



By-Product assessment report

BP136

Thajeen Fishmeal Industry Company Limited

Document TEM-003 (prev. FISH-1) - Version 3.1

Issued April 2025 – Effective April 2025

Report code	BP136	Date of issue	December 2025
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1. Application details		
Applicant	Thajeen Fishmeal Industry Company Limited	
Applicant country	Thailand	
2. Certification Body details		
Name of Certification Body (CB)	LRQA	
Contact information for CB	mt-ca@lrqa.com	
Assessor name	Sam Peacock	
CB internal peer reviewer name	Jose Peiro Crespo	
Internal peer review evaluation	Agree with evaluation	
Number of Assessment days	1	
Comments on the assessment	<p>This assessment covers ten byproducts. None of the byproduct species meets the MT definition of an ETP species. Two of the byproducts are caught exclusively by vessels from Medium Risk flag states and were therefore Approved source with caution without the need for a Step 3 assessment. The remaining eight byproducts were assessed under Step 3. All these byproducts passed the Category C assessment. Full KDE information was provided for catches originating in the Pacific Ocean, representing five byproducts. These were downgraded to Medium Risk and Approved source with caution. Port and coastal state information was provided for catches originating in the Indian Ocean, allowing these byproducts to be downgraded to Medium Risk via Path 2, and therefore also Approved source with caution.</p>	
3. Approval validity		
	Valid from 12/2025	Valid until 12/2026
4. Assessment cycle		
	Initial	

5. By-product assessment outcomes			
By-product species name <i>Common and Latin names</i>	Flag country(ies)	Fishing Areas <i>Only applicable to Step 3 assessed species</i>	MarinTrust approval status
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 51, 57	Approved source with caution
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 61, 71	Approved source with caution
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 77,87	Approved source with caution
<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 51, 57	Approved source with caution

<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 61, 71	Approved source with caution
<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 77	Approved source with caution
<i>Thunnus obesus</i> - Bigeye tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 51, 57	Approved source with caution
<i>Thunnus obesus</i> - Bigeye tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 71, 77	Approved source with caution
<i>Thunnus alalunga</i> - Albacore tuna	Japan	FAO 61, 71	Approved source with caution
<i>Thunnus alalunga</i> - Albacore tuna	Japan	FAO 51, 57	Approved source with caution

Guidance for on-site auditor

For the audit, the auditor will check how the facility manages by-products deemed medium risk. Any by-products downrated from high to medium risk will require additional due diligence checks.

It is important that facilities check all raw materials from and verify their suppliers especially if there is a perceived risk of sourcing from known or suspected IUU fishing activity. This requires checking supplier records or procedures in place to understand how the supplier can ensure there is no IUU in the raw material they provide. For raw materials risk rated medium, additional or

more frequent checks may be required until the facility is certain that the raw materials are not from IUU fishing activity.

The audit requirements are covered in clause 2.11.3 of the MarinTrust Global Standard for Responsible Supply of Marine Ingredients (the MarinTrust Standard) and associated interpretation guidance.

Approved by-products

- No further checks are required beyond those included in the MarinTrust Standard.

Additional checks of Approved Source with Caution by-products

- Review supplier records or procedures in place.

Additional checks of by-products Approved Source with Caution via Step 3 assessment

- In addition to checks for medium risk Approved Source with Caution by-products, by-products that have had risk downgraded from high to medium at Step 3 (use **Appendix 1** to identify these by-product species), confirm that the relevant traceability information continues to be collected for this by-product. During the audit, a traceability check on any by-products downgraded from high to medium risk shall be included as part of the required traceability checks (Section 4).

Guidance for the applicant/certificate holder

The applicant/certificate holder is responsible for ensuring the relevant actions are taken to comply with the MarinTrust Standard.

The certificate holder is responsible for communicating any changes to the by-products sourced by submitting a scope extension request through the MarinTrust online Application Portal.

Appendix 1 – assessment outcomes

Step 2 Assessment Outcomes

By-product species name <i>Common and Latin names</i>	Flag country(ies)	IUCN Red List <i>Select IUCN red list category from dropdown</i>	CITES Appendices <i>Select CITES appendix status from dropdown</i>	Step 2 risk status <i>Low risk/ Medium risk/ High risk</i>	Step 3 required <i>Yes / No</i>
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Least concern	Not listed	High risk	Yes

<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Least concern	Not listed	High risk	Yes
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Least concern	Not listed	High risk	Yes
<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Least concern	Not listed	High risk	Yes

<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Least concern	Not listed	High risk	Yes
<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Least concern	Not listed	High risk	Yes
<i>Thunnus obesus</i> - Bigeye tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Vulnerable	Not listed	High risk	Yes

<i>Thunnus obesus</i> - Bigeye tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Vulnerable	Not listed	High risk	Yes
<i>Thunnus alalunga</i> - Albacore tuna	Japan	Least concern	Not listed	Medium risk	No
<i>Thunnus alalunga</i> - Albacore tuna	Japan	Least concern	Not listed	Medium risk	No

Step 3 Assessment Outcomes

By-product species name <i>Common and Latin names</i>	Flag country(ies)	Fishing Area	Stock name <i>(If applicable e.g. Eastern Pacific stock)</i>	Category C Assessment Outcome <i>Pass/Fail</i>	Traceability information <i>Path 1 – Yes OR Path 2 – Yes/No OR MT Approved Whole Fish</i>	Step 3 Risk Outcome <i>Risk downgraded to Medium Risk/ Remains High Risk</i>
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 51, 57	Indian Ocean yellowfin tuna	Pass	Path 2 – Yes	Risk downgraded to Medium Risk
<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 61, 71	WCPO yellowfin tuna	Pass	Path 1 - Yes	Risk downgraded to Medium Risk

<i>Thunnus albacares</i> - Yellowfin tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 77,87	EPO yellowfin tuna	Pass	Path 1 - Yes	Risk downgraded to Medium Risk
<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 51, 57	Indian Ocean skipjack tuna	Pass	Path 2 – Yes	Risk downgraded to Medium Risk
<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 61, 71	WCPO skipjack tuna	Pass	Path 1 - Yes	Risk downgraded to Medium Risk

<i>Katsuwonus pelamis</i> - Skipjack tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 77	EPO skipjack tuna	Pass	Path 1 - Yes	Risk downgraded to Medium Risk
<i>Thunnus obesus</i> - Bigeye tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 51, 57	Indian Ocean bigeye tuna	Pass	Path 2 – Yes	Risk downgraded to Medium Risk
<i>Thunnus obesus</i> - Bigeye tuna	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	FAO 71, 77	WCPO bigeye tuna	Pass	Path 1 - Yes	Risk downgraded to Medium Risk
Comments on Step 3 Assessment: N/A						

Appendix 2 – detailed assessment outcomes (step 2 and step 3 if applicable)

Step 2 outcomes

Flag state	Risk rating	Flag score	Port score	General score	Flag State is contracting party or cooperating non-contracting party to all relevant RFMOs	'Carded' under EU Carding system	Flag state party to PSMA	Flag state mandatory vessel tracking for commercial seagoing fleet	WGI Governance rank
Ecuador	High	2.58	2.11	2.43	1	3	1	1	35.38%
India	High	2.75	3	3.47	1	1		5	50.94%
Indonesia	Medium	3.33	2.56	2.47	1	1	1	1	59.43%
Kiribati	High	1.79	3.11	1.96	1	1	5	1	42.92%
Maldives	High	2.25	1.67	2.13	1	1	1	1	26.89%
Micronesia (FS of)	High	1.92	2.94	1.93	1	1	5	1	31.13%
Nauru	Medium	2.04	1	1.64	1	1		1	53.30%
Panama	High	3.75	1.67	1.93	3	3	1	1	55.19%

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| Approved by MarinTrust Fisheries Manager

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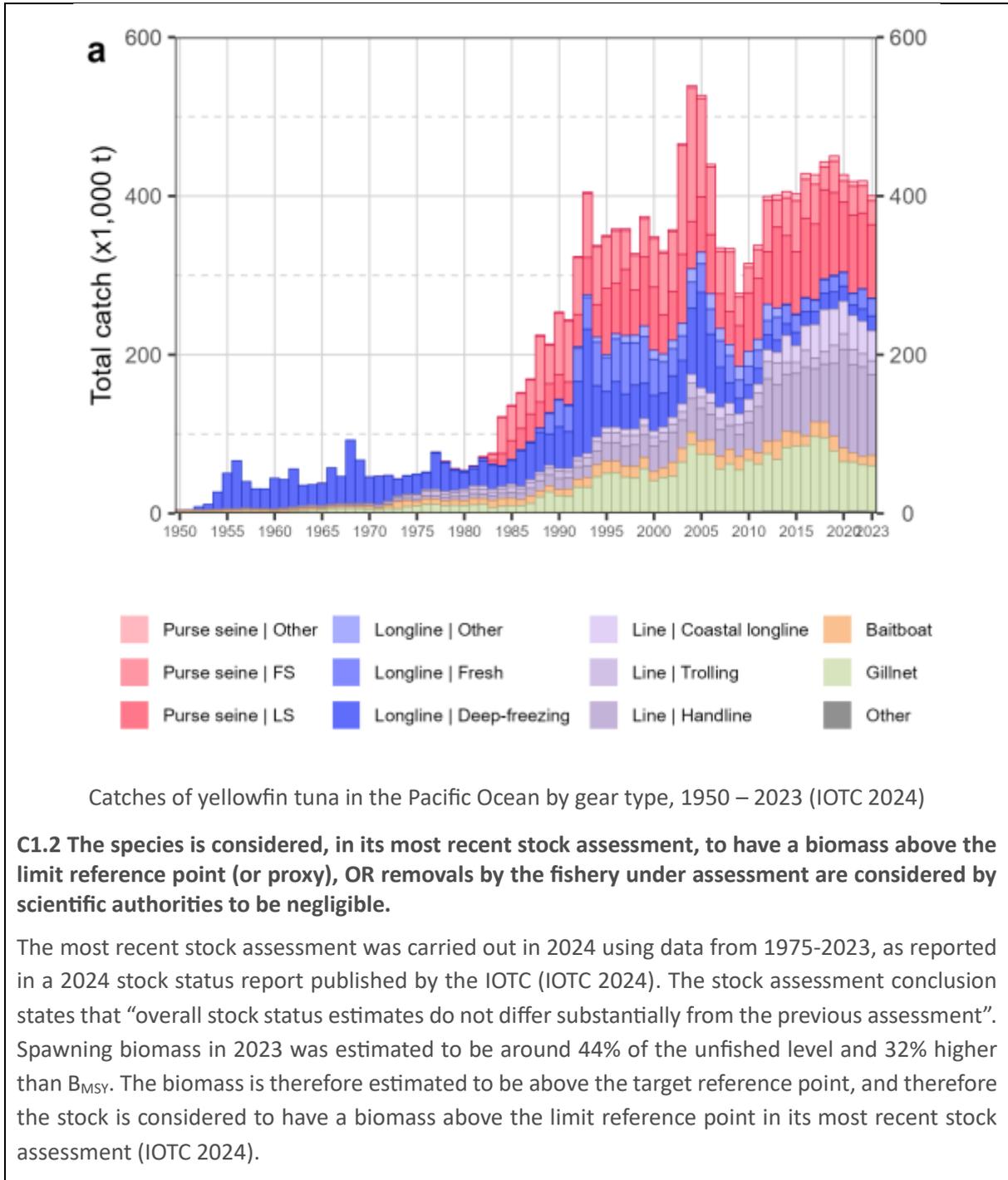
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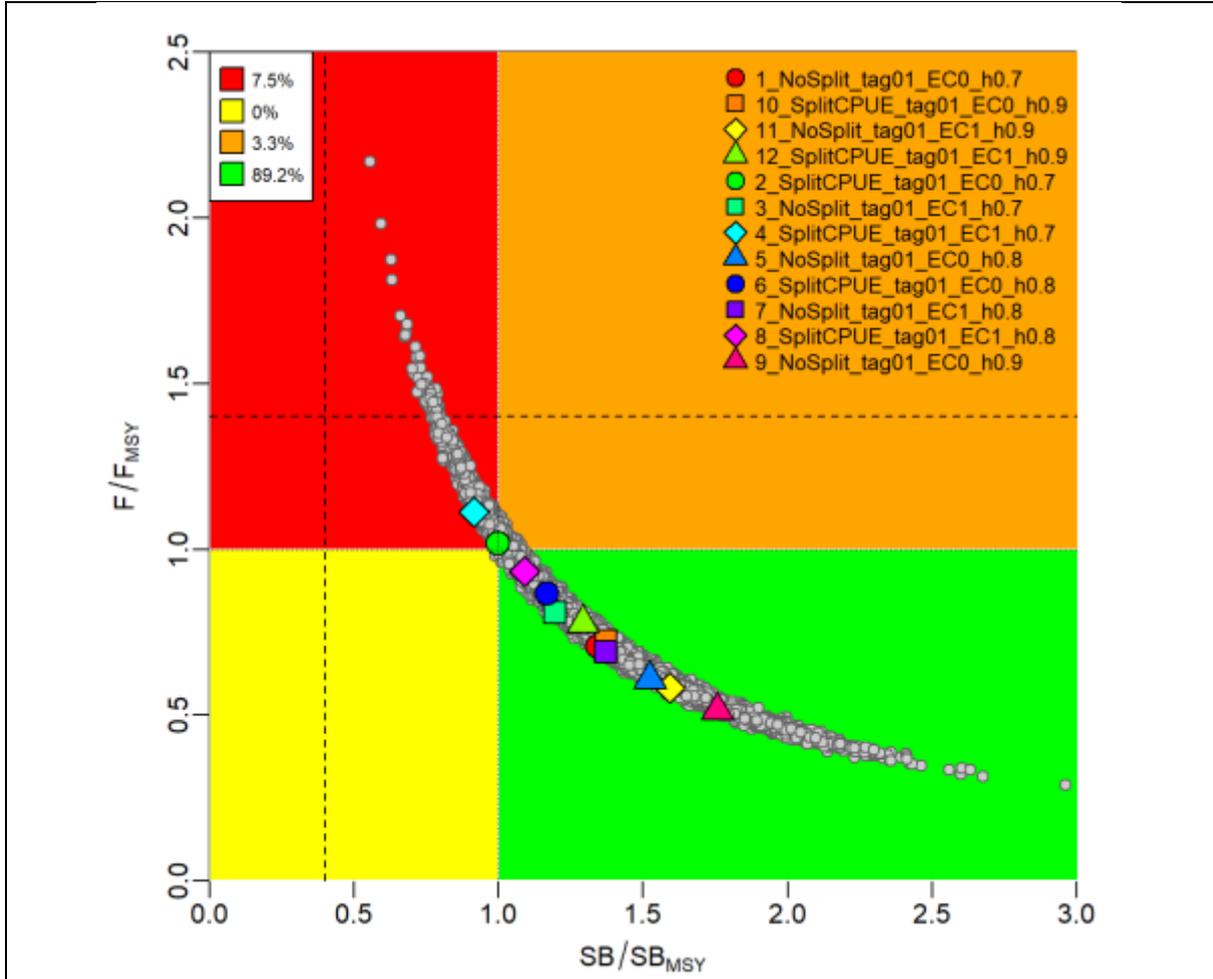
Papua New Guinea	High	2.04	2.94	2.07	1	1	5	1	26.42%
Nicaragua	High	2.08	1.44	2.4	1	1	1	1	18.40%
Korea (Rep. South)	Medium	3.67	3.11	1.97	1	1	1	1	83.96%
Spain	Medium	3.21	3.39	2.03	1	1	1	1	75.94%
Taiwan	High	4.17	3.06	2.27	1	1	5	1	90.57%
Vanuatu	High	2.88	1.56	2.17	2	1	1	1	48.58%

Step 3 outcomes

Category C assessment

Species name		<i>Thunnus albacares</i> -Yellowfin Tuna	
Fishing area and stock		Indian Ocean yellowfin	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
Clause outcome:			PASS
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.</p> <p>The stock assessment conducted by the Indian Ocean Tuna Commission (IOTC) takes all fishery removals into account. The most recent assessment was conducted in 2024. Landings in recent years were reported as a total catch in 2023 of 400,950t, and an average catch 2019-2023 of 423,142t (IOTC 2024). Full catch datasets, including catch and effort by month, species, gear, and vessels flag, and size-frequency datasets, are made available on the IOTC website (IOTC 2025).</p>			





Yellowfin tuna in the Pacific Ocean: Kobe chart estimating current stock status. Coloured symbols represent estimates from individual models. Grey dots represent statistical uncertainty from individual models. Dashed lines represent limit reference points (IOTC 2024)

References

IOTC (2025). Available datasets. <https://www.iotc.org/data/datasets>

IOTC (2024). Indian Ocean Yellowfin Tuna Stock Status: Executive Summary. https://iotc.org/sites/default/files/content/Stock_status/2024/English/IOTC-2024-SC27-ES04_YFTE.pdf

Species name	<i>Thunnus albacares</i> -Yellowfin Tuna
Fishing area and stock	Western and Central Pacific yellowfin

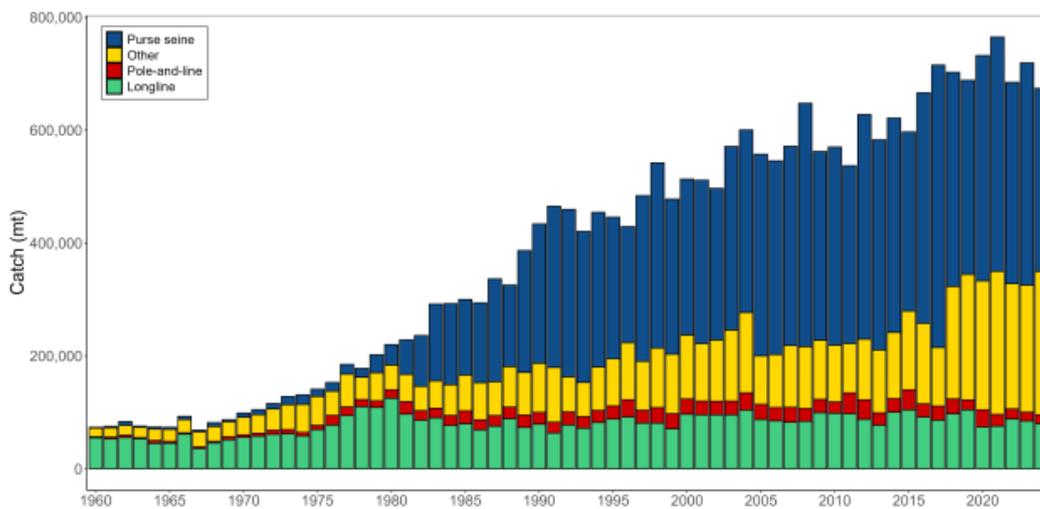
C1	Category C Stock Status - Minimum Requirements	
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

Clause outcome: PASS

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

Western and Central Pacific Ocean (WCPO) yellowfin tuna is subject to regular stock assessments by the Western and Central Pacific Fisheries Commission (WCPFC). The most recent stock assessment was conducted in 2023 and utilised all available catch data, as summarised in the graph below. 54 models were used to provide a range of potential outcomes based on different key variables, a process which reduces the inherent level of uncertainty.

Catches are presented in the figure below:



WCPO yellowfin catch by gear (WCPFC 2025)

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The 2023 stock assessment produced a series of estimates of the current status of the stock relative to the target reference point BMSY. Biomass in 2021 was estimated to be between 1.91 and 3.11 times larger than BMSY with an 80% certainty; none of the model results indicated that biomass was below BMSY. Biomass is estimated by the most recent stock assessment to be above the target

reference point with a high degree of certainty, and therefore also above any potential limit reference point (WCPFC 2023).

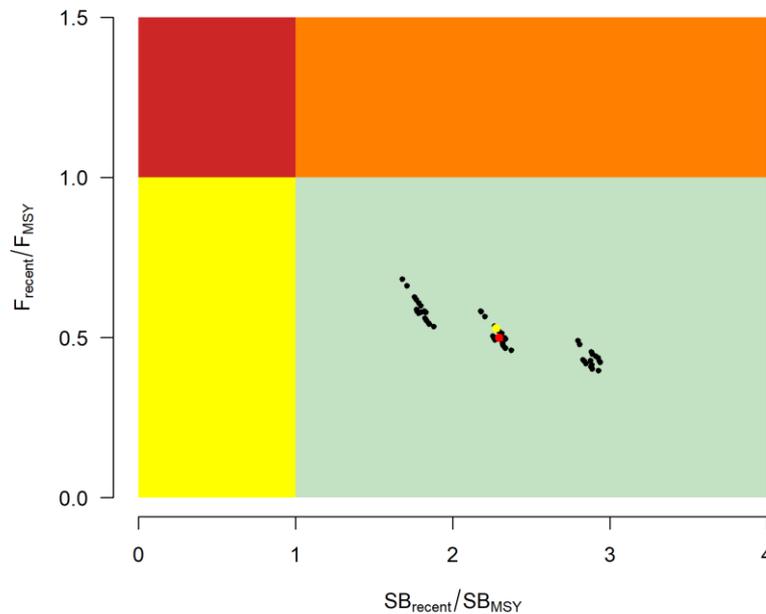


Figure 1. WCP0 yellowfin tuna, Kobe plot summarising the results of each of the stock assessment models. The yellow dot is the 2023 diagnostic model and the red dot is the median (WCPFC 2023).

References

WCPFC (2023). WCP0 Yellowfin Tuna, Stock Status and Management Advice. <https://www.wcpfc.int/file/1008665/download?token=wFUhc7q7tern>

WCPFC (2025). Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2024. <https://meetings.wcpfc.int/node/26697>

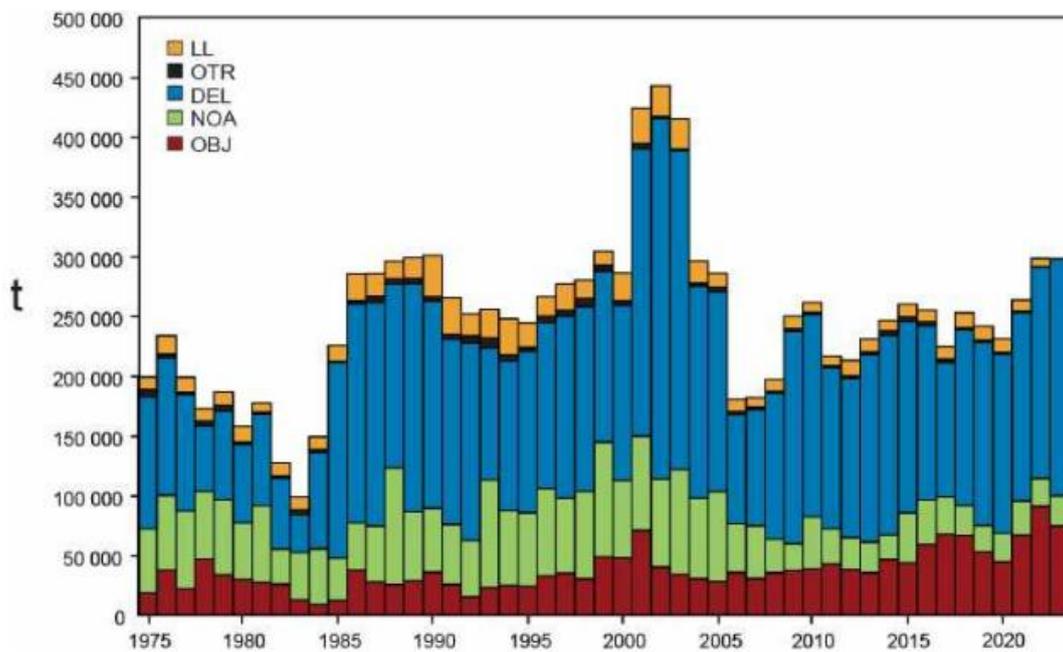
Species name		<i>Thunnus albacares</i> -Yellowfin Tuna	
Fishing area and stock		East Pacific yellowfin	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR	PASS

	removals by the fishery under assessment are considered by scientific authorities to be negligible.	
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Clause outcome: PASS

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

The Eastern Pacific Ocean (EPO) yellowfin tuna stock is managed and assessed by the Inter-American Tropical Tunas Commission (IATTC). A new risk-based approach was introduced to the management of the stock in 2022, with Stock Status Indicators (SSIs) developed using catch and other data collected from the EPO as a whole. This approach continued in 2023 (IATTC 2024). SSIs are considered to be important alternatives to formal stock assessments, particularly where those stock assessments may be too unreliable to form the basis for management advice (IATTC 2022). Fishery removals are a key component of the modelling used to generate SSI's, and their development and use is evidence that managers have sought out alternative mechanisms where stock assessment uncertainty is high. The most recent full stock assessment was conducted in 2020.

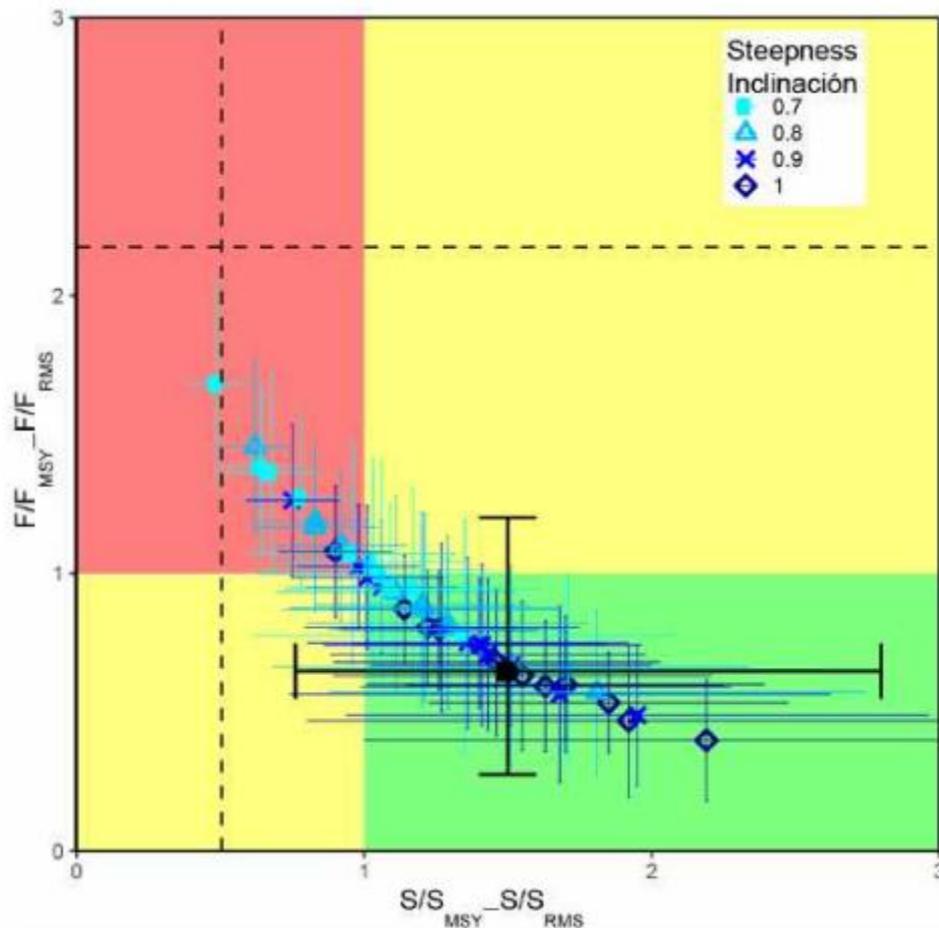


Total catches of yellowfin tuna in the EPO by set type (IATTC 2024)

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

In the full stock assessments for this stock, multiple reference models are utilised to create a risk-based understanding of stock status. The most recent results, from 2020, indicated that “the probability of the spawning biomass being below S_{MSY_d} [i.e. the target reference point] is low (12%)” (IATTC 2024), and that the probability of the biomass being below the limit reference point S_{LIMIT} is

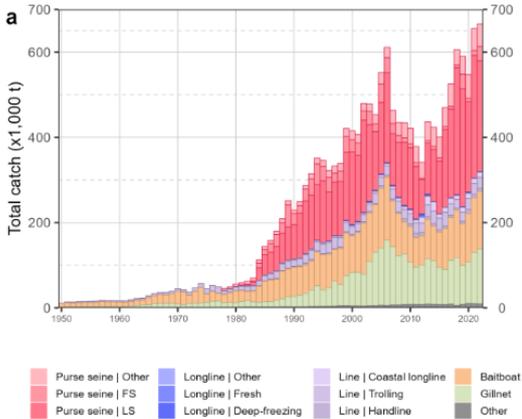
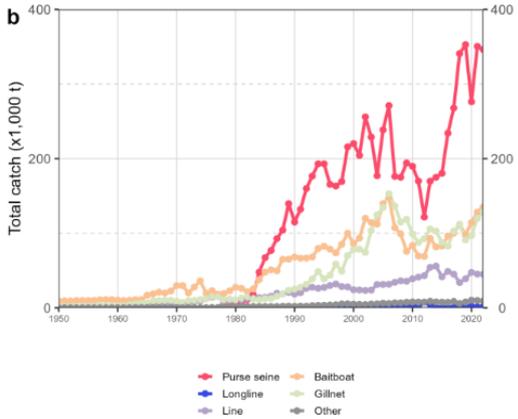
zero. There was therefore a low probability that biomass is currently below the target reference point and almost no possibility it was below the limit reference point.



Kobe plot for yellowfin tuna in the EPO of estimates of spawning stock size (S) and fishing mortality (F). Coloured panels are separated by the target reference points S_{MSY} and F_{MSY} . Limit reference points are approximately indicated by the dashed lines, although these vary between models. The solid black circle represents all models combined (IATTC 2024).

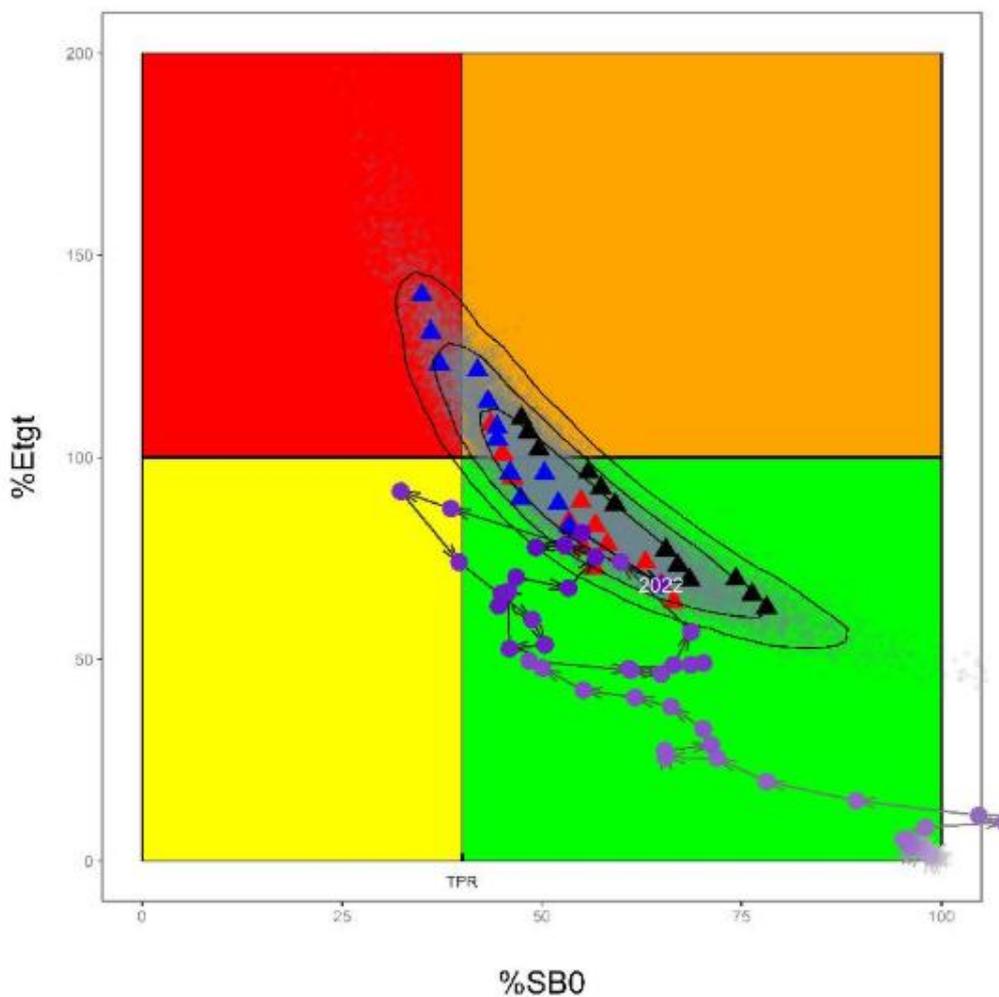
References

- IATTC (2022). Stock Status Indicators (SSIs) for tropical tunas in the Eastern Pacific Ocean. 13th Meeting of the IATTC Scientific Advisory Committee, Document SAC-13-06 Corr. [https://www.iattc.org/GetAttachment/22511b5b-ba2b-4126-9ba2-0bffe89f4d5/SAC-13-06%20-%20Stock%20status%20indicators%20\(SSIs\)%20for%20tropical%20tunas%20in%20the%20EPO](https://www.iattc.org/GetAttachment/22511b5b-ba2b-4126-9ba2-0bffe89f4d5/SAC-13-06%20-%20Stock%20status%20indicators%20(SSIs)%20for%20tropical%20tunas%20in%20the%20EPO)
- IATTC (2024). The tuna fishery in the Eastern Pacific Ocean in 2023. https://www.iattc.org/GetAttachment/1ed36788-07ce-4bf4-80e4-10c6c3b2b14d/No-22-2024_Tunas-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2023.pdf

Species name		<i>Katsuwonus pelamis</i> - Skipjack tuna	
Fishing area and stock		Indian Ocean skipjack	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
Clause outcome:			PASS
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.</p> <p>The stock assessment conducted by the Indian Ocean Tuna Commission (IOTC) takes all fishery removals into account. The most recent assessment was conducted in 2023. Landings in recent years were reported as a total catch in 2022 of 666,408t, and an average catch 2018-2022 of 613,061t (IOTC 2024). Full catch datasets, including catch and effort by month, species, gear, and vessels flag, and size-frequency datasets, are made available on the IOTC website (IOTC 2025).</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Annual time series of (a) cumulative nominal catches (metric tonnes; t) by fishery and (b) individual nominal catches (metric tonnes; t) by fishery group for Indian Ocean skipjack tuna during 1950-2022 (IOTC 2024)</p>			
<p>C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.</p>			

The most recent stock assessment was carried out in 2023, as reported in a 2023 stock status report published by the IOTC (IOTC 2024). The stock assessment conclusion states that “The outcome of the 2023 stock assessment model is more optimistic than the previous assessment (2020) despite the high catches recorded in the period 2021-2022, which exceeded the catch limits established in 2020 for this period” (IOTC 2024).

Biomass was estimated to be around 53% of the unfished level, which is above SB_{MSY} . The IOTC also notes that “Over the history of the fishery, biomass has been well above the adopted limit reference point ($20\%SB_0$)” (IOTC 2024).



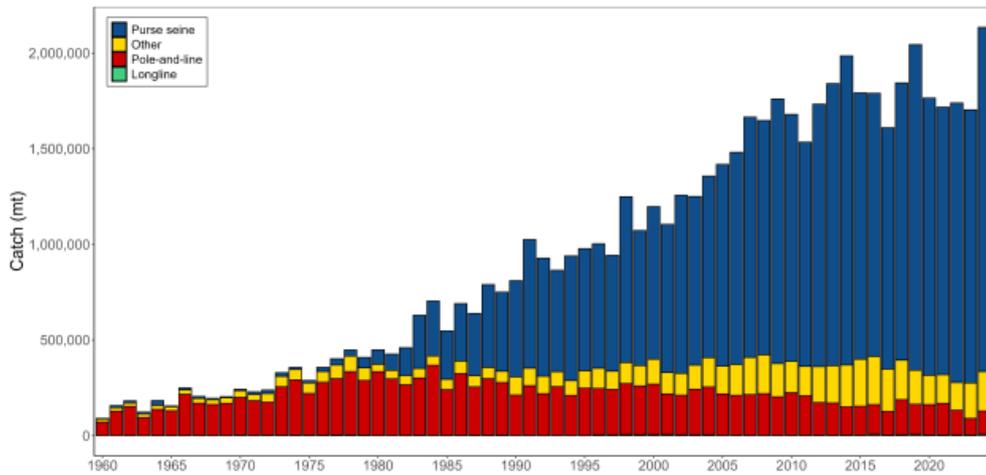
Indian Ocean skipjack tuna, Kobe plot of the 2023 stock assessment. Triangles represent outputs from individual models, grey dots represent uncertainty from individual models (IOTC 2024)

References

IOTC (2024). Indian Ocean Skipjack Tuna Stock Status: Executive Summary.
https://iotc.org/sites/default/files/content/Stock_status/2024/English/IOTC-2024-SC27-ES03_SKJE.pdf

IOTC (2025). Available datasets. <https://www.iotc.org/data/datasets>

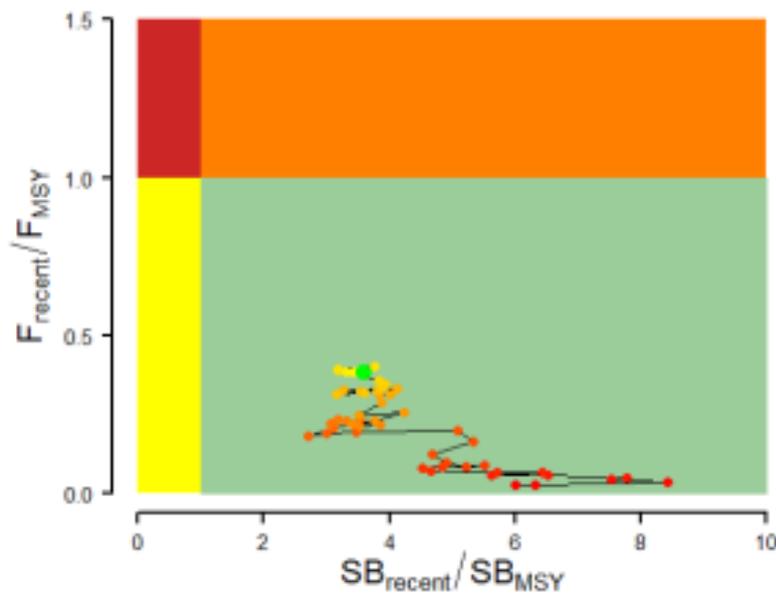
Species name		<i>Katsuwonus pelamis</i> - Skipjack tuna	
Fishing area and stock		West Pacific skipjack	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
Clause outcome:			PASS
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.</p> <p>WCPO skipjack tuna is subjected to regular stock assessments by the WCPFC. The most recent of these was carried out in 2025, using data up to the end of 2024. The assessment incorporated catch, effort- and length-frequency estimates, and tag-recapture data (WCPFC 2025). The stock assessment report does not raise major concerns about uncertainties due to lack of data.</p> <p>Catches are presented in the figure below:</p>			



Annual catches of skipjack by gear type in the WCPO area covered by the stock assessment (WCPFC 2025a)

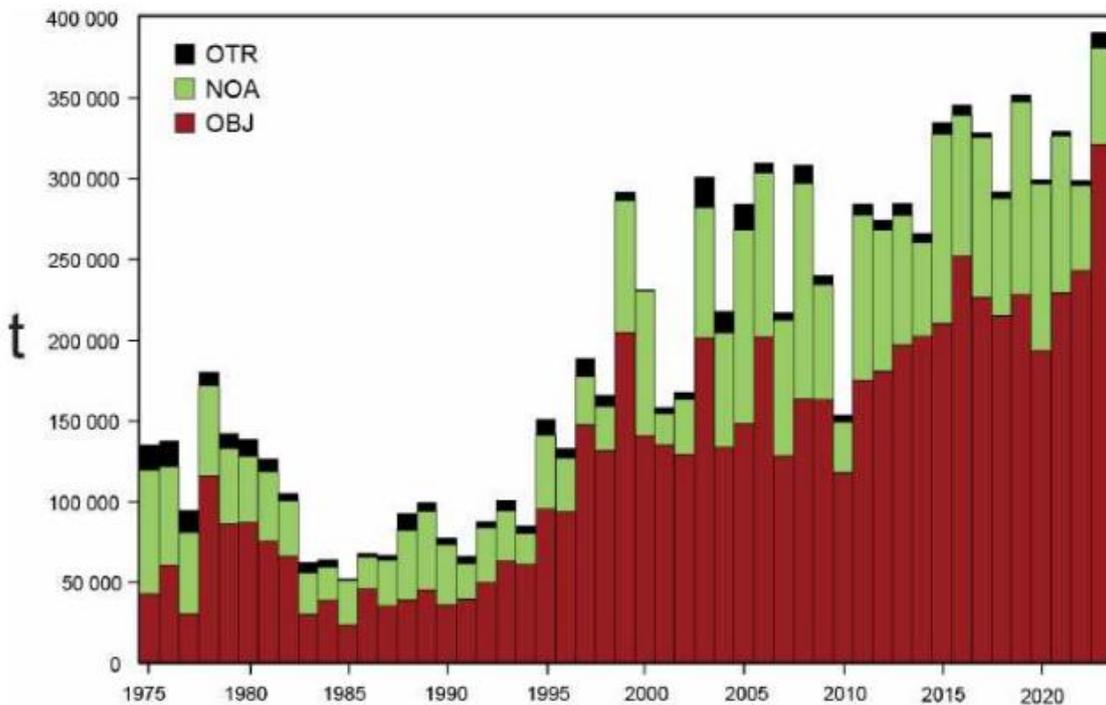
C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The 2025 stock assessment for WCPO skipjack concluded that “Overall, the outcomes of this assessment suggest that the skipjack stock in the WCPO is not overfished nor undergoing overfishing” (WCPFC 2025). SB_{RECENT}/SB_{MSY} was estimated to be 3.90, with an 80% CI of 2.95 – 5.61, suggesting biomass is highly likely to be above the MSY level.



<p>Kobe plot summarising the results for the dynamic MSY analysis of WCPO skipjack by the 2025 stock assessment. Dot colours go from red to green over time, with the green dot being the most recent SB estimate (WCPFC 2025)</p>
<p>References</p> <p>WCPFC (2025). WCPO skipjack tuna stock assessment 2025. https://meetings.wcpfc.int/node/26679</p> <p>WCPFC (2025a). Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2024. https://meetings.wcpfc.int/node/26697</p>

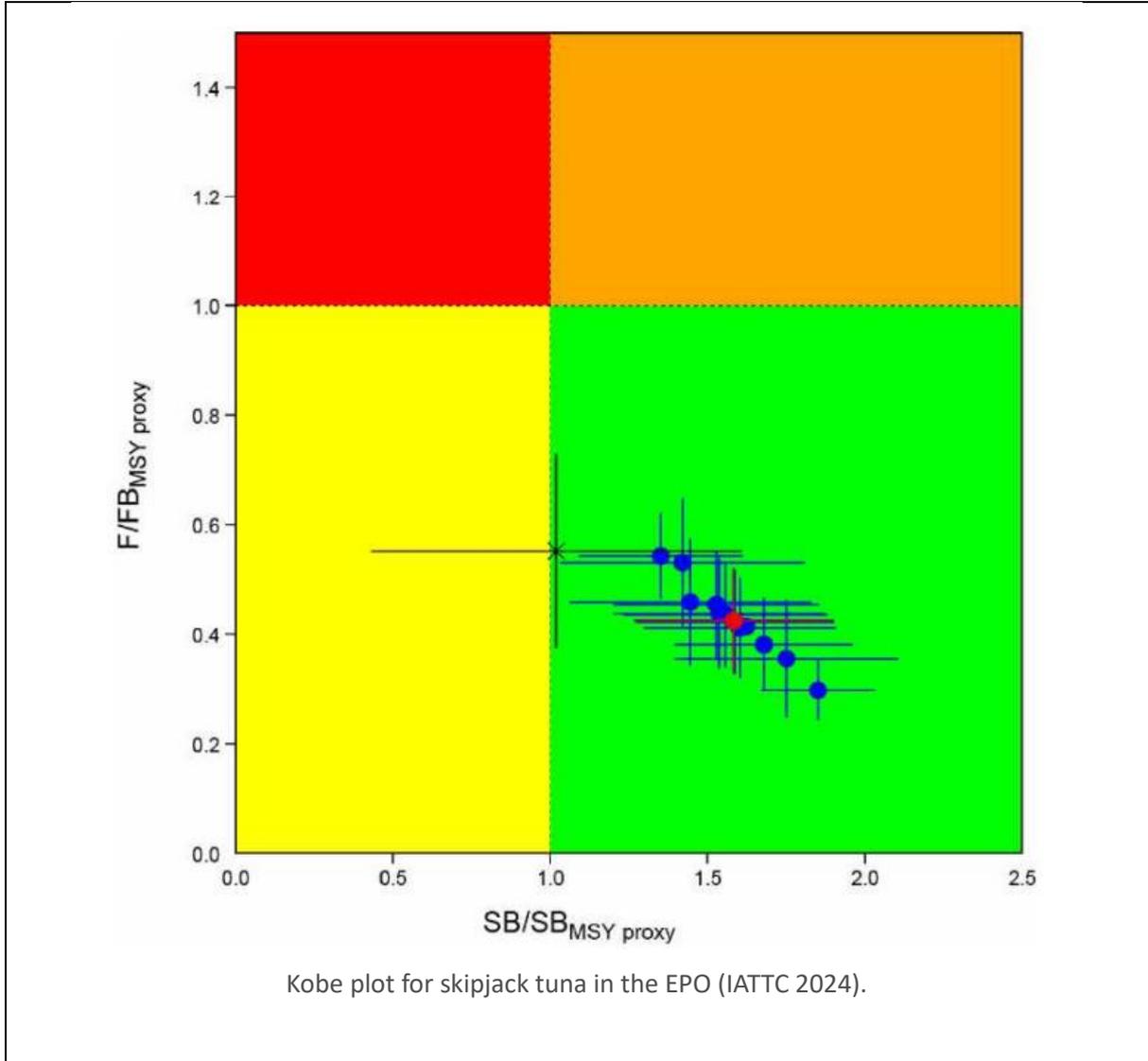
Species name	<i>Katsuwonus pelamis</i> - Skipjack tuna		
Fishing area and stock	East Pacific skipjack		
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
Clause outcome:			PASS
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.</p> <p>EPO skipjack has historically been subject to “interim” integrated statistical age-structured catch-at-length stock assessments carried out by the IATTC. In 2023, a benchmark stock assessment was conducted using an integrated statistical age-structured catch-at-length model in Stock Synthesis, which is considered by the IATTC to represent “a significant improvement from the initial interim assessment conducted in 2022” (IATTC 2024). The assessment incorporates all available data from across the EPO, including catch data but also size and age frequency data and other sources.</p>			



Skipjack catches (retained plus discards) in the EPO, 1975-2023 (IATTC 2024).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

MSY-based estimates and reference points cannot be estimated for EPO Skipjack due to the nature of the model used. Instead, the IATTC management process utilises a conservative proxy for target biomass of $SBR = 0.3$, with the fishing mortality corresponding to that target biomass used as the target reference point for fishing mortality (IATTC 2024). The reference model and most of the sensitivity analyses conducted in 2023 indicated that biomass is above the target reference point and fishing mortality is below the target level. None of the model scenarios concluded that stock biomass is below the limit reference point level.



References

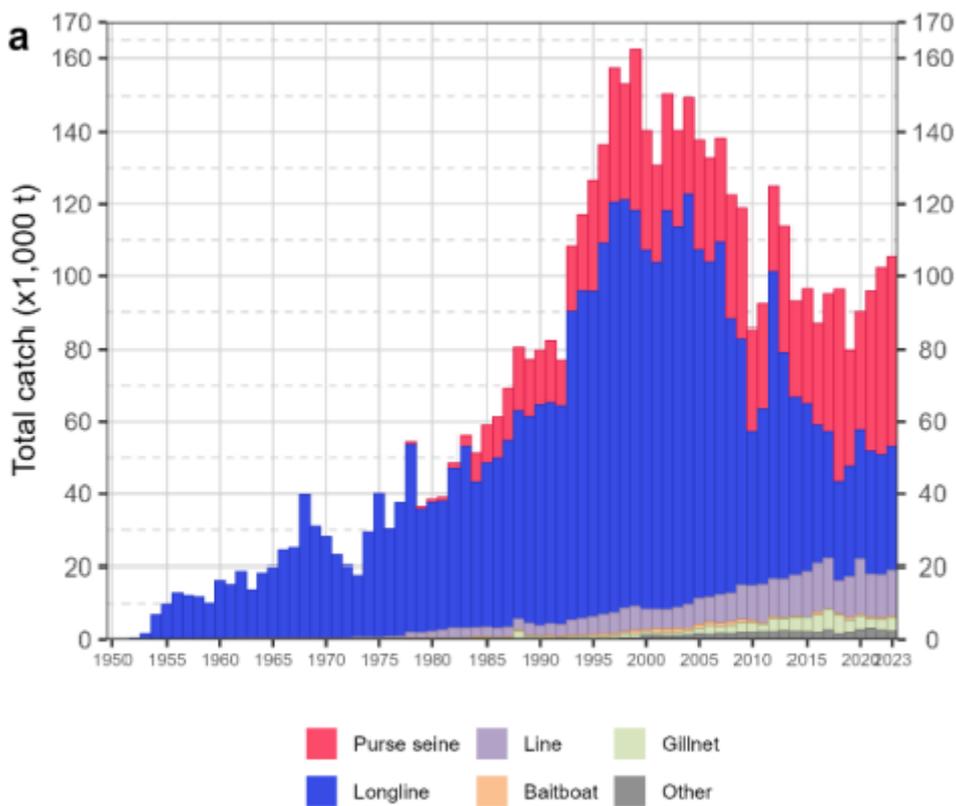
IATTC (2024). The tuna fishery in the Eastern Pacific Ocean in 2023.
https://www.iatcc.org/GetAttachment/1ed36788-07ce-4bf4-80e4-10c6c3b2b14d/No-22-2024_Tunas,-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2023.pdf

Species name	<i>Thunnus obesus</i> - Bigeye tuna
Fishing area and stock	Indian Ocean bigeye
	Category C Stock Status - Minimum Requirements

C1	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
Clause outcome:			PASS

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

Bigeye tuna in the Indian Ocean (IO bigeye) is subject to regular stock assessment by the IOTC. The most recent stock assessment was carried out in 2022 using a Stock Synthesis model with 24 model configurations. The assessment incorporated international catch data, and the range of models used was intended to capture uncertainty on stock recruitment relationship, longline selectivity, growth, and natural mortality (IOTC 2024).

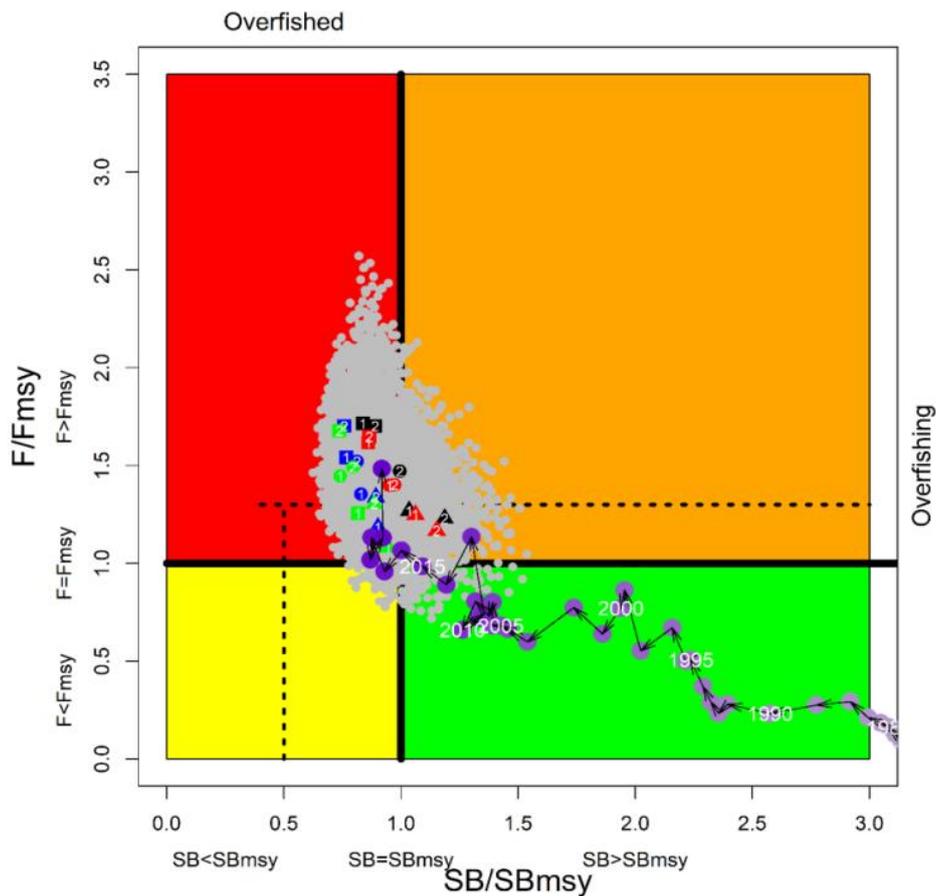


Indian Ocean bigeye tuna, catches (IOTC 2024)

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The 2022 stock assessment concluded that spawning biomass levels in 2021 were 25% of the unfished level, and 90% of the level which can support MSY. Taking into account the uncertainty in the assessment process, the IOTC documentation concludes that the stock is “overfished and subject to overfishing” (IOTC 2023). This conclusion indicates that the stock is likely below the target reference point. However, the limit reference point for the stock is defined as $0.5 \cdot SB_{MSY}$; i.e. the level at which stock biomass is half the level which can support MSY. As the stock is currently estimated to be at 90% of this level, it is likely above the limit reference point. Additionally, none of the outcomes of the 24 models indicated that biomass was below the LRP.

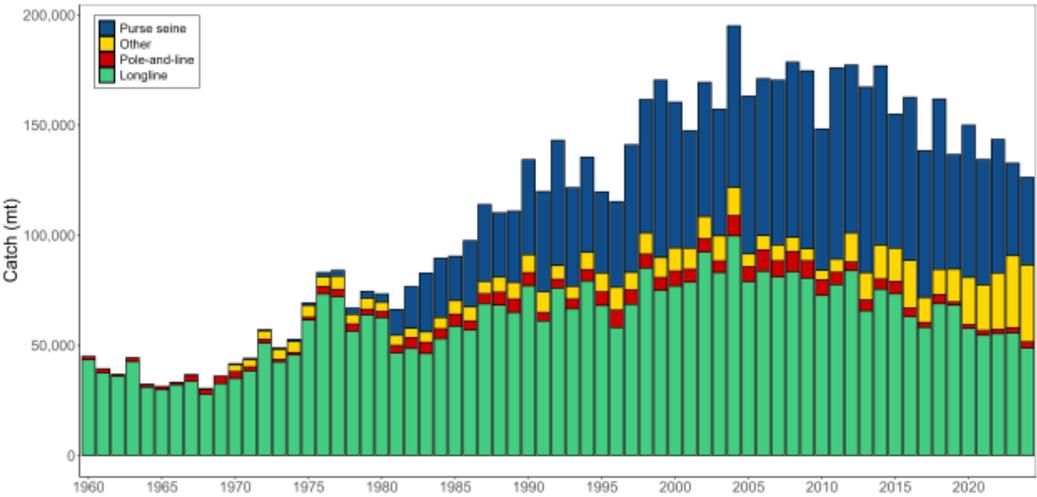
A Kobe chart showing the status of the fishery as estimated by the 2022 stock assessment is shown below.



Aggregated Indian Ocean stock assessment Kobe plot for bigeye tuna. Coloured points represent stock status estimates from each of the 24 models. Purple dots represent the time series of stock status estimates. Grey dots represent uncertainty from individual models. Dashed lines indicate IO bigeye tuna limit reference points (IOTC 2024).

References

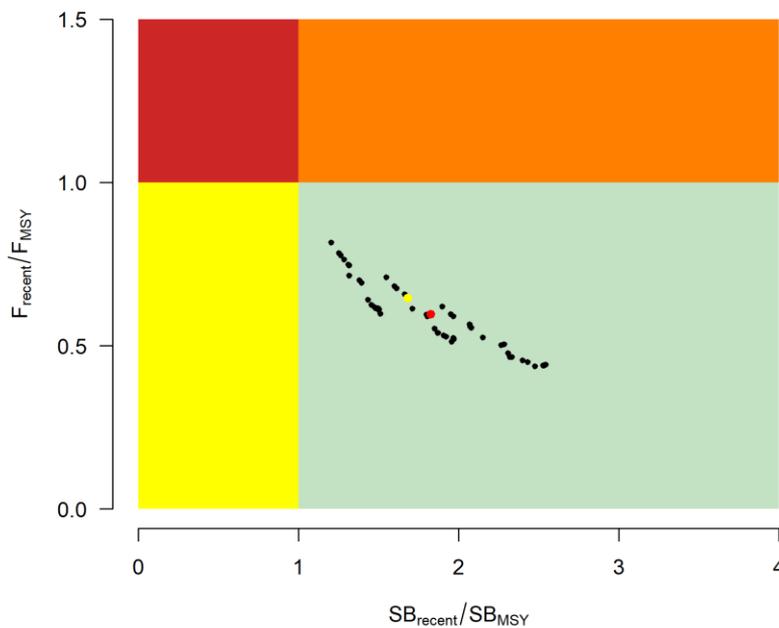
IOTC (2024). Indian Ocean bigeye tuna stock status and advice, executive summary. https://iotc.org/sites/default/files/content/Stock_status/2024/English/IOTC-2024-SC27-ES02_BETE.pdf

Species name		<i>Thunnus obesus</i> - Bigeye tuna	
Fishing area and stock		Western and Central Pacific bigeye	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	PASS
Clause outcome:			PASS
C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.			
<p>Bigeye tuna in the Western and Central Pacific Ocean is subject to regular stock assessment by the Western and Central Pacific Fisheries Commission. The most recent stock assessment was conducted in 2023, using data up to 2021. The assessment utilised all international catch data. 54 models were applied to take into account the main sources of uncertainty, and the results are presented alongside the likely confidence intervals (WCPFC 2021). All available catch data are incorporated into the assessment.</p>			
			

Western and Central Pacific bigeye catch (mt) by gear (WCPFC 2025)

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The results of the most recent stock assessment produced an estimate of the current status of the stock relative to target reference point SB_{MSY} . The assessment concluded across all 54 models that the mean value of SB_{latest}/SB_{MSY} was 1.76, with an 80% certainty that it was between 1.28 and 2.31 (WCPFC 2024). This translates to a very high probability that stock biomass is above the target reference point SB_{MSY} , and therefore also above any potential limit reference point. The most recent stock assessment summary also states that “For all models in the grid $SB_{recent}/SB_{F=0}$ was above the biomass limit reference point” (WCPFC 2024).



Western and Central Pacific bigeye tuna, Kobe plot for recent spawning potential (2018-2021) summarising the results for each of the models in the structural uncertainty grid. Median value is shown in red (WCPFC 2024)

References

WCPFC (2024). WCPO bigeye tuna stock status and management advice. <https://www.wcpfc.int/doc/01/bigeye-tuna>

WCPFC (2025). Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2024. <https://meetings.wcpfc.int/node/26697>

Traceability information

The applicant provided full KDE information for byproducts caught in the Pacific Ocean. Sourcing information for byproducts caught in the Indian Ocean indicated that the material originates from a number of port and coastal states, none of which are high risk.

Species name	Yellowfin, Skipjack and Bigeye tunas caught in FAO 61, 71, 77, 87			
Path 1	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Confirm all KDEs are provided	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Path 2	Yes <input type="checkbox"/> No <input type="checkbox"/> <i>If yes for Path 2, complete the next section</i>			
Path 2 outcome <i>Countries may be different for Coastal State and Port State.</i>	Flag country	Coastal score	Port score	Risk outcome
				Choose an item.
				Choose an item.

Species name	Yellowfin, Skipjack and Bigeye tunas caught in FAO 51, 57			
Path 1	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Confirm all KDEs are provided	Yes <input type="checkbox"/> No <input type="checkbox"/>			
Path 2	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <i>If yes for Path 2, complete the next section</i>			
Path 2 outcome <i>Countries may be different for Coastal State and Port State.</i>	Flag country	Coastal score	Port score	Risk outcome
	Ecuador, India, Indonesia, Kiribati, Maldives, Micronesia, Nauru, Panama, Papua, New Guinea, Nicaragua, South Korea, Spain, Taiwan, Vanuatu	Multiple coastal states in FAO Areas 51 and 57, highest risk Medium Risk (applicant confirmed no material caught in Yemen, which is the only High Risk coastal state)	Multiple port states in FAO Areas 51 and 57, highest risk Medium Risk	Downgraded to medium risk