By-Product assessment report

BP042 – Fortidex SA, Ecuador

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

Issued April 2025 – Effective April 2025

Report code	BP042	Date of issue	January 2026

1. Application details		
Applicant	Fortidex SA	
Applicant country	Ecuador	
2. Certification Body details		
Name of Certification Body (CB)	LRQA	
Contact information for CB	mt-ca@lrqa.com	
Assessor name	Blanca Gonzalez	
CB internal peer reviewer name	Sam Peacock	
Internal peer review evaluation	Agree with evaluation	
Number of Assessment days	1	
Comments on the assessment	The 9 byproduct species listed in this report are not considered ETP species according to the Marin Trust definition, fulfilling this requirement for the assessment. All the species required a step 3 assessment evaluation due to a high-risk flag state. The client provided information about the FAO fishing areas, which was necessary for the Category C assessments. 8 of the species pass Category C and only the Common dolphinfish (*Coryphaena hippurus*) fails. Traceability information allowed the skipjack and yellowfin tuna to be downgraded to medium risk; therefore, these byproducts are approved, but they should be sourced with caution The client didn't provide traceability information for all other species required to complete step 3 of this assessment; consequently, remain at high risk, and they were scored as NOT APPROVED.	
3. Approval validity	Valid from 01/2026	Valid until 01/2027
4. Assessment cycle	Initial	

5. By-product assessment outcomes			
By-product species name *Common and Latin names*	**Flag country(ies)**	**Fishing Areas** *Only applicable to Step 3 assessed species*	**MarinTrust approval status**
Yellowfin tuna - *Thunnus albacares*	Ecuador	FAO 77 - Eastern Central Pacific, 87 - Southeast Pacific	Approved source with caution
Skipjack tuna - *Katsuwonus pelamis*	Ecuador	FAO 77 - Eastern Central Pacific, FAO 87 - Southeast Pacific	Approved source with caution
Pacific thread herring/pinchagua - *Opisthonema spp.*	Ecuador	FAO 87 - Southeast Pacific	Not approved
Pacific chub mackerel/macarela - *Scomber japonicus*	Ecuador	FAO 87 - Southeast Pacific	Not approved
South Pacific hake - *Merluccius gayi*	Ecuador	FAO 87 - Southeast Pacific	Not approved
Drums, Barriga Juma - *Larimus ssp.*	Ecuador	FAO 87 - Southeast Pacific	Not approved
Pacific harvestfish/ Gallinaza - *Peprilus medius*	Ecuador	FAO 87 - Southeast Pacific	Not approved
Roncador - *Haemulopsis axillaris*	Ecuador	FAO 87 - Southeast Pacific	Not approved
Common dolphinfish - *Coryphaena hippurus*	Ecuador	FAO 87 - Southeast Pacific	Not approved

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 *Common and Latin names*	**Flag country(ies)**	**IUCN Red List** *Select IUCN red list category from dropdown*	**CITES Appendices** *Select CITES appendix status from dropdown*	**Step 2 risk status** *Low risk/ Medium risk/ High risk*	**Step 3 required** *Yes / No*
Yellowfin tuna - *Thunnus albacares*	Ecuador	Least concern	Not listed	High risk	Yes
Skipjack tuna - *Katsuwonus pelamis*	Ecuador	Least concern	Not listed	High risk	Yes
Pacific thread herring/pinchagua - *Opisthonema spp.*	Ecuador	Multispecies, all Least concern	Not listed	High risk	Yes
Pacific chub mackerel/macarela - *Scomber japonicus*	Ecuador	Least concern	Not listed	High risk	Yes
South Pacific hake - *Merluccius gayi*	Ecuador	Data deficient	Not listed	High risk	Yes

Drums, Barriga Juma - *Larimus ssp.*	Ecuador	Multispecies, all Least concern	Not listed	High risk	Yes
Pacific harvestfish/ Gallinaza - *Peprilus medius*	Ecuador	Least concern	Not listed	High risk	Yes
Roncador - *Haemulopsis axillaris*	Ecuador	Least concern	Not listed	High risk	Yes
Common dolphinfish - *Coryphaena hippurus*	Ecuador	Least concern	Not listed	High risk	Yes

Step 3 Assessment Outcomes

By-product species name *Common and Latin names*	Flag country(ies)	Fishing Area	Stock name *(If applicable e.g. Eastern Pacific stock)*	Category C Assessment Outcome *Pass/Fail*	Traceability information *Path 1 – Yes OR* *Path 2 – Yes/No OR* *MT Approved Whole Fish*	Step 3 Risk Outcome *Risk downgraded to Medium Risk/ Remains High Risk*
Yellowfin tuna - *Thunnus albacares*	Ecuador	FAO 77 - Eastern Central Pacific, FAO 87 - Southeast Pacific	Eastern Pacific Ocean (EPO)	Pass	Path 2 - Yes	Risk downgraded to Medium Risk
Skipjack tuna - *Katsuwonus pelamis*	Ecuador	FAO 77 - Eastern Central Pacific, FAO 87 - Southeast Pacific	Eastern Pacific Ocean (EPO)	Pass	Path 2 - Yes	Risk downgraded to Medium Risk
Pacific thread herring/pinchagua - *Opisthonema spp.*	Ecuador	FAO 87 - Southeast Pacific	Ecuador EEZ	Pass	No information provided	Remains High Risk

Pacific chub mackerel/macarela - *Scomber japonicus*	Ecuador	FAO 87 - Southeast Pacific	Ecuador EEZ	Pass	No information provided	Remains High Risk
South Pacific hake - *Merluccius gayi*	Ecuador	FAO 87 - Southeast Pacific	Ecuador and Peru EEZ	Pass	No information provided	Remains High Risk
Drums, Barriga Juma - *Larimus ssp.*	Ecuador	FAO 87 - Southeast Pacific	Ecuador EEZ	Pass	No information provided	Remains High Risk
Pacific harvestfish/ Gallinaza - *Peprilus medius*	Ecuador	FAO 87 - Southeast Pacific	Ecuador EEZ	Pass	No information provided	Remains High Risk
Roncador - *Haemulopsis axillaris*	Ecuador	FAO 87 - Southeast Pacific	Ecuador EEZ	Pass	No information provided	Remains High Risk
Common dolphinfish - *Coryphaena hippurus*	Ecuador	FAO 87 - Southeast Pacific	Eastern Pacific Ocean (EPO)	Fail	No information provided	Remains High Risk
Comments on Step 3 Assessment: The Common dolphinfish (*Coryphaena hippurus*) has undergone a harmonisation process, in which Marin Trust concluded that this species fails.						

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%

Step 3 outcomes

Category C assessment

Species name		**Yellowfin tuna - *Thunnus albacares***	
Fishing area and stock		**FAO 77 - Eastern Central Pacific, FAO 87 - Southeast Pacific Eastern Pacific Ocean (EPO)**	
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.

The clause is met considering that:

The yellowfin tuna stock in the Eastern Pacific Ocean is managed and assessed by the Inter-American Tropical Tunas Commission (IATTC). The last benchmark assessment for yellowfin tuna was conducted in 2020 and followed a risk assessment framework, considered sufficiently reliable to be used as the basis for providing management advice. This framework utilizes Stock Status Indicators (SSIs), which have become particularly important as supplemental information to, or a temporary replacement for, formal stock assessments for yellowfin, as the staff considered the results of the assessments at that time to be insufficiently reliable to serve as the basis for management advice. SSIs are simply time series of raw or lightly processed data for a stock that may reflect trends in abundance or exploitation of that stock. SSIs estimations include quantities such as fishing effort, catch, catch per unit effort, and the size of fish in the catch (IATTC 2023a). Thus, removals of the species are included in the stock assessment process (figure 1).

In 2024 an exploratory benchmark assessment was carried out, but unresolved issues prevented a full benchmark (IATTC2024).

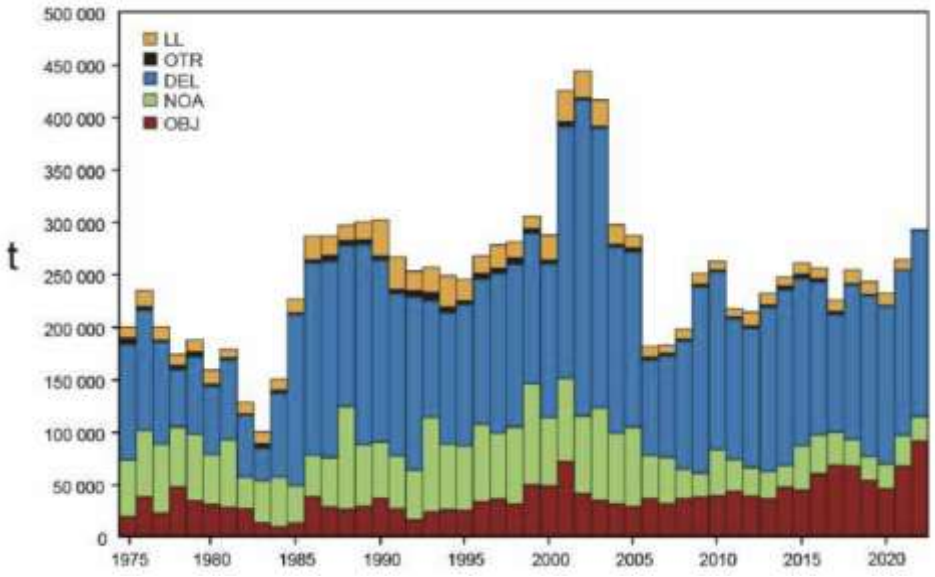


Figure 1. Total catches (retained catches plus discards) for the purse-seine fisheries, by set type (DEL, NOA, OBJ), and retained catches for the longline (LL) and other (OTR) fisheries, of yellowfin tuna in the eastern Pacific Ocean, 1975-2022. The purse-seine catches are adjusted to the species composition estimate obtained from sampling the catches. (IATTC 2023b)

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 Clause is met considering that:

The results from multiple reference models are combined in a risk analysis to provide management advice. The most recent results published in 2023 indicates that the probability of the spawning biomass being below S_{MSY_d} is low (12%) and the probability of the spawning biomass exceeding S_{LIMIT} is zero (IATTC 2023b).

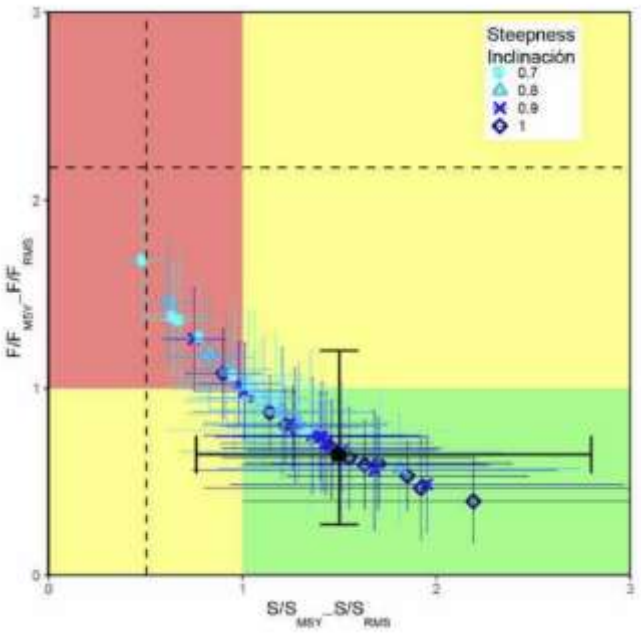


Figure 1. . Kobe (phase) plot of the time series of estimates of spawning stock size (S) and fishing mortality (F) of yellowfin tuna relative to their MSY reference points. The colored panels are separated by the target reference points (S_{MSY} and F_{MSY}). Limit reference points (dashed lines), which correspond to a 50% reduction in recruitment from its average unexploited level, based on a conservative steepness (h) of 0.75 for the Beverton-Holt stock-recruitment relationship, are merely indicative, since they vary by model and are based on all models combined. The center point for each model indicates the current stock status, based on the average fishing mortality (F) over the last three years; The solid black circle represents all models combined; to be consistent with the probabilistic nature of the risk analysis and the HCR, it is based on $P(S_{cur}/S_{LIMIT}<x) = 0.5$ and $P(F_{cur}/F_{MSY}>x) = 0.5$. The lines around each estimate represent its approximate 95% confidence interval. (IATTC 2023b).

References

IATTC (2023a). Stock Status Indicators (SSIs) for tropical tunas in the Eastern Pacific Ocean. Document SAC-14-04. May 2023. https://www.iattc.org/GetAttachment/663cdcdd-f599-4802-b9fd-6611959ff893/SAC-14-04_Stock-status-indicators-(SSIs)-for-tropical-tunas-in-the-EPO.pdf

IATTC (2023b). The tuna fishery in the Eastern Pacific Ocean in 2022. https://www.iattc.org/GetAttachment/0f48f889-2aa5-437f-8d03-648d62ecfb75/No-21-2023_Tunas,-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2022.pdf

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		Skipjack tuna - *Katsuwonus pelamis*	
Fishing area and stock		FAO 77 - Eastern Central Pacific, FAO 87 - Southeast Pacific Eastern Pacific Ocean (EPO)	
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.

The clause is met considering that:

The last stock assessment of skipjack tuna in the eastern Pacific Ocean was carried out in 2024 by the Inter-American Tropical Tuna Commission (IATTC) using an integrated statistical age-structured catch-at-length model in Stock Synthesis. This assessment reflects major advancements in the assessment methodologies in comparison to the previous assessment carried out in 2022, and incorporates new data sets. Data used to fit the model includes data from sixteen defined fisheries and five surveys, among which international catch and discard data is considered (IATTC 2024).

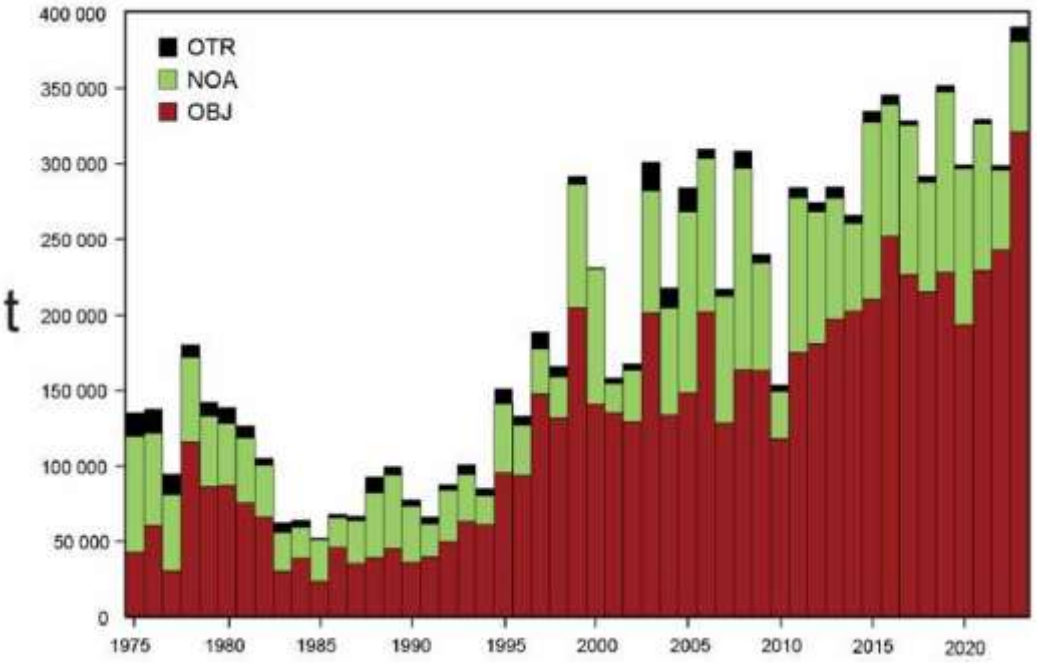


Figure 1. Total catches (retained catches plus discards) for the purse-seine fisheries, by set type (NOA, OBJ) and retained catches for the other (OTR) fisheries, of skipjack tuna in the eastern Pacific Ocean, 1975- 2023. The purse-seine catches are adjusted to the species composition estimate obtained from sampling the catches. The 2020 catch data are preliminary. (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.

The Clause is met considering that:

MSY-based estimates and reference points cannot be estimated due the tradeoff between growth and natural mortality, in combination with the assumption that recruitment is independent of stock size, implies fish should be caught at the youngest ages to maximize yield, implying that the optimal fishing mortality should be infinite. Therefore, a conservative proxy for the target biomass of SBR = 0.3 based on values for bigeye and yellowfin, and the fishing mortality corresponding to that biomass, are used as the target reference points. Stock assessment results indicates that all but one of the assessment models estimated that biomass was above the target reference point level, and fishing mortality below the target reference point level, and none of the models indicated that biomass was below the limit reference point level (Figure 1) (IATTC 2024).

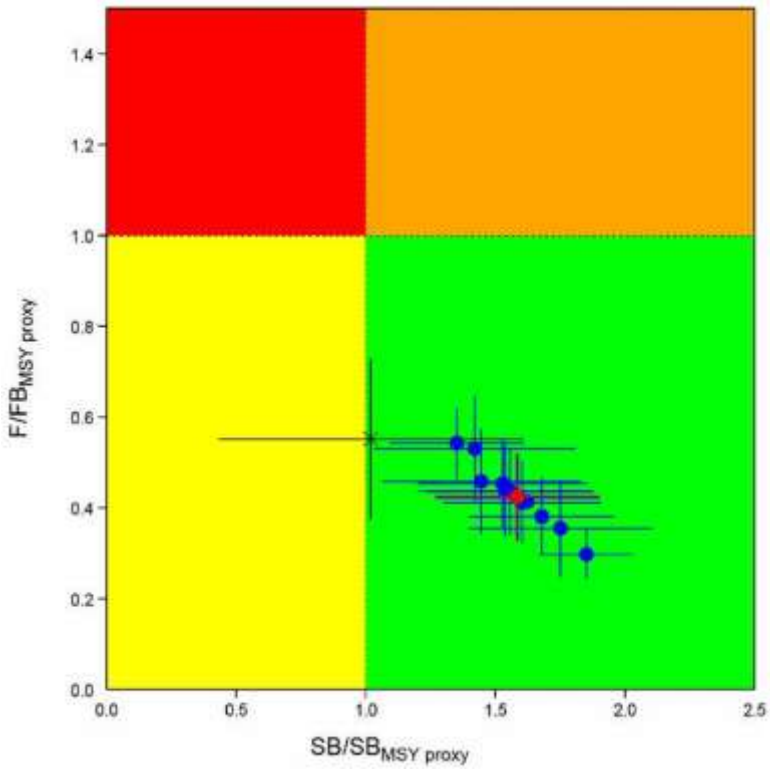


Figure 1. Kobe plot showing the skipjack tuna stock status estimates from all the models. The red dot and error bars represent the estimates from the reference model. The black cross and error bars represent the estimates from the model that removed the ECHO index (IATTC 2024).

References

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		**Pacific thread herring/pinchagua - *Opisthonema spp.***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Ecuador EEZ**	
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.	
			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.

Clause is met considering that:

The Ecuadorian Instituto Público De Investigación De Acuicultura Y Pesca (IPIAP) assesses all the main species stocks caught in the Ecuadorian small pelagic fishery annually since 2019. The last stock assessment report was published in May 2024, where analysis used catch data from 1975-2023, fishery-dependent sampling data collected by the IPIAP, including fishing areas, catch composition, size frequency data, and environmental conditions, CPUE estimates, and the outputs of a semiregular hydroacoustic cruise survey (IPIAP 2024).

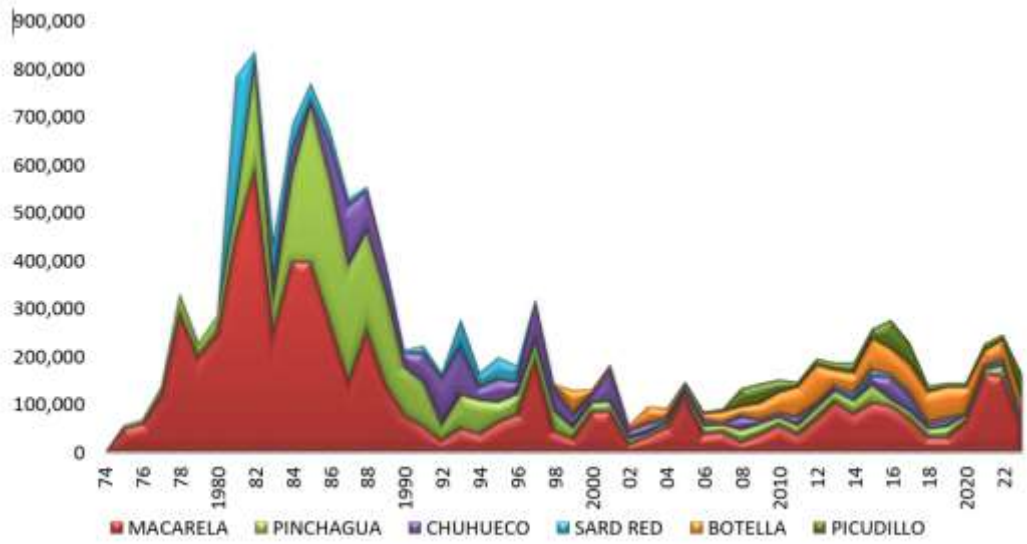


Figure 1. Landings of Ecuador's main small pelagic species during 1975-2023. In green, the pinchagua or Pacific thread herring (IPIAP 2024).

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.

Clause is met considering that:

The biomass target reference point for this stock (BMSY) is established to precautionary retention of 40% of the unfished adult biomass. Biological reference points for pinchagua were estimated by projecting the long-term biomass annually across different average annual fishing mortality rates. Results indicate that the adult biomass is estimated at around 86,000 tons, equivalent to 49% of the unfished biomass, and the average fishing mortality levels are estimated to be 82% below the FMSY

reference fishing mortality; therefore, there are practically no risks of overfishing or overexploitation (Figure x) (IPIAP 2024).

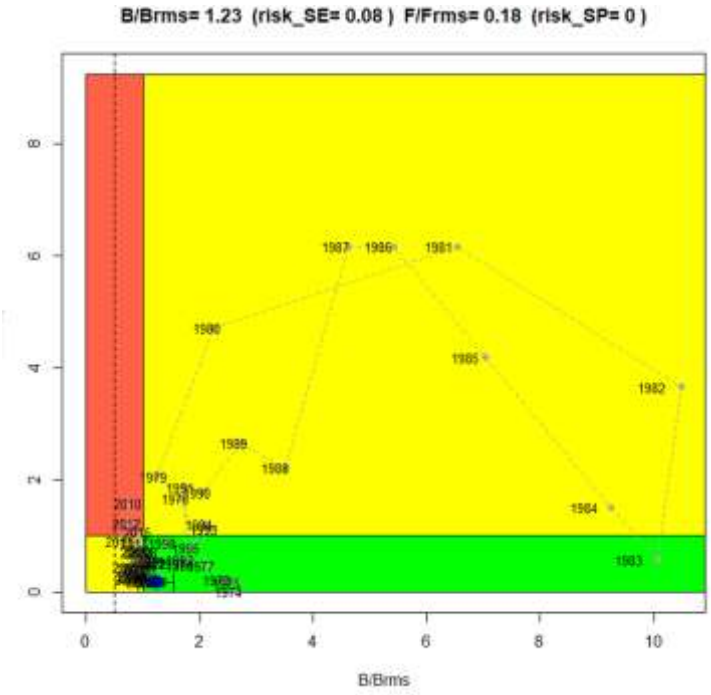


Figure 2. Kobe plot for the pinchagua or Pacific thread herring (IPIAP 2024).

References

IPIAP (2024). Evaluacion Del Stock De Recursos Pelagicos Pequeños Del Ecuador 2023 (Stock assessment of Ecuador's small pelagic resources 2023). https://institutopesca.gob.ec/wpcontent/uploads/2024/07/Informe_Evaluacion_2024.pdf

Species name		**Pacific chub mackerel/macarela - *Scomber japonicus***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Ecuador EEZ**	
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.

Clause is met considering that:

The Ecuadorian Instituto Público De Investigación De Acuicultura Y Pesca (IPIAP) assesses all the main species stocks caught in the Ecuadorian small pelagic fishery annually since 2019. The last stock assessment report was published in May 2024, where analysis used catch data from 1975-2023, fishery-dependent sampling data collected by the IPIAP, including fishing areas, catch composition, size frequency data, and environmental conditions, CPUE estimates, and the outputs of a semi-regular hydroacoustic cruise survey (IPIAP 2024).

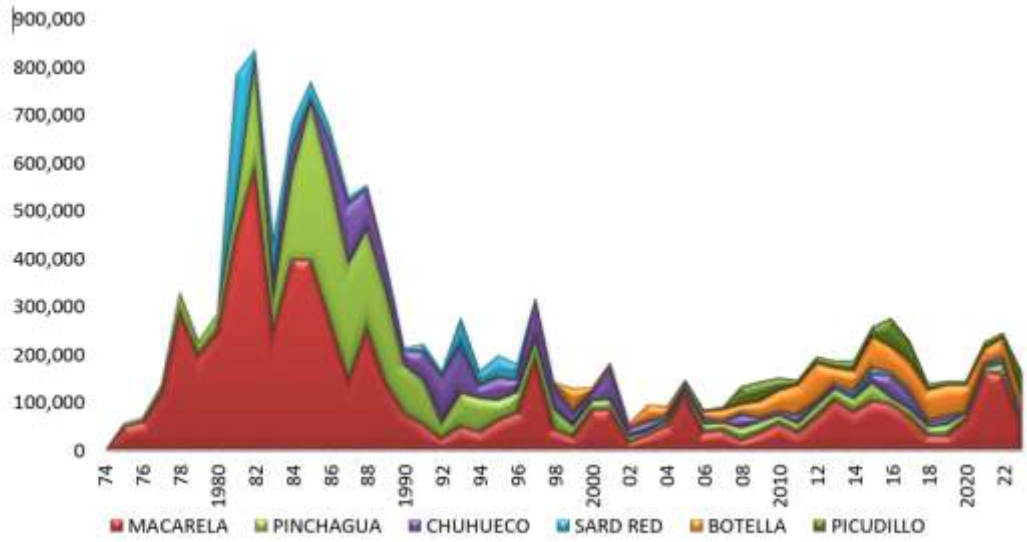


Figure 1. Landings of Ecuador's main small pelagic species during 1975-2023. In red, the macarela or Pacific chub mackerel (IPIAP 2024).

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.

Clause is met considering that:

The BMSY for this stock is set at a precautionary level of 40% of the unfished adult biomass. A spawning biomass of 374,000 t and an MSY of 220,000 t were estimated as proxies for BMSY and MSY, respectively. Stock analysis results indicate that the adult biomass is approximately 352,000 t, about 38% of the unfished biomass, slightly below the target level. Average fishing mortality is estimated to be 64% lower than the FMSY. In conclusion, the Kobe plot and associated uncertainty measures suggest no risk of overfishing; however, the risk of overexploitation is estimated at 61%. (Figure x) (IPIAP 2024).

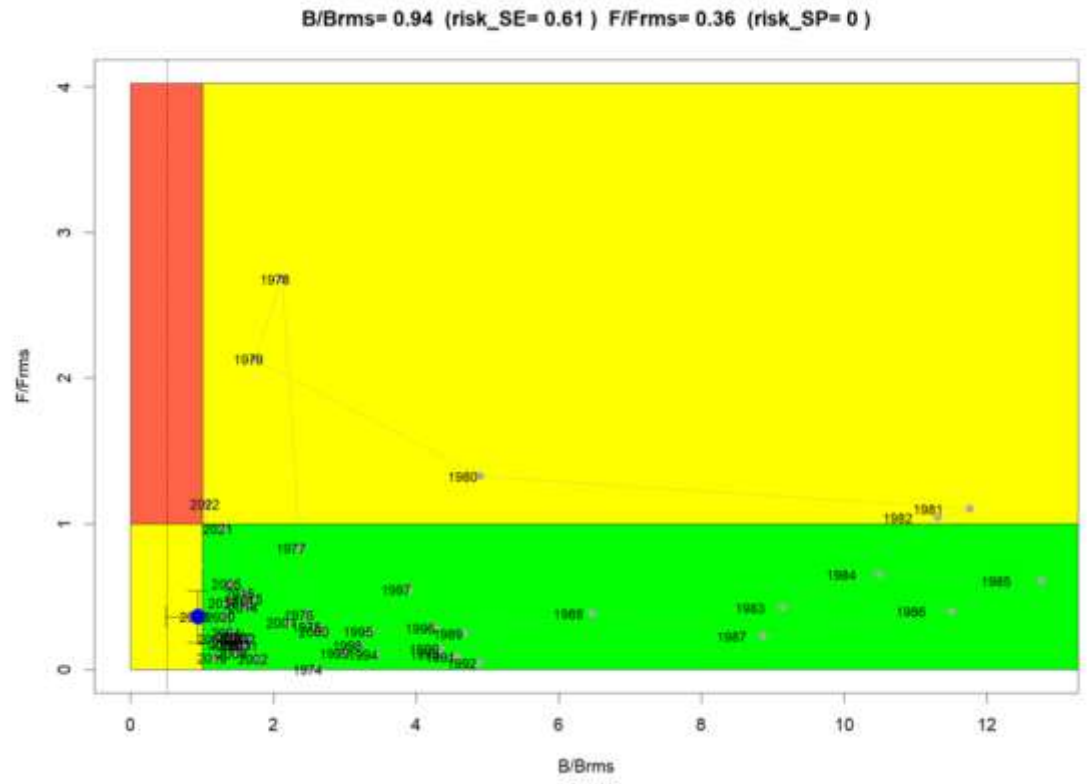


Figure 2. Kobe plot for the macarela or Pacific chub mackerel (IPIAP 2024).

References

IPIAP (2024). Evaluacion Del Stock De Recursos Pelagicos Pequeños Del Ecuador 2023 (Stock assessment of Ecuador's small pelagic resources 2023). https://institutopesca.gob.ec/wpcontent/uploads/2024/07/Informe_Evaluacion_2024.pdf

Species name		**South Pacific hake - *Merluccius gayi***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Ecuador and Peru EEZ**	
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.

Clause is met considering that:

A single South Pacific hake stock is considered to extend through the waters of Ecuador and Peru, and the Peruvian Instituto del Mar del Perú (IMARPE) evaluates the stock regularly. The last assessment was carried out in 2024 using an extended survivor analysis (XSA), which used data from both countries on landings (Figure x), size structure, age structure, maturity ogives, and natural mortality, in addition to abundance indices data from Peru only (IMARPE 2024).

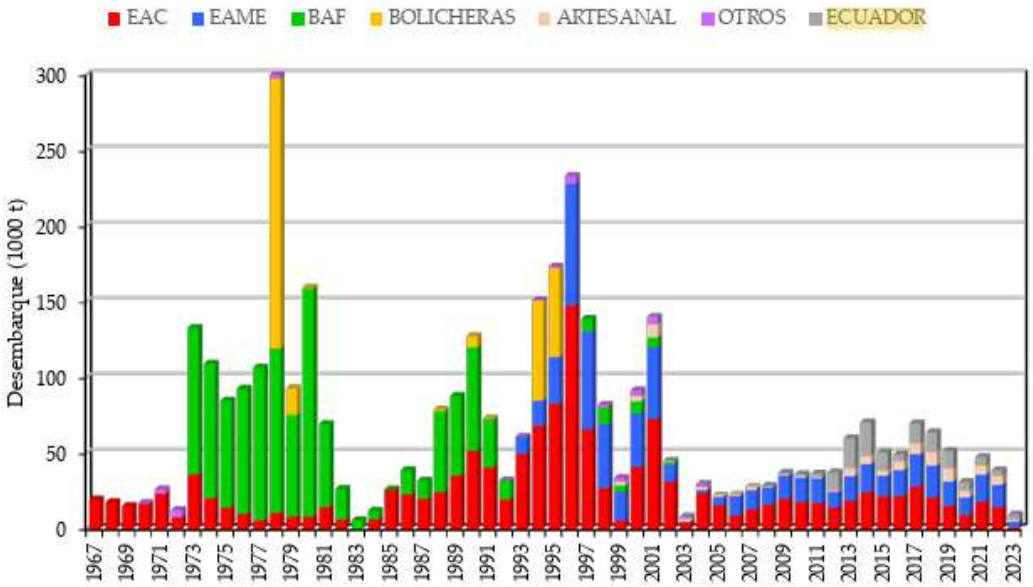


Figure 1. Hake landings from 1971 to 2023 by the Peruvian fleet and in grey color landings data from Ecuador (IMARPE 2024).

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.

Clause is met considering that:

The assessment results show that South Pacific hake stocks remain above biological reference points. While specific limit reference points were not defined in the report, it clarifies that the applied models followed a precautionary approach, consistent with FAO guidelines. This approach utilized an exploitation rate between 0.15 and 0.18, allowing the projected spawning stock biomass (SSB) to remain above the limit reference threshold (IMARPE, 2024).

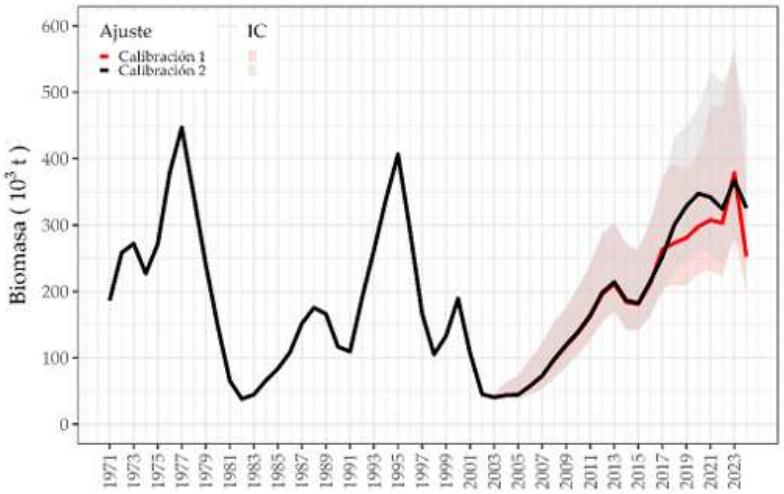


Figure 2. Estimated hake biomass under two calibration approaches (IMARPE 2024).

References

IMARPE (2024). Análisis de la pesquería, estado poblacional y proyecciones de pesca de la merluza Peruana, Julio 2024 – Junio 2025. https://www.gob.pe/institucion/imarpe/informes-publicaciones/5866400-informe-correspondiente-al-oficio-n-0902-2024-imarpe-pcd

Species name		**Drums, Barriga Juma - *Larimus ssp.***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Ecuador EEZ**	
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.

Clause is met considering that:

There is no species-specific management in place or established reference points for drums; however, the Ecuadorian Instituto Público De Investigación De Acuicultura Y Pesca (IPIAP) recognizes them as a associated species with the small pelagic fishery, which are species that inhabit or are linked to the seabed and due to their migrations in the water column, are accessible to interact with the purse seine at the time of their fishing operation (SRP 2021). The average catch composition of

small pelagic fishery from 2021 to 2024, indicates that drums represent 1% (IPIAP 2025); thus, fishery removals can be considered as 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 is met since removals can be considered as negligible.

References

Subsecretaría de Recursos Pesqueros (SRP) - Viceministerio de Acuacultura y Pesca (VAP)-Ministerio de Producción Comercio Exterior Inversiones y Pesca (MPCEIP). (2021). Plan de Acción Nacional y Manejo de la Pesquería de Peces Pelágicos Pequeños del Ecuador / SRP-VAP-MPCEIP. Manta-Manabí-Ecuador. 54 pp. https://www.produccion.gob.ec/wp-content/uploads/2021/05/Plan-de-Accion-y-Manejo-Pelagicos-Pequenos-Ecuador_2021_WEB.pdf

IPIAP. (2025). Flota cerquera costera, captura de pelágicos pequeños. https://institutopesca.gob.ec/wp-content/uploads/2023/05/Capturas-pela%CC%81gicos-pequen%CC%83os-2015-2022.pdf

Species name		**Pacific harvestfish/ Gallinaza - *Peprilus medius***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Ecuador EEZ**	
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.

Clause is met considering that:

There is no species-specific management in place or established reference points for Pacific harvestfish; however, the Ecuadorian Instituto Público De Investigación De Acuicultura Y Pesca (IPIAP) recognizes them as a associated species with the small pelagic fishery, which are species that inhabit or are linked to the seabed and due to their migrations in the water column, are accessible to interact with the purse seine at the time of their fishing operation (SRP 2021). The average catch

composition of small pelagic fishery from 2021 to 2024, indicates that Pacific harvestfish represent 0.3% (IPIAP 2025); thus, fishery removals can be considered as 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 is met since removals can be considered as negligible.

(References

Subsecretaría de Recursos Pesqueros (SRP) - Viceministerio de Acuacultura y Pesca (VAP)-Ministerio de Producción Comercio Exterior Inversiones y Pesca (MPCEIP). (2021). Plan de Acción Nacional y Manejo de la Pesquería de Peces Pelágicos Pequeños del Ecuador / SRP-VAP-MPCEIP. Manta-Manabí-Ecuador. 54 pp. https://www.produccion.gob.ec/wp-content/uploads/2021/05/Plan-de-Accion-y-Manejo-Pelagicos-Pequenos-Ecuador_2021_WEB.pdf

IPIAP. (2025). Flota cerquera costera, captura de pelágicos pequeños. https://institutopesca.gob.ec/wp-content/uploads/2023/05/Capturas-pela%CC%81gicos-pequen%CC%83os-2015-2022.pdf

Species name		**Roncador - *Haemulopsis axillaris***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Ecuador EEZ**	
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.

Clause is met considering that:

There is no species-specific management in place or established reference points for roncador; however, the Ecuadorian Instituto Público De Investigación De Acuicultura Y Pesca (IPIAP) recognizes them as a associated species with the small pelagic fishery, which are species that inhabit or are linked to the seabed and due to their migrations in the water column, are accessible to interact with the purse seine at the time of their fishing operation (SRP 2021). The average catch composition of the small pelagic fishery from 2021 to 2023 indicates that roncador represents 0.1% (IPIAP 2024). In the 2024 report, the roncador is not mentioned, which means that it is included within the

concept of "other," where species that have a small representation on the fishery are grouped (IPIAP 2025); thus, fishery removals can be considered as 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 is met since removals can be considered as negligible.

References

Subsecretaría de Recursos Pesqueros (SRP) - Viceministerio de Acuacultura y Pesca (VAP)-Ministerio de Producción Comercio Exterior Inversiones y Pesca (MPCEIP). (2021). Plan de Acción Nacional y Manejo de la Pesquería de Peces Pelágicos Pequeños del Ecuador / SRP-VAP-MPCEIP. Manta-Manabí-Ecuador. 54 pp. https://www.produccion.gob.ec/wp-content/uploads/2021/05/Plan-de-Accion-y-Manejo-Pelagicos-Pequenos-Ecuador_2021_WEB.pdf

IPIAP. (2025). Flota cerquera costera, captura de pelágicos pequeños. https://institutopesca.gob.ec/wp-content/uploads/2023/05/Capturas-pela%CC%81gicos-pequen%CC%83os-2015-2022.pdf

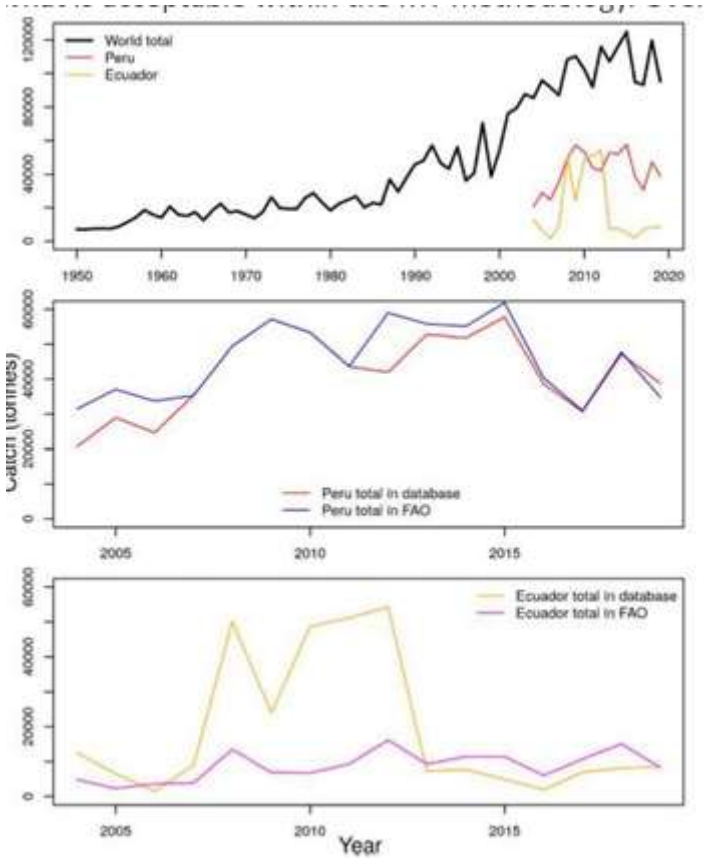
IPIAP. (2024). Flota cerquera costera, captura de pelágicos pequeños. https://institutopesca.gob.ec/wp-content/uploads/2025/01/DesembarquesPPP2010-2023_WEB-1.pdf

Species name		**Common dolphinfish - *Coryphaena hippurus***	
Fishing area and stock		**FAO 87 - Southeast Pacific** **Eastern Pacific Ocean (EPO)**	
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.	Fail
	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.	Fail
		Clause outcome:	Fail

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 stock structure of dolphinfish in the Pacific Ocean is not known, and regular stock assessments are not undertaken (Fishsource, 2025). The most recent stock assessment was conducted in 2021, using data up to 2019. The assessment incorporated Ecuadorian and Peruvian catch data; while the unknown stock structure means it is not possible to determine whether this represents all fishery removals from this stock, it does cover those vessels within the scope of the present assessment.

However, the fishery is considered “data poor” in both countries, and the stock assessment report notes significant gaps in much of the source data (IATTC 2021). On top of this, the stock assessment is now 4 years old and based on data which are 6+ years old, approaching the limit of what is acceptable within the MT methodology. Overall*,* **C1.1 is not met.**



(Figure x). World and country landings of dolphinfish, taken from the 2021 stock assessment report (IATTC 2021).

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 2021 stock assessment provides estimates of biomass up to the end of the assessed time series – i.e. December 2019 (IATTC 2021). No reference points are established for this stock (Fishsource 2025). Due to the age of the most recent stock assessment, and the lack of reference points, it is not possible to determine whether the current stock status is above the limit reference point. **C1.2 is not met.**

References

Fishsource, 2025. Common dolphinfish in the Eastern Pacific Ocean. https://www.fishsource.org/stock_page/1036 IATTC, 2021. Stock Assessment of the dolphinfish (Coryphaena hippurus) in the South-East Pacific Ocean. https://www.iattc.org/GetAttachment/76cad98f-5a38-4aa2-b7cb-df4cfd23ef00/SAC-13-INF-O_Evaluaciondel-stock-de-dorado-OPO-Sur.pdf

Traceability information

Information provided for Step 3 Path 1 or Path 2

Species name	Yellowfin tuna - *Thunnus albacares* Eastern Pacific Ocean (EPO)			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☐			
Path 2	Yes ☒ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Ecuador	2.69	2.11	Downgraded to medium risk

Species name	Skipjack tuna - *Katsuwonus pelamis* Eastern Pacific Ocean (EPO)			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☐			
Path 2	Yes ☒ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Ecuador	2.69	2.11	Downgraded to medium risk