MarinTrust Whole fish fishery assessment report

Document TEM-002 (prev. FISH2) - Version 3.0

Issued June 2024 – Effective June 2024

Peru - Anchovy (Engraulis ringens) - FAO 87, Northern Border of Peruvian EEZ to 16° South

Re-approval
WF02

Table 1: Whole fish fishery assessment scope

Fishery name	**Peru - Anchovy (*Engraulis ringens*) - FAO 87, Northern Border of Peruvian EEZ to 16° South**
MarinTrust report code	**WF02**
Type 1 species (common name, Latin name)	*Anchovy (Engraulis ringens)*
Fishery location	*FAO 87, Northern Border of Peruvian EEZ to 16° South*
Gear type(s)	*Purse seine (industrial fleet)*
Management authority (country/state)	*Peru, Ministry of Production (PRODUCE)*

Table 2: Applicant and Certification Body details

Application details			
Applicant(s)		*Pesquera Exalmar SAA - Tambo de Mora, Chancay (COPEINCA), Chancay (Pesquera Centinela SAC), Supe (Pesquera Diamente SA), Vegueta (TASA), Pesquera Exalmar SAA - Callao, Pesquera Caral, Pesquera Exalmar SAA - Huacho (Av. Industrial No. 690), Pisco Norte (Pesquera Diamante SA), Tambo de Mora (COPEINCA), Pesquera Jada SA, Chimbote (TASA), Coishco (Pesquera Hayduk SA), Callao (TASA), Pesquera Exalmar SAA - Chimbote, Chicama Norte (Malabrigo), Tambo de Mora (Pesquera Centinela SAC), Chimbote (COPEINCA), Callao (Pesquera Diamante SA), Chimbote (Pesquera Centinela SAC), Pisco (Austral Group SAA), Samanco (TASA), Chimbote (Compañía Pesquera del Pacifico Centro), Malabrigo (TASA), Supe (Copeinca), Coishco (Pesquera Cantabria SA), Bayovar (COPEINCA), Chimbote Norte (COPEINCA), Supe (TASA), Chancay (Austral Group SAA), Ilo (Austral Group SAA), Malabrigo (Pesquera Diamante SA), Pesquera Exalmar SAA - Chicama, Vegueta (Pesquera Hayduk SA), Coishco (Austral Group SAA), Chicama Sur (COPEINCA), Malabrigo (Pesquera Hayduk SA), Pesquera Capricornio SA - Callao, Pisco Sur (TASA)*	
Applicant country		*Peru*	
Certification Body details			
Name of Certification Body		LRQA	
Contact Information for CB (e.g. email address/address/telephone number)		E: mt-ca@lrqa.com LRQA, 4-5 Lochside Way, Edinburgh Park, EH12 9DT T: +44 800 092 0452	
Fishery Assessor name		Jim Missen	
CB Peer Reviewer name		Blanca Gonzalez	
Number of assessment days	7	**Assessment period**	08.2025 to 08.2026

Table 3: Assessment outcome

Assessment outcome **(See Table 4 for a summary of assessment determination)**		*Approve*
Approval validity	Valid from: 08/2025	Valid until: 08/2026
CB peer reviewer evaluation		*Agree with assessment determination*

Fishery Assessment Peer Review Group external peer reviewer evaluation	*Agree with assessment determination*

Table 4: Assessment determination

Assessment determination Summary of assessment and outcome
The Peruvian anchovy (*Engraulis ringens*) fishery is a highly productive industrial pelagic purse seine fishery, comprising approximately 99.53% of total landings. On average, bycatch occurs in very small quantities and consists primarily of chub mackerel, caballa (*Scomber japonicus*), and carrot/red squat lobster, munida (*Pleuroncodes monodon*), at around 0.2% and 0.15% of landings, respectively. The remaining 0.12% of landings consist of five species, with none exceeding the 0.1% threshold of assessment. This assessment covers anchovy in FAO Area 87, from the Northern Border of the Peruvian EEZ to 16° South. Both anchovy and chub mackerel are listed as Least Concern by the IUCN, while the carrot/red squat lobster is not listed, and none are listed in any CITES appendix. Thus, making them eligible for approval as MarinTrust whole fish material and meeting the MarinTrust management requirements (Category M). Anchovy is Peru's most significant extractive species and supports the largest monospecific fishery in the world. As such, it is subjected to a well-informed management regime designed to absorb the environmental perturbations characteristic of the ecosystem. The most recently fishing year with a full assessment was the second season of 2024, running between November 2024 and January 2025. The Limit of Maximum Total Catch for the Period (LMTCP) was 2,510,000 tons, with the subsequent April 2025 research cruise indicating that the stock biomass was 10,927,796 tons. This is above the established reference points of spawning biomass and the limit reference point, which are 5,000,000 and 4,000,000 tons, respectively. Anchovy LMTCP is set in line with Maximum Sustainable Yield (MSY) and aligns with the commitment to sustainable fisheries management and reflects the precautionary approach endorsed by the Peruvian Marine Institute (IMARPE). Therefore, anchovy is assessed as a Category A species and meets the requirements of this section. The latest chub mackerel stock assessment was conducted in December 2024, and removals of the species were included in the stock assessment process. The biomass remains above the limit reference point, and, as such, chub mackerel is assessed as a Category C species and meets the requirements of this section. The carrot/red squat lobster is not subjected to management by the Peruvian Ministry for Production (PRODUCE) and represents less than 5% of the catch composition. As such, it is assessed as a Category D species and meets the requirements for the Productivity-Susceptibility Analysis (PSA). Interactions between the fishery and ETP species are reported by two onboard observer programs (Programa Bitácoras de Pesca and Salvamares). While these programs report a significant quantity of interactions with ETP species, the mortality rate is believed to be low and mitigation measures are in place. The fishery, using pelagic purse seines, has a minimal impact on the marine habitat. In relation to the fishery's impact on marine ecosystems, it is thought that the activity, at current levels, is not having a significant negative impact. This is bolstered by the application of a consistent and intensive monitoring regime and spatial closures to protect critical areas. As a result, the

anchovy fishery meets the MarinTrust standards concerning marine habitats, ETP species, and ecosystem impacts. The anchovy fishery in FAO Area 87, from the Northern Border of the Peruvian EEZ to 16° South, passed all the MarinTrust requirements in this assessment; therefore, its re-approval is recommended for use as raw material in MarinTrust-certified products. Last data accessed: August 13, 2025.	
Summary of CB peer review	This is the first time that the anchovy (*Engraulis ringens*) fishery in FAO 87, Northern Border of Peruvian EEZ to 16° is assessed against Marin Trust whole fish fishery assessment criteria V3. Management framework and surveillance, control, and enforcement system, impacts on ETP species, habitats, and ecosystem continue to meet the requirements of the Marin Trust Standard. The species classification and their assessment are accurate, noting that the carrot/red squat lobster is a species that had not previously needed to be evaluated. All clauses have a clear rationale for each outcome supported by relevant and up-to-date references. A few suggestions were made to enhance clarity in a few sections, and they were considered in this version of the report. The peer reviewer agrees with the assessor's determination. .
Summary of external peer review (see Appendix 1 for the full peer review report)	*Note to assessor: Include a brief summary of the external peer review evaluation.*
Notes for on-site auditor	*Note to assessor: Notes for on-site auditor should be included where there may be reason to validate the findings of the assessment during the on-site audit. For example, if a marine mammal or ETP shark is allowed to be landed by the fishery, the auditor on site can review evidence to ensure this species is not used for reduction purposes.*

Table 5: General results

Section	Outcome (Pass/Fail)
M1 - Management Framework	Pass
M2 - Surveillance, Control and Enforcement	Pass
E1 - Impacts on ETP Species	Pass
E2 - Impacts on Habitats	Pass
E3 - Ecosystem Impacts	Pass

Table 6: Species-specific results

See Table 7 for further details of species categorisation.

Category	Species name (common & Latin name)	Outcome (Pass/Fail/n/a)	
Category A	*Anchovy, anchoveta (Engraulis ringens)*	A1	Pass
		A2	Pass
		A3	Pass
		A4	Pass
Category B	No species identified	-	
Category C	*Chub mackerel, caballa (Scomber japonicus)*	Pass	
Category D	*Carrot/red squat lobster, munida (Pleuroncodes monodon)*	Pass	

Table 7: Species categorisation table

List of all the species assessed. Type 1 species are assessed against Category A or Category B. Type 1 species must represent 95% of the total annual catch. Type 2 species are assessed against Category C or Category D. Type 2 species may represent a maximum of 5% of the annual catch. Species that comprise less than 0.1% of the catch are not required to be assessed or listed here.

Species name (common & Latin name)	Stock	CITES listed yes/no	IUCN Red list Category	% catch composition	Management (Y/N)	Category (A, B, C or D)
Anchovy, anchoveta (Engraulis ringens)	FAO 87, Northern Border of Peruvian EEZ to 16° South	No	LC[1]	~99.5	Yes	A
Carrot/red squat lobster, munida (Pleuroncodes monodon)	FAO 87, Northern Border of Peruvian EEZ to 16° South	No	Not listed	~0.20	No	D
Chub mackerel, caballa (Scomber	FAO 87, Northern Border of	No	LC[2]	~0.15	Yes	C

japonicus)	Peruvian EEZ to 16° South					

Rationale

The Peruvian anchovy (*Engraulis ringens*) fishery is the largest monospecific fishery in the world, with the unit in FAO Area 87, from the northern border of the Peruvian EEZ to 16° South, being the predominant component. To determine the catch composition of the fishery, the average catch composition from the most recent observed trips of the industrial anchovy fleet was calculated, in line with the methodology used by previous assessors. Data was compiled from the five most recently available reports, dated November, June, May, and April 2024, and the second fishing season (October to April) in 2023, thus broadly representing a complete year of reporting[3,4,5,6,7].

The results were approximately 99.53% anchovy, 0.21% carrot/red squat lobster (*Pleuroncodes monodon*), and 0.13% chub mackerel (*Scomber japonicus*). The remaining ~0.12% of the averaged landings were comprised of four species: longnose anchovy (*Anchoa nasus*), Peruvian sea catfish (*Galeichthys peruvianus*), bonito (*Sarda chiliensis chiliensis*), and skipjack tuna (*Katsuwonus pelamis*). None of these exceeded the 0.1% threshold necessary to require assessment under the MarinTrust framework and, as such, have not been assessed in this report.

This assessment is designated as a re-assessment and is the first for the fishery to be conducted under the MarinTrust Version 3 whole fish fishery criteria. The previous assessment, completed in 2024, was based on Version 2.

Anchovy was assessed as a Category A species, since it is listed as Least Concern by the IUCN, not listed in any CITES appendix, managed by the Peruvian Ministry for Production (PRODUCE), and comprises more than 95% of the fishery's total catch.

Chub mackerel was assessed as a Category C species, since it is listed as Least Concern by the IUCN, not listed in any CITES appendix, managed by the PRODUCE, and comprises less than 5% of the fishery's total catch.

Carrot/red squat lobster was assessed as a Category D species, since it is not listed by the IUCN, not listed in any CITES appendix, not managed by the PRODUCE, and comprises less than 5% of the fishery's total catch.

References

1. International Union for Conservation of Nature. (n.d.). *Species 183775*. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/183775/102904317
2. International Union for Conservation of Nature. (n.d.). *Species 170306*. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/170306/170083106
3. Instituto del Mar del Perú. (2024). *Bitácora de pesca anchoveta — Noviembre 2024*. https://www.imarpe.pe/imarpe/archivos/reportes/imarpe_repo_bitacora_de_pesca_anchoveta_noviembre_2024.pdf
4. Instituto del Mar del Perú. (2024). *Bitácora de pesca anchoveta — Junio 2024*. https://www.imarpe.pe/imarpe/archivos/reportes/imarpe_repo_bitacora_de_pesca_anchoveta_junio_2024.pdf

5. Instituto del Mar del Perú. (2024). *Bitácora de pesca anchoveta — Mayo 2024*. https://www.imarpe.pe/imarpe/archivos/reportes/imarpe_repo_bitacora_de_pesca_anchoveta_mayo_2024.pdf
6. Instituto del Mar del Perú. (2024). *Bitácora de pesca anchoveta — Abril 2024*. https://www.imarpe.pe/imarpe/archivos/reportes/imarpe_rbiore_bitacora_de_pesca_anchoveta_abril_2024.pdf
7. Instituto del Mar del Perú. (2023). *Bitácora de pesca anchoveta — Segunda Temporada de Pesca 2023*. https://www.imarpe.pe/imarpe/archivos/reportes/imarpe_rbiore_bitacora_de_pesca_anchoveta_segunda_temporada_2023_norte_centro.pdf

Management requirements

This section, or module, assesses the general management regime applied to the fishery under assessment. It comprises two parts, M1, which evaluates the management framework, and M2, which evaluates surveillance, control and enforcement within the fishery.

1.6. All management criteria must be met (pass) for a fishery to pass the Management requirements.

1.6.1. The sub-criteria offer a structured evidence base to demonstrate that the fishery sufficiently meets the management criteria. It is not expected that sub-criteria are assessed independently of the main criterion.

M1 Management framework

M1.1	**M1.1 There is an organisation responsible for managing the fishery.** *In reaching a determination for M1.1, the assessor should consider if the following is in place:*	
	M1.1.1 The management and administration organisations within the fishery are clearly identified.	
	M1.1.2 The functions and responsibilities of the management organisations include the overall regulation, administration, science and data collection and enforcement roles, and are documented and publicly available.	
	M1.1.3 Fishers have access to information and/or training materials through nationally recognised organisations.	
Outcome	*Pass*	

Rationale

Fisheries, like other natural resources in Peru, are considered national capital assets and, as such, are administered by the state[1]. The overarching piece of legislation governing the industry in Peru is the General Fisheries Law Legislative Decree N° 25977 (GFL), introduced in 1992, with further regulations approved in 2001 (supreme decree N° 012-2001-PE and its modifications)[2,3,4]. This declares that the "hydro-biological resources contained in Peru's jurisdictional waters are the patrimony of the nation" and that it is the responsibility of the state to "regulate the comprehensive management and rational exploitation of these resources, considering that fishing activity is of national interest"[5].

The current Individual Vessel Quota (IVQ) system was enacted in 2008 with Legislative Decree N° 1084 (2008)[6]. This forms the basis of the management system applied to the fishery. Quotas were first granted to fish anchovy for Indirect Human Consumption (IHC) between the northern limit with Ecuador and parallel 16° S, outside the reserve areas for the artisanal and small-scale fleet. This was later extended to the southern stock in the second fishing season of the year.

Institutional management is entrusted to the Ministry of Production (PRODUCE) (formerly the

Ministry of Fisheries until 2002, by Law N° 27779)[1]. PRODUCE formulates, designs, implements, and oversees national and sectoral policies for Fisheries, Aquaculture, Micro, Small and Medium Enterprises (MSMEs), and Industry[7]. It exercises jurisdiction over fisheries and aquaculture regulations, industrial fisheries, medium- and large-scale aquaculture, industrial standardization, as well as regulated products, productive innovation, and technology transfer.

Within PRODUCE is the Vice Ministry of Fisheries and Aquaculture (DVPA), which is responsible for leading national policy on fishing and aquaculture. As part of this role, it formulates, approves, and supervises fisheries management, and promotes scientific and technological research in the sector. Its scope extends over the ecological conditions of the species' habitat; the quality, health, and sustainability of exploitation; the processing and marketing methods; and the species themselves[6].

As part of the responsibilities of PRODUCE and the Peruvian Marine Institute (IMARPE), both institutions ensure that fishers have access to relevant fisheries information, including management actions and fishery data, through their public websites[8,9]. IMARPE is also involved in training vessel crew members participating in the private Salvamares program, with the aim of improving the release and identification of marine predators[10].

Based on the above, the fishery passes Clause M1.1.

References

1. Food and Agriculture Organization of the United Nations. (n.d.). Country profile: Peru. https://www.fao.org/fishery/docs/DOCUMENT/fcp/en/FI_CP_PE.pdf
2. Presidencia de la República del Perú. (1992). Ley General de Pesca (Decreto Ley Nº 25977) [Decreto-Ley]. SENACE. https://www.senace.gob.pe/wp-content/uploads/filebase/senacenormativa/NAS-4-8-01-D-LEY-25977.pdf
3. Ministerio de la Producción. (2001). Decreto Supremo Nº 012-2001-PE: Aprueban el Reglamento de la Ley General de Pesca. Peru. https://www.gob.pe/institucion/presidencia/normas-legales/353735-012-2001-pe
4. Fisheries Transparency Initiative. (2022). FiTI Peru TaSo detailed assessment report. https://www.fiti.global/wp-content/uploads/2022/04/FiTI_PER_TaSo_DetailedAssessmentReport_EN_20220427.pdf
5. Perú. (1992). Ley General de Pesca (Decreto Ley Nº 25977). https://www.senace.gob.pe/wp-content/uploads/filebase/senacenormativa/NAS-4-8-01-D-LEY-25977.pdf
6. Garteizgogeascoa, M., Gonzales, I. E., Kluger, L. C., Damonte, G., & Flitner, M. (2020). Institutional context and governance of Peruvian fisheries and aquaculture (artec-Paper No. 226). Universität Bremen, Forschungszentrum Nachhaltigkeit. https://www.ssoar.info/ssoar/bitstream/handle/document/73225/ssoar-2020-garteizgogeascoa_et_al-Institutional_context_and_governance_of.pdf?sequence=1&isAllowed=y
7. Ministerio de la Producción. (n.d.). Información institucional. https://www.gob.pe/institucion/produce/institucional
8. Ministerio de la Producción (PRODUCE). (n.d.). Informes y publicaciones. Gobierno del Perú. https://www.gob.pe/institucion/produce/informes-publicaciones
9. Instituto del Mar del Perú (IMARPE). (n.d.). Reportes e informes [Página de recursos]. IMARPE. https://www.imarpe.gob.pe/reportes-e-informes/?path_to_pdf=wp-content/uploads/pdfs/reportes%20e%20informes/informes
10. Sociedad Nacional de Pesquería (SNP). (n.d.). Conferencias de sostenibilidad marina. SNP.

https://snp.org.pe/investigacion-cientifica/conferencias-de-sostenibilidad-marina-2/

M1.2	**M1.2 Fishery management organisations are legally empowered to take management actions.** *In reaching a determination for M1.2, the assessor should consider if the following is in place:*	
	M1.2.1 There are legal instruments in place to give authority to the management organisation(s) which can include policies, regulations, acts or other legal mechanisms.	
	M1.2.2 Vessels wishing to participate in the fishery must be authorised by the management organisation(s).	
	M1.2.3 The management system has a mechanism in place for the resolution of legal disputes.	
	M1.2.4 There is evidence of the legal rights of people dependent on fishing for food or livelihood.	
Outcome	*Pass*	

Rationale

PRODUCE, through its DVPA arm, is the management organisation in Peru that is legally empowered to implement management actions in the fishery. It formulates, approves and supervises the fisheries management. PRODUCE was created by Law N°. 27779 (2002) with the last regulation outlining the organization and roles of PRODUCE was approved by Supreme Decree 002-2017-PRODUCE[1].

The Peruvian anchovy fishery is comprised of two management stocks. The northern stock is between 3°S and 15°S in northern Peru and the southern if between 15°S and the southern limit of the Peruvian maritime domain[2]. As such the stocks are managed separately and the former historically receives more attention from the authorities and greater levels of exploitation.

Under the GFL, fishing extraction is broken into two primary groups, commercial (be that small-scale, artisanal or large-scale, industrial) and non-commercial extraction. This is determined by hold capacity, vessel length and level of mechanisation. The fishery is further dissected by vessels fishing for IHC and Direct Human Consumption (DHC). It is required that the two types of commercial extraction are managed as separate units and this is achieved through fishing regulation schemes, known as ROP (Reglamento de Ordenamiento Pesquero)[2]. Through the objectives of the ROPs, they define access to fishing, fishing seasons, fleet capacity, fishing quotas, minimum sizes, fishing gear and allowed methods, territorial restrictions, research requirements and monitoring and surveillance actions[2].

In order to participate in the fishery, a permit is required however, the availability of these permits is dependent on the level of exploitation. A fishery is defined as either unexploited, underexploited

or fully exploited[2,3]. These designations are formed by scientific studies and technical reports carried out by IMARPE. In a fully exploited fishery such of that as anchovy, PRODUCE will cease the fleet increase authorizations and the release of fishing permits thus preventing vessels or new permit holders from entering. Exceptions can be provided for the replacement of a comparable vessel hold capacity.

The primary mechanism for dispute management within the fishery is through a fortnightly technical consultation meeting involving National Fisheries Society (SNP), relevant government organisations and the national industry society (FIP)[4]. The agenda at these meetings is open.

Exemptions for the payment of fishing concessions, authorisations and permits are provided to subsistence fishers, scientific institutions and artisanal fishers and companies predicted on Article 45 of the GFL[5].

Based on the above, the fishery passes Clause M1.2.

References

1. Government of Peru. (n.d.). *Reglamento de Organización y Funciones (ROF)*. https://cdn.www.gob.pe/uploads/document/file/360628/ROF.pdf?v=1568324665
2. Garteizgogeascoa, M., Gonzales, I. E., Kluger, L. C., Damonte, G., & Flitner, M. (2020). *Institutional context and governance of Peruvian fisheries and aquaculture* (artec-Paper No. 226). Universität Bremen. https://www.ssoar.info/ssoar/bitstream/handle/document/73225/ssoar-2020-garteizgogeascoa_et_al-Institutional_context_and_governance_of.pdf?sequence=1&isAllowed=y
3. Food and Agriculture Organization of the United Nations. (n.d.). *Country profile: Peru*. https://www.fao.org/fishery/docs/DOCUMENT/fcp/en/FI_CP_PE.pdf
4. Fishery Progress. (2019). *Peruvian Anchovy IHC FIP review*. https://fisheryprogress.org/sites/default/files/indicators-documents/Peruvian_Anchovy_IHC_FIP_Review_2019_GB2338_5.pdf
5. Presidencia de la República del Perú. (1992). Ley General de Pesca (Decreto Ley Nº 25977) [Decreto-Ley]. SENACE. https://www.senace.gob.pe/wp-content/uploads/filebase/senacenormativa/NAS-4-8-01-D-LEY-25977.pdf

M1.3	**M1.3**	**There is an organisation responsible for collecting data and (scientifically) assessing the fishery.** *In reaching a determination for M1.3, the assessor should consider if the following is in place:*
	M1.3.1	The organisation(s) responsible for collecting data and assessing the fishery is/are clearly identified.
	M1.3.2	The management system receives scientific advice regarding stock, non-target species and ecosystem status.
	M1.3.3	Scientific advice is independent from the management organisation(s) and transparent in its formulation through a clearly defined process.

Outcome	*Pass*

Rationale

The Peruvian Marine Institute (IMARPE) is a specialised technical agency attached to PRODUCE. As a Public Research Institute (IPI), IMARPE is part of the National System of Science, Technology, and Innovation (SINACTI)[1]. SINACTI's purpose is to promote and conduct scientific research, technological developments, and innovations related to living resources that exist both within and outside the maritime domain, as well as in inland waters.

Its scope of action includes the maritime domain and national inland waters, as well as the high seas, the Antarctic ecosystem, and any aquatic environment where Peru has interests, including the seabed, in accordance with international law. IMARPE is responsible for conducting stock assessments; producing recommendations for annual catch limits; establishing temporary authorisations for the extraction of fish; and setting the maximum tolerance of juvenile specimens as bycatch[1]. The interaction between IMARPE, PRODUCE, and the fishers is shown in Figure 1.

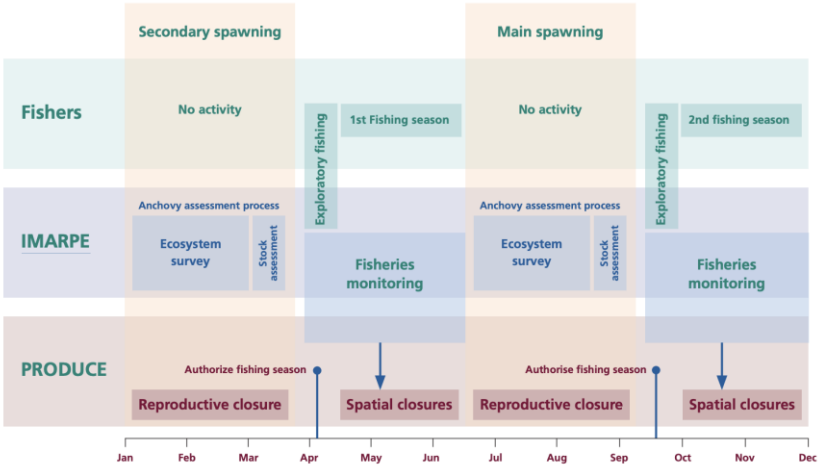

Figure 1. Stakeholder participation in anchovy fisheries management, showing activities related to fisheries management and the stakeholders involved[2].

To address environmental variability, which is particularly influential in the Peruvian Upwelling System, IMARPE carries out intensive and continuous monitoring of the ecosystem using remote sensing and in situ observations at sea and on land. Direct observations at sea are conducted through two to four scientific surveys each year, covering the entire Peruvian coast[2]. These surveys collect oceanographic and ecosystem information, including hydroacoustic assessments used to estimate total biomass, egg and larval production, size structure of the anchovy population, and reproductive condition. Vessels of the IHC fleet are required to sample 100 fish from every haul and provide IMARPE with catch and biological data daily[3]. Additionally, during anomalous environmental conditions, a "Eureka" operation conducts hydroacoustic assessment surveys, with data collected simultaneously by several industrial fishing vessels under the coordination of IMARPE. The most recent of these was conducted in April 2025[4].

Based on the above, the fishery passes Clause M1.3.

References

1. Instituto del Mar del Perú. (n.d.). *Quiénes somos*. https://www.imarpe.gob.pe/nosotros-seccion-quienes-somos/
2. Bahri, T., Vasconcellos, M., Welch, D.J., Johnson, J., Perry, R.I., Ma, X. & Sharma, R., eds. 2021. Adaptive management of fisheries in response to climate change. FAO Fisheries and Aquaculture Technical Paper No. 667. Rome, FAO. https://doi.org/10.4060/cb3095en
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4. Instituto del Mar del Perú. (2025). *Plan de trabajo Operación Eureka LXXVI: Informe correspondiente al oficio nº 0580-2025 IMARPE-PE*. https://www.imarpe.gob.pe/wp-content/uploads/pdfs/reportes%20e%20informes/informes/Informes_de_la_pesqueria_pelagica/20250415_1201-Plan_de_Trabajo_Operacion_Eureka_LXXVI-Informe_correspondiente_al_oficio_n%C2%B0_0580_2025_IMARPE_PE.pdf

M1.4	**M1.4 The fishery management system is based on the principles of sustainable fishing and a precautionary approach.** *In reaching a determination for M1.4, the assessor should consider if the following is in place:* M1.4.1 A policy or long-term management objective for sustainable harvesting based on the best scientific evidence and a precautionary approach is publicly available and implemented for the fishery.
Outcome	*Pass*

Rationale

The commitment of Peru's fisheries management system to ensuring sustainable fishing and applying a precautionary approach can be seen through all levels of the system.

At the highest level, the GFL underscores these principles within Article 1, which states: "The purpose of this Law is to regulate fishing activities in order to promote their sustained development as a source of food, employment, and income, and to ensure responsible use of hydrobiological resources, optimising economic benefits, in harmony with environmental preservation and biodiversity conservation"[1].

This is operationalised within Legislative Decree N° 1084, the Law on Maximum Catch Limits per Vessel, which contains the complementary rules and establishes the procedures for applying the fishing management regime applicable to the extraction intended for indirect human consumption of anchovy and white anchovy resources (*Engraulis ringens* and *Anchoa nasus*). In Article 4, it states: "Maximum Catch Limits per Vessel (LMCE) aims to improve the conditions for the modernisation and efficiency of fishing activity; to promote its sustainable development as a source of food, employment and income; and to ensure responsible use of hydrobiological resources, in harmony with the preservation of the environment and the conservation of biodiversity"[2].

The results are presented in the form of a decision table used by PRODUCE to set the LMTCP for the

current fishing season[3].
The decision table considers the following aspects:

- Information from multiple sources, integrated and analysed to better understand the current status of the stock: hydroacoustic survey cruises, egg production method (MPH) cruises, oceanographic surveys, Eureka operations, fishery monitoring, among others.
- Updated information on anchovy biology and fishery dynamics for projecting stock condition under different exploitation scenarios.
- Estimation of juvenile catch, determining the number of juveniles expected to be incidentally caught during the fishing season (juvenile quota).

This approach permeates PRODUCE and the wider sector, which publicly states: "Our mission is to promote the development of stakeholders in the production sector, boosting their productivity and competitiveness through innovation, quality, and sustainability"[4]. IMARPE's mission is to provide fisheries management with "reliable, timely, and scientific advice for the sustainable use of living resources in the sea and inland waters"[5].

The principles of the precautionary approach and sustainable management are integral to the Peruvian fisheries management system, which is designed to absorb the natural environmental perturbations that are common within El Niño–Southern Oscillation (ENSO).

Based on the above, the fishery passes Clause M1.4.

References

1. Perú. (1992). *Ley General de Pesca (Decreto Ley Nº 25977)*. https://www.senace.gob.pe/wp-content/uploads/filebase/senacenormativa/NAS-4-8-01-D-LEY-25977.pdf
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5. Instituto del Mar del Perú. (n.d.). *Información institucional*. https://www.gob.pe/institucion/imarpe/institucional

M1.5	**M1.5**	**There is a clearly defined decision-making process which is transparent, with processes and results made publicly available.** *In reaching a determination for M1.5, the assessor should consider if the following is in place:*
	M1.5.1	There is participatory engagement through which fishery stakeholders and other stakeholders can access, provide information, consult with, and respond to, the management systems' decision-making process.
	M1.5.2	The decision-making process is transparent, with results made publicly available.

	M1.5.3 The fishery management system is subject to periodic internal or external review to validate the decision-making process, outcomes and scientific data.
Outcome	*Pass*

Rationale

The fisheries management decision-making process relevant to this fishery is transparent, with resources and results being publicly available. This ethos is reflected in Peruvian national legislation. IMARPE, which provides fisheries management advice, publishes its guidance online, while PRODUCE releases decisions and relevant documents on its respective website.

IMARPE has released documents to establish, explain, and disseminate the procedures carried out by the department's decision table for determining the Limit of Maximum Total Catch for the Period (LMTCP). A high-level decision flowchart is displayed in Figure 2[1].

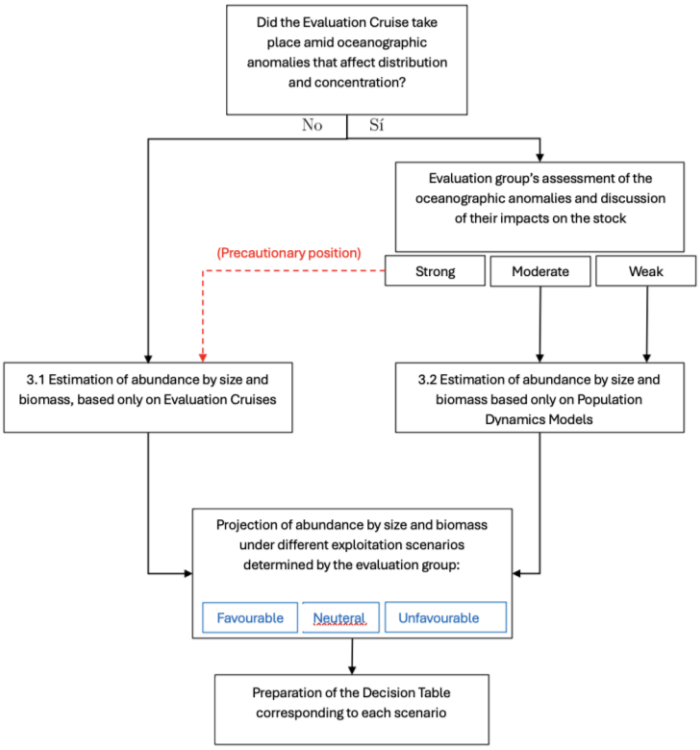

Figure 2. Procedure for preparing the Decision Table for determining the LMTCP by fishing season in the North-Central Stock of Peruvian anchovy fishery[1].

Peru is also a member of the Fisheries Transparency Initiative (FiTI), a "global partnership that increases transparency and participation for a more sustainable management of marine fisheries. By making fisheries management more transparent and inclusive, the FiTI promotes informed public debates on fisheries policies and supports the long-term contribution of the sector to national economies and the well-being of citizens and businesses that depend on a healthy marine environment"[2]. As part of the initiative, an assessment of the online transparency of Peru's fisheries management information was conducted. Overall, the country fared well in producing and

disseminating information to justify decision-making[3].

This is corroborated by the Fishery Improvement Project Progress (FIP) for the Peru anchovy industrial purse-seine fishery in the northern region, where the performance indicator "Decision-making processes" within the component "Fishery-specific management system" was met[4].

However, it should be noted that in 2019 IMARPE was at the centre of a controversy regarding the transparency of anchovy quota allocation for the industrial IHC fleet[5,6]. This culminated in the Public Ministry (Fiscalía) requesting a search and seizure of IMARPE documents and property due to concerns of adulteration of scientific information[7,8]. The case was effectively archived in 2022 due to lack of evidence, but later that same year the procuraduría appealed, resulting in the case reopening[9,10]. Beyond this point, there is no public information, likely due to the confidential nature of preliminary Peruvian criminal proceedings and the absence of subsequent media coverage.

In response to the controversy, IMARPE received support from members of the international scientific community defending its track record, and an Emergency Decree (Nº 015-2020) was issued to mandate reorganisation within IMARPE. IMARPE subsequently formalised a Multianual Institutional Operational Plan (POI) for 2023–2025, aligned with the broader sector's strategic planning directives (PESEM) mandated by PRODUCE[7].

While this case should not be disregarded, when considering the current regime and its compliance, and the weight of evidence supporting this, it can still be said that decision-making process is clearly defined and transparent.

All information used in the production of this MarinTrust assessment is publicly available online.

Based on the above, the fishery passes Clause M1.5.

References

1. Instituto del Mar del Perú. (2020). Protocolo: Elaboración de la tabla de decisión para la determinación del límite máximo de captura total permisible por temporada de pesca en la pesquería del Stock Norte-Centro de la anchoveta peruana. https://cdn.www.gob.pe/uploads/document/file/1307822/Protocol_tabla_decision_anchoveta.pdf
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7. SeafoodSource. (2023). Peru's prosecutor requests IMARPE raid amid suspicions of foul play. https://www.seafoodsource.com/news/supply-trade/peru-s-prosecutor-requests-imarpe-raid-amid-suspicions-of-foul-play
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M2 Surveillance, control and enforcement

M2.1	**M2.1**	**There is an organisation responsible for monitoring compliance with fishery laws and regulations.** *In reaching a determination for M2.1, the assessor should consider if the following is in place:*
	M2.1.1	There is an organisation responsible for monitoring compliance with specific monitoring, control and surveillance (MCS) mechanisms in place.
	M2.1.2	There are relevant tools or mechanisms used to minimise IUU fishing activity.
	M2.1.3	There is evidence of monitoring and surveillance activity appropriate to the intensity, geography, management control measures and compliance behaviour of the fishery.
Outcome	*Pass*	

Rationale

The implementation and enforcement of fisheries laws and regulations is one of the stated functions of PRODUCE. The General Directorate of Supervision, Auditing, and Sanctions (DGSFS) is responsible for carrying out this function[1]. This was enabled through the creation of Ministerial Resolution Nº 027-2003-PRODUCE in 2003[2].

Currently, compliance with fisheries laws and regulations is managed through a number of mechanisms[3]:

- Physical monitoring includes at-sea observations by compliance observers.
- On-land monitoring involves port landings inspections conducted by PRODUCE, as well as

landings verifications at designated landing sites carried out by third-party operators.
- Departure control is conducted by DICAPI (the Peruvian Coast Guard).

Remote monitoring is also employed. The Satellite Surveillance System (SISESAT) is mandated for industrial vessels, transmitting vessel positions every 15 minutes (Supreme Decree N° 026-2003-PRODUCE). This system, operational since 1998, includes satellite and radio monitoring and direct communication with vessels. In addition, the Fishing and Landings Surveillance Program (PVCPDAM) was established under Ministerial Resolution N° 591-2008-PRODUCE. Both tools are applied to foreign-flagged and national vessels. Electronic logbooks have also been implemented in the industrial fishery[4].

In addition to domestic efforts to minimise IUU fishing, Peru also provides its Vessel Monitoring System (VMS) data to Global Fishing Watch (GFW). In 2018, it became the first Latin American country to do so, signalling its strong commitment to combating IUU fishing[5].

These measures indicate that a robust compliance network is in place.

Based on the above, the fishery passes Clause M2.1.

References

1. Garteizgogeascoa, M., Gonzales, I. E., Kluger, L. C., Damonte, G., & Flitner, M. (2020). *Institutional context and governance of Peruvian fisheries and aquaculture* (artec-Paper No. 226). Universität Bremen, Forschungszentrum Nachhaltigkeit. https://www.ssoar.info/ssoar/bitstream/handle/document/73225/ssoar-2020-garteizgogeascoa_et_al-Institutional_context_and_governance_of.pdf?sequence=1&isAllowed=y
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5. Global Fishing Watch. (n.d.). *Our work in Peru*. https://globalfishingwatch.org/our-work-in-peru/

M2.2	**M2.2 There is a framework of sanctions which are applied when infringements against laws and regulations are discovered.** *In reaching a determination for M2.2, the assessor should consider if the following is in place:*	
	M2.2.1 The laws and regulations provide for penalties or sanctions that are adequate in severity to act as an effective deterrent.	
	M2.2.2 There is no evidence of systematic non-compliance.	

Outcome	*Pass*

Rationale

The framework of control and sanctions in Peru is set out by Supreme Decree N° 017-2017-PRODUCE, which establishes the legislation for inspections, what can be sanctioned, and the scale of sanctions[1]. This framework is enacted by the DGSFS of PRODUCE and Regional Directorate of Production (DIREPRO), supported by DICAPI and the National Police (PNP), depending on the territorial jurisdiction in which enforcement actions take place. These institutions have unimpeded access to any location where fishing activities are conducted, along with the authority to supervise and sanction fisheries[2].

Depending on the nature of the infractions, PRODUCE or DIREPRO can impose fines, confiscation, suspension of rights, and cancellation of rights. Certain illegal fishing practices are also criminalised, including but not limited to misreporting of captured fishing volumes, fishing species during closed seasons, harvesting juveniles, exceeding the Individual Vessel Quota (IVQ), and fishing without a licence[2].

In the wider ecosystem of laws and regulations that sanction the Peruvian fishing industry, the following are particularly relevant:

- Legislative decree N° 25977, 1992. Articles 77 & 78 define administrative infractions and penalties[3].
- Supreme decree N° 012-2001-PE. Article 126 classifies infractions as very serious, serious, or minor, and mandates referral to judicial authorities if there are indications of criminal conduct[4].
- Supreme decree N° 019-2011-PRODUCE. Supplements the main fisheries law and provides specific sanction codes[5].
- Supreme decree N° 017-2017-PRODUCE. Defines detailed sanction mechanisms such as temporary suspension of operations, fines, and product seizures[1].
- Supreme decree N° 016-2007-PRODUCE. Regulation of fishing and aquaculture inspections and sanctions[6].
- Supreme decree N° 024-2016-PRODUCE. Control and inspection measures[7].

Despite the robust framework of sanctions, there is some evidence of issues within the industrial fleet. Namely, a tendency to underreport catches and thereby exceed quota allocations. This is supported by reports showing that exported fishmeal exceeded formally reported production by an average of 68 tons between 2012 and 2016[1]. While there are indications of non-compliance, these appear not be systematic and are exceptions to the persistent and expanding compliance campaign led by PRODUCE.

Based on the above, the fishery passes Clause M2.2.

References

1. Ministerio de la Producción. (2017). Decreto Supremo N.º 017-2017-PRODUCE: Reglamento de Fiscalización y Sanción de las Actividades Pesqueras y Acuícolas. El Peruano. https://busquedas.elperuano.pe/dispositivo/NL/1585361-5
2. Garteizgogeascoa, M., Gonzales, I. E., Kluger, L. C., Damonte, G., & Flitner, M. (2020).

Institutional context and governance of Peruvian fisheries and aquaculture (artec-Paper No. 226). Universität Bremen, Forschungszentrum Nachhaltigkeit. https://www.ssoar.info/ssoar/bitstream/handle/document/73225/ssoar-2020-garteizgogeascoa_et_al-Institutional_context_and_governance_of.pdf?sequence=1&isAllowed=y
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6. Ministerio de la Producción. (2007). Decreto Supremo N.º 016-2007-PRODUCE: Reglamento de Inspecciones y Sanciones Pesqueras y Acuícolas (RISPAC). El Peruano. https://www.gob.pe/institucion/sanipes/normas-legales/5995618-016-2007-produce
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M2.3	**M2.3 There is substantial evidence of widespread compliance in the fishery, and no substantial evidence of IUU fishing.** *In reaching a determination for M2.3, the assessor should consider if the following is in place:*	
	M2.3.1	The level of compliance is documented and updated routinely, statistically reviewed and available.
	M2.3.2	Fishers provide additional information and cooperate with management/enforcement agencies/organisations to support the effective management of the fishery.
	M2.3.3	The catch recording and reporting system is sufficient for effective traceability of catches per vessel and supports the prevention of IUU fishing.
Outcome	*Pass*	

Rationale

PRODUCE shows a strong commitment to ensuring compliance in the fishery and preventing Illegal, Unreported, and Unregulated (IUU) fishing.

In 2021, Supreme decree N° 024-2021-PRODUCE was authorised with the objective of tightening control and transparency within the fisheries and aquaculture supply chains by requiring full digital traceability[1]. As a result, IUU fishing is addressed through the mandatory use of:

- SITRAPESCA (Fishing and Aquaculture Traceability System) for recording and declaring

information on fishing, aquaculture, and commercial activities.
- SIGPESCA (Georeferenced Fisheries and Aquaculture System) for tracking fishing and aquaculture vessels[2].

This commitment is applied more specifically to the anchovy fishery through Directorial Resolution N° 061-2020-PRODUCE/DGSFS-PA, which sets the guidelines for recording information on illegal and unreported fishing of the anchovy resource[3].

Since 2018, Peru has provided GFW with its VMS data. By leveraging advanced data analysis and satellite technologies, this collaboration aims to enhance ocean governance, strengthen monitoring, control, and surveillance of maritime activities, and support Peru in fulfilling its international commitments. Thus, further demonstrating the country's dedication to transparency and the elimination of IUU fishing globally[4].

There is strong evidence of significant compliance activities. As of 2021, IMARPE and PRODUCE fisheries observers collected information from up to 80% of trips, while VMS is mandatory for the industrial fleet[5]. There is also an extensive inspection regime in place, with 163,148 inspections reported in 2024, resulting in 1,909 infraction notices—an infringement rate of 0.011%[6].

Industry also demonstrates a commitment to compliance and to assisting in the management of the fishery. For example, during Eureka operations, industry vessels assist in the collection of data used to inform management decisions for the following fishing season.

PRODUCE expresses a strong commitment to combating IUU fishing globally and as previously mentioned, while there are some reports of non-compliance these appears to anomalies. This view is supported by other assessments that conclude "the surveillance system is so strong, it would be difficult not to comply."[7]

Based on the above, the fishery passes Clause M2.3.

References

1. Ministerio de la Producción. (2021). *Decreto Supremo N.º 024-2021-PRODUCE: Regula el registro obligatorio en el Sistema de Trazabilidad de Pesca y Acuicultura (SITRAPESCA)*. https://www.gob.pe/institucion/produce/normas-legales/2383361-024-2021-produce
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3. Ministerio de la Producción. (2020). *Resolución Directoral N.º 061-2020-PRODUCE/DGSFS-PA: Lineamientos para el registro de información sobre pesca ilegal y pesca no declarada*. https://www.gob.pe/institucion/produce/normas-legales/1196339-061-2020-produce-dgsfs-pa
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https://weareaquaculture.com/news/fisheries/iuu-fishing-inspections-in-peru-set-a-record-in-2024
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Species requirements

This section, or module, comprises of four species categories. Each species in the catch is subject to an assessment against the relevant species category in this section (see clauses 1.2 and 1.3 and Table 6).

Type 1 species can be considered the 'target' or 'main' species in the fishery under assessment. They make up the bulk of the catch and a subjected to a detailed assessment. Type 1 species must represent 95% of the total annual catch. If a species-specific management regime is in place for a Type 1 species, it shall be assessed under Category A. If there is no species-specific management regime in place for a Type 1 species, it shall be assessed under Category B.

Type 2 Species can be considered the 'non-target' species in the fishery under assessment. They comprise a small proportion of the annual catch and are subjected to a relatively high-level assessment. Type 2 species may represent a maximum of 5% of the annual catch. If a species-specific management regime is in place for a Type 2 species, it shall be assessed under Category C. If there is no species-specific management regime in place for a Type 2 species, it shall be assessed under Category D.

Species that comprise less than 0.1% of the catch are not required to be assessed or listed here.

Category A species

5.1. All clauses must be met for a species to pass the Category A assessment.

5.1.1. If a species fails any of the Category A clauses, it should be re-assessed as a Category B species.

Species name: Anchovy (*Engraulis ringes*)

A1 Data collection

A1.1	**A1.1 Landings data are collected such that the fishery-wide removals of this species are known.**
Outcome	*Pass*
Rationale	

Landing data in Peru is collected by independent third-party operators (SGS) at designated landing sites. This data is reported twice yearly, reflecting the two fishing seasons, each with its own LMTCP. The first broadly runs from April to July, and the second from November to January. The variability in start and finish dates comes from PRODUCE implementing seasons that suit the characteristics of the fishery for the year. The most recent full status report is for the second season of 2024. The season began on 1 November and ended on 23 January 2025, with 96.4% of the established LMTCP (2,420,000 of 2,510,000 tons) being extracted, as depicted in Figure 3[1]. Landings were highest during November and December, with 1,070,000 and 920,000 tons, respectively. The granularity of information is such that removals can be plotted every second day, as displayed for the first fishing year of 2025 in Figure 4. Landings of anchovy are collated and released at very regular intervals[2].

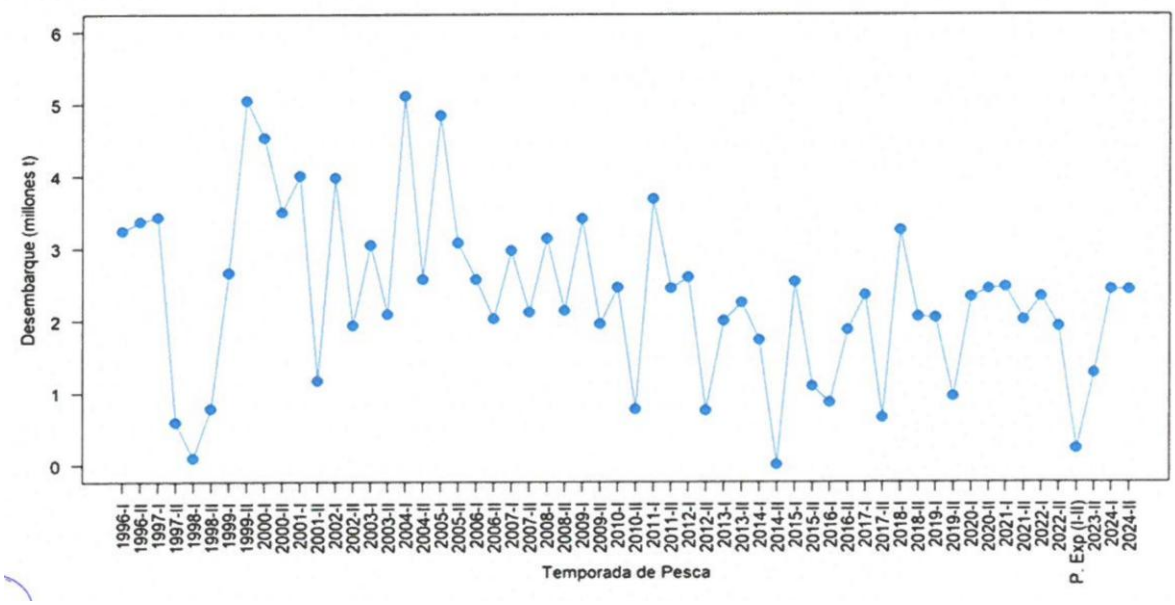

Figure 3. Anchovy landings by fishing season in the north-central region of the Peruvian coast, from the 1996-1 season to the 2024-2 season[1].

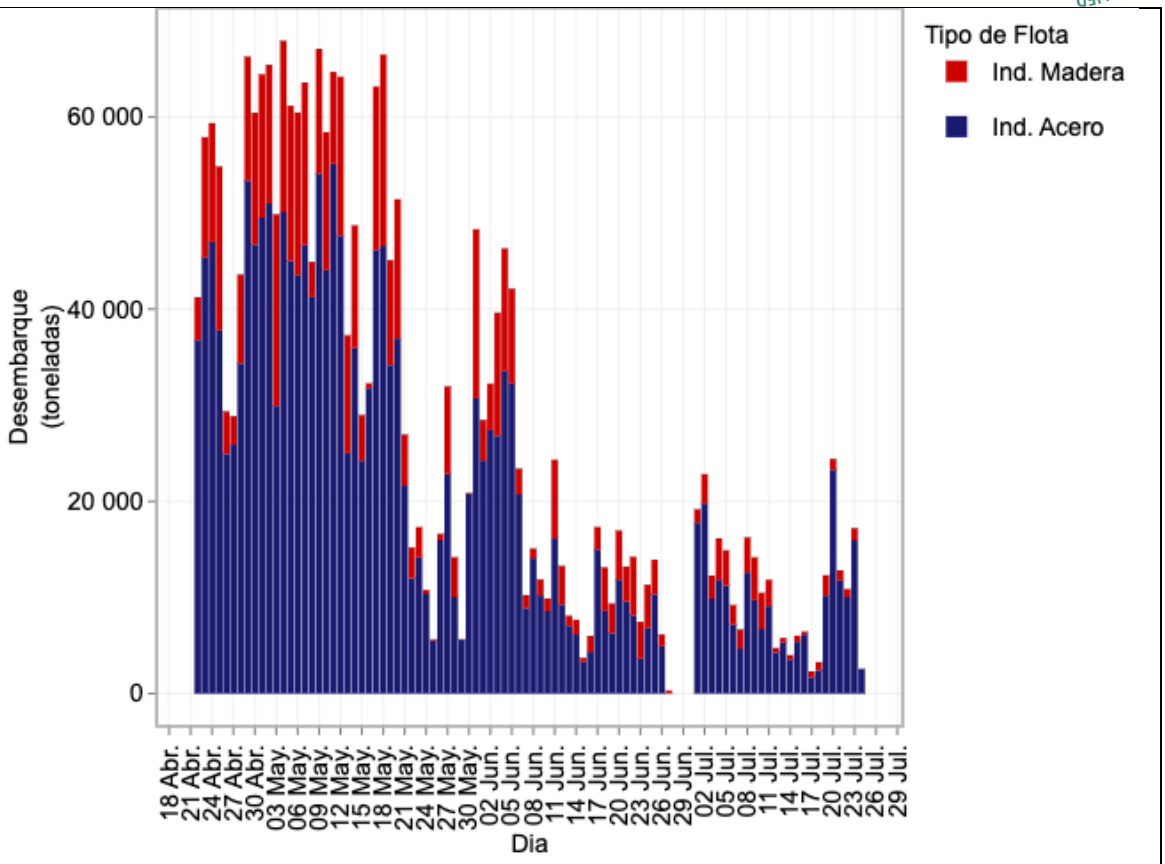

Figure 4. Daily landings (in tons) of anchovy during the 2025 First Fishing Season in the northern-central region as of July 29, 2025[3].

Based on the above, the fishery passes Clause A1.1.

References

1. Instituto del Mar del Perú (IMARPE). (2025, 14 de abril). *Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens) al 5 de abril y perspectiva de explotación para la primera temporada de pesca de 2025*. Gobierno del Perú. https://www.gob.pe/institucion/imarpe/informes-publicaciones/6668595-informe-correspondiente-al-oficio-n-0579-2025-imarpe-pe
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3. Instituto del Mar del Perú (IMARPE). (n.d.). Reporte diario de la primera temporada de pesca de anchoveta I-2025 – Zona Norte-Centro. IMARPE. https://www.imarpe.pe/imarpe/archivos/reportes/Reporte_Anchoveta_I_2025.html#desembarque

A1.2	**A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.**

Outcome	*Pass*

Rationale

IMARPE is the agency responsible for collecting fishery-specific information to inform PRODUCE management actions in Peru. As a part of this, hydroacoustic research cruises are undertaken biannually through the anchovies' Peruvian range, first beginning in 1982. These surveys capture oceanographic conditions and use direct biomass estimates and onboard sampling to estimate size structure and reproductive parameters.

The last fishing year with complete reports of research cruises was the second fishing season of 2024. The two research cruises relevant to the fishing year were MPH 2408-09 and 2409-10[1]. These had the primary objectives of estimating the spawning biomass of the north-central anchovy stock using the egg production method and conducting acoustic biomass estimates, respectively. Following the cessation of the fishing season, IMARPE launched the 2025 summer evaluation of the stock with research cruise Cr. 2502-04[2]. Resulting from the anomalous conditions found during this evaluation, a eureka operation (LXXVI) was conducted in April 2025 to further bolster the inputs informing the management of the fishery for the subsequent fishing season[3]. The procedure of using eureka operations to further investigate conditions is common during anomalous conditions.

The breadth of information that is gathered by IMARPE throughout the year is sufficient to accurately capture the stock status of the fishery on a regular basis.

Based on the above, the fishery passes Clause A1.2.

References

1. Instituto del Mar del Perú (IMARPE). (2025). *Informes de cruceros de investigación 2025*. https://www.imarpe.gob.pe/reportes-e-informes/?path_to_pdf=wp-content/uploads/pdfs/reportes%20e%20informes/informes/Informes_de_Cruceros_de_Investigacion/Informes_de_Cruceros_de_Investigaci%C3%B3n_2025
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A2 Stock assessment

A2.1	**A2.1**	**A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock) and considers all fishery removals and the biological characteristics of the species.**

Outcome	*Pass*

Rationale

Anchovy population dynamics are strongly influenced by environmental conditions. The Peruvian Sea is a part of the anticyclonic movement of the eastern part of the Southern Pacific Ocean and is characterized by slow-moving surface currents. The result is a complex system of water flows and masses with seasonal variations. This is overlaid with abnormal irregular variations, principally the unusually hot periods referred to as 'El Niño'[1,2]. These conditions produce an upwelling ecosystem that is conducive to abundant and diverse aquatic living resources off the Peruvian coast, mainly driven by the El Niño–Southern Oscillation (ENSO).

These conditions have culminated in need for a flexible and adaptive management system closely focused on incorporating near real-time observational data of both oceanographic conditions and anchovy population dynamics with the stock being assessed twice annually [2]. The resultant assessment methods employ three concepts that differ from traditional methods, namely, the use of a conservative projection horizon for the setting of management limits, the use of near real-time observations for the projection of harvest scenarios, and the inclusion of environmental variability. This is informed by a minimum of two hydroacoustic surveys, one before each fishing season, with the potential for additional. The assessment also collates catch data collected from the fishery via logbooks and landing inspections, the characteristics of the species, the Catch Per Unit Effort (CPUE), size distribution, spawning biomass, and all biological, fishing, and ecosystem information available[3].

Based on the above, the fishery passes Clause A2.1.

References

1. Instituto del Mar del Perú (IMARPE). (2025). *Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens)*. Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/7923602/6668595-situacion-del-stock-norte-centro-de-la-anchoveta-peruana-engraulis-ringens.pdf?v=1744661475
2. Bahri, T., Vasconcellos, M., Welch, D.J., Johnson, J., Perry, R.I., Ma, X. & Sharma, R., eds. 2021. Adaptive management of fisheries in response to climate change. FAO Fisheries and Aquaculture Technical Paper No. 667. Rome, FAO. https://doi.org/10.4060/cb3095en
3. Instituto del Mar del Perú (IMARPE). (2024). Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens). Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/6182656/5452946-situacion-del-stock-norte-centro-de-la-anchoveta-peruana-engraulis-ringens.pdf?v=1712877361

A2.2	**A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.**
Outcome	*Pass*

Rationale

The most recent IMARPE biomass estimate for the north-central anchovy stock was from 5 April

2025 and represents the biomass at the start of the fishing season. This estimate was 10,927,796 tons, above the established reference points of spawning biomass and the limit reference point, which are 5,000,000 and 4,000,000 tons, respectively, for the stock[1]. This was based on the hydroacoustic research cruise Cr. 2502-04.

Based on the above, the fishery passes Clause A2.2.

References

1. Instituto del Mar del Perú (IMARPE). (2025). Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens). Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/7923602/6668595-situacion-del-stock-norte-centro-de-la-anchoveta-peruana-engraulis-ringens.pdf?v=1744661475

A2.3	**A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.**
Outcome	*Pass*

Rationale

In recognition of the inherent variability of the system, IMARPE has produced several scenarios relating to different environmental conditions for the first fishing season of 2025. As an output of the decision tables for determining LMTCP, they inform PRODUCE's management for the season. For the first season of the 2025 anchovy fishing year the LMTCP was set at 3,000,000 tons[1]. This is displayed in Figure 5.

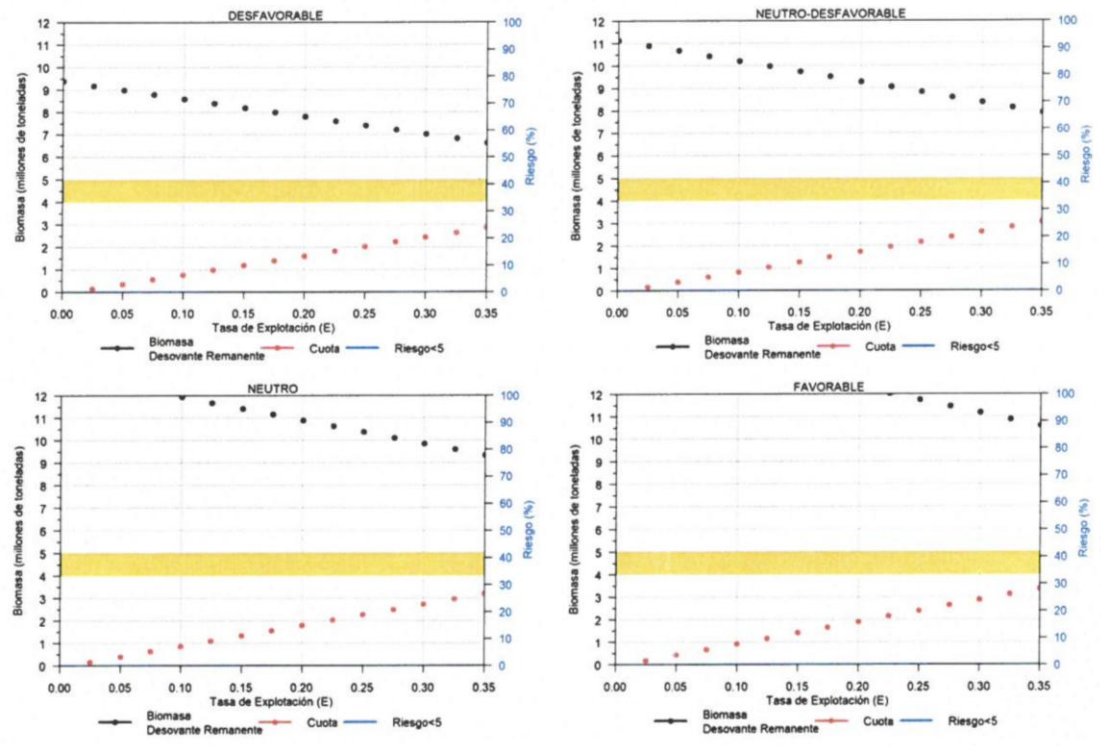

Figure 5. In each figure, the x-axis indicates different levels of exploitation rate (E), each of which corresponds to a catch quota (red points, whose value is read on the left vertical axis). The black points correspond to the spawning biomass which, according to projections, would be available in the next reproductive cycle (winter 2025) after applying each exploitation rate. The yellow bar indicates the target and limit spawning biomass levels necessary to sustainably renew the stock. The blue line corresponds to the risk, or probability, of having a spawning biomass below 5,000,000 tons after applying each exploitation rate (whose scale is read on the right vertical axis)[2].

Based on the above, the fishery passes Clause A2.3.

References

1. Ministerio de la Producción (PRODUCE). (2025). R.M. Nº 148-2025-PRODUCE [Resolución Ministerial]. Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/7920545/6666487-r-m-n-148-2025-produce.pdf?v=1744643503
2. Instituto del Mar del Perú (IMARPE). (2025). Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens). Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/7923602/6668595-situacion-del-stock-norte-centro-de-la-anchoveta-peruana-engraulis-ringens.pdf?v=1744661475

A2.4	**A2.4 The assessment is subject to internal or external peer review.**
Outcome	*Pass*

Rationale

Every five years, IMARPE invites experts to evaluate the methodologies, results, and instruments, with the most recent evaluation held in 2024. This recent visit included experts from Scotland, the USA, and Spain to audit the current IMARPE methods. The assessment was previously reviewed by FAO experts in 2014, and it was concluded that there is a high standard of scientific support for fisheries management in Peru[1]. IMARPE has voluntarily requested international scientific audits in 1992, 1994–95, 1997–98, 2000, 2010, 2018, and 2024.

In 2018, the FIP in effect achieved formal collaboration with PRODUCE for technical collaboration towards fisheries sustainability. A resulting 2019 report was submitted to IMARPE and SNP on the Management Strategy Evaluation (MSE) approach and included recommendations for improving the determination of stock status for the fishery.

IMARPE conducts internal reviews on both the assessment methodology and reports prior to their publishing[2].

Based on the above, the fishery passes Clause A2.4.

References

1. Seafood Watch. (2024). Anchoveta, Chile–Peru: Seafood Watch assessment. Seafood Watch.

https://www.seafoodwatch.org/globalassets/sfw-data-blocks/reports/a/seafood-watch-anchoveta-chile-peru-27723.pdf
2. Gómez, A. (2022, November). *Peru anchovy – Industrial purse-seine: FisheryImprovement Project three-year evaluation report (Version 1.3)*. FishChoice / FisheryProgress. https://fisheryprogress.org/sites/default/files/indicators-documents/Anchoveta%20CHI_FisheryProgress_Three_Year_Evaluation_Template_dic_23_4.pdf#overlay-context=node/3546/improvement

A2.5	**A2.5 The assessment is made publicly available.**
Outcome	*Pass*

Rationale

This assessment and management outcomes can be found on the IMARPE and PRODUCE websites along with all others[1,2].

Based on the information, the fishery passes Clause A2.5.

References

1. Ministerio de la Producción (PRODUCE). (n.d.). *Informes y publicaciones*. Gobierno del Perú. https://www.gob.pe/institucion/produce/informes-publicaciones
2. Instituto del Mar del Perú (IMARPE). (n.d.). *Informes y publicaciones*. Gobierno del Perú. https://www.gob.pe/institucion/imarpe/informes-publicaciones

A3 Harvest strategy

A3.1	**A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.**
Outcome	*Pass*

Rationale

Total fishing mortality within the fishery is monitored through four mechanisms: logbooks and onboard observers, SISESAT, landing information collection, and scientific surveys[1].

This information feeds into fisheries management to allow appropriate levels of fishing and for total mortality to be restricted. This is achieved through LMTCP and temporal limits that can be triggered by factors such as juvenile catch percentage which cannot exceed 10%. This can be seen in the first season of 2025 with PRODUCE issuing a total of 20 directoral resolutions and 35 communications, which temporarily suspended 55 fishing areas with a high incidence of juveniles. Resulting in 186,602 km^2 of protected maritime space[2]. The objective is to manage it around a stock biomass of at least 5,000,000 tons and an exploitation rate of below 0.35.

Based on the above, the fishery passes Clause A3.1.

References

1. Gómez, A. (2022). *Peru anchovy – Industrial purse-seine: FisheryImprovement Project three-year evaluation report (Version 1.3)*. FishChoice / FisheryProgress. https://fisheryprogress.org/sites/default/files/indicators-documents/Anchoveta%20CHI_FisheryProgress_Three_Year_Evaluation_Template_dic_23_4.pdf#overlay-context=node/3546/improvement
2. Instituto del Mar del Perú (IMARPE). (2025). Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens). Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/7923602/6668595-situacion-del-stock-norte-centro-de-la-anchoveta-peruana-engraulis-ringens.pdf?v=1744661475

A3.2	**A3.2 Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.**
Outcome	*Pass*

Rationale

Fishery removals are subjected to a stringent monitoring regime, and as such, the LMTCP has not been exceeded in recent years. In cases where thresholds have been reached, such as a 10% juvenile catch composition, temporal closures and, in some cases, fishing season closures are applied to protect the fishery. The daily collection of landings data allows strict adherence to the LMTCP throughout the season as seen in figure 6. The output of the north-central anchovy stock acoustic biomass surveys is displayed in Figure 7.

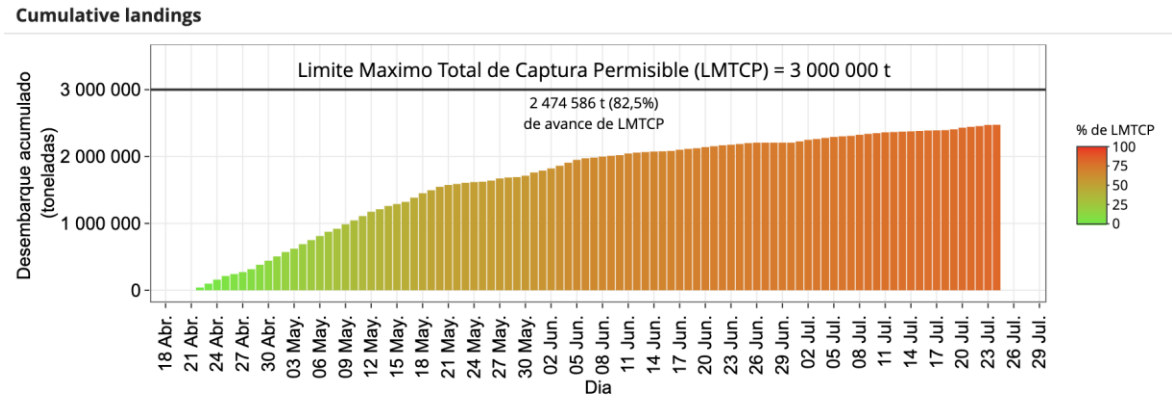

Figure 6. Levels of landings in relation to the LMTCP for the first season of 2025[1].

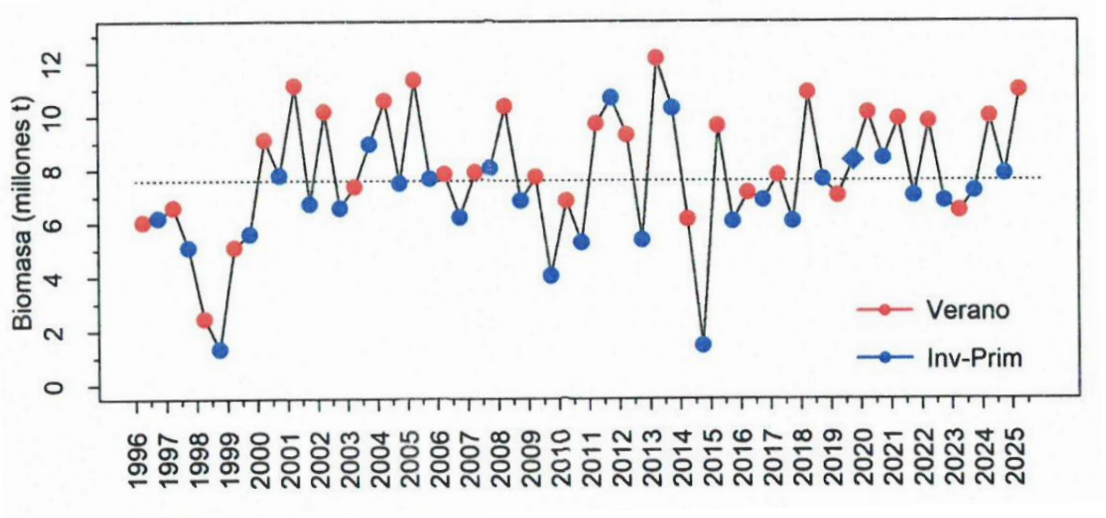

Figure 7. Acoustic biomass of the north-central anchovy stock observed by assessment cruise from 1996 to 2025 displaying summer and winter observations[2].

Based on the above, the fishery passes Clause A3.2.

References

1. Instituto del Mar del Perú (IMARPE). (n.d.). Reporte diario de la primera temporada de pesca de anchoveta I-2025 – Zona Norte-Centro. IMARPE. https://www.imarpe.pe/imarpe/archivos/reportes/Reporte_Anchoveta_I_2025.html#desembarque
2. Instituto del Mar del Perú (IMARPE). (2025). Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens). Gobierno del Perú. https://cdn.www.gob.pe/uploads/document/file/7923602/6668595-situacion-del-stock-norte-centro-de-la-anchoveta-peruana-engraulis-ringens.pdf?v=1744661475

A3.3	**A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).**
Outcome	*Pass*

Rationale

Under the MSY approach, IMARPE recommended that the total catch for the first anchovy fishing season of 2025 should not exceed 3,000,000 tons[1]. Once the fishery reaches the LMTCP for the season, it is closed. This decision is based on near-real-time fishing removals data. Additionally, the start date of the fishing season may be delayed if the biomass is below the established limit. As previously mentioned, juvenile catch limits can also lead to temporary closures.

Since 1998, there has been only one instance in which the biomass estimate fell below the

4,000,000 tonne reference point. This was during the second season of 2014–2015 and as a result, the fishery was not opened in during this season.

Based on the above, the fishery passes Clause A3.3.

References

1. Instituto del Mar del Perú (IMARPE). (2025). *Informe de avance de la primera temporada de pesca de anchoveta 2025 en la región norte-centro del mar peruano (22 de abril al 20 de julio de 2025)*. Gobierno del Perú. https://www.gob.pe/institucion/imarpe/informes-publicaciones/6985333-informe-correspondiente-al-oficio-n-0048-2025-imarpe-gc

A4 Stock status

A4.1	**A4.1**	**The stock is at or above the target reference point; OR IF NOT: the stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure; OR IF NOT: the stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.**
Outcome	*Pass*	

Rationale

As of April 2025, the stock is above the target reference points of a spawning biomass of 5,000,000 tons and a limit reference point for the spawning biomass of 4,000,000 tons, with an estimated biomass of 10,927,796 tons[1].

The first fishing season of the year started on 22 April 2025 with a LMTCP of 3,000,000 tons. As of 16 July, landings reached a total of 2,430,261 tons, representing 81% of the LMTCP[2]. At this point, IMARPE declared that the first fishing season of the year was concluded.

Based on the above, the fishery passes Clause A4.1.

References

1. Instituto del Mar del Perú (IMARPE). (2025, 14 de abril). *Situación del stock norte-centro de la anchoveta peruana (Engraulis ringens) al 5 de abril y perspectiva de explotación para la primera temporada de pesca de 2025*. Gobierno del Perú. https://www.gob.pe/institucion/imarpe/informes-publicaciones/6668595-informe-correspondiente-al-oficio-n-0579-2025-imarpe-pe
2. Instituto del Mar del Perú (IMARPE). (2025, 24 de julio). *Informe de avance de la primera temporada de pesca de anchoveta 2025 en la región norte-centro del mar peruano (22 de abril al 20 de julio de 2025)*. Gobierno del Perú. https://www.gob.pe/institucion/imarpe/informes-publicaciones/6985333-informe-correspondiente-al-oficio-n-0048-2025-imarpe-gc

Category B species

Category B species are assessed using a risk-based approach.

3. The risk matrix in Table B(a) shall be used when assessing a Category B species when estimates of Fishing mortality (F), Biomass (B) and reference points are available.
4. The risk matrix in Table B(b) shall be used when assessing a Category B species when no reference points are available.

B1	**A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).**
Table used B(a) or B(b)	
Outcome	Choose an item.
Rationale	
References	

Category C species

5. All clauses must be met for a species to pass the Category C assessment.
    - Where a species fails this Category C clause, it should be assessed as a Category D species instead, except if there is evidence that the species is currently below the limit reference point.

Species name: Chub mackerel (*Scomber japonicus*)

C1.1	**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.**
Outcome	*Pass*
Rationale The latest IMARPE report on the chub mackerel fishery was released in December 2024, detailing the current situation and prospects for 2025. Landings of the species in 2024 reached approximately 42,000 tons, with the majority (61%) being landed in January following the trend of higher volumes in summer. Of this, 58% was landed by the industrial fleet[1]. Annual catches are recorded for the fishery and are displayed in figure 7. Monthly catch and reproductive indicator reports are produced by IMARPE[2,3]. A number of legal instruments relating to the catch of chub mackerel were implemented for 2024.	

These culminated in a catch limit of 63,000 tons from July 2024 onwards arising from Ministerial resolution N° 290-2024-PRODUCE of which 25,991 tons is allocated to large-scale vessels. This is up from original catch limit of 44,740 tons (ministerial resolution N° 449-2023-PRODUCE) which was followed by an extraction suspension (ministerial resolution N° 020-2023-PRODUCE) and a complimentary catch limit of 5,775 tons for large-scale vessels (ministerial resolution N° 092-2024-PRODUCE).

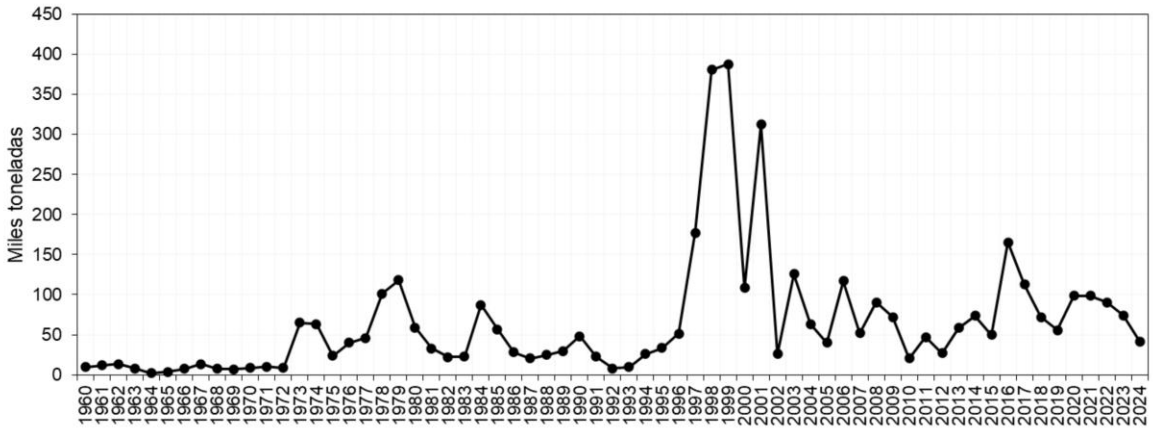

Figure 7. Annual mackerel landings in Peru, recorded from 1960 to 2024 (data projected to December 2024).[1]

Based on the above, the fishery passes Clause C1.1.

References

1. Instituto del Mar del Perú (IMARPE). (2025). *Informe sobre el desarrollo de la pesquería de caballa (Scomber japonicus) durante el 2024, situación actual y perspectivas de explotación para el 2025*. https://cdn.www.gob.pe/uploads/document/file/7446060/6342270-informe-desarrollo-de-la-pesqueria-de-caballa-scomber-japonicus-durante-el-2024-situacion-actual-y-perspectivas-de-explotacion-para-el-2025.pdf
2. Instituto del Mar del Perú (IMARPE). (2025). *Reporte mensual de la condición reproductiva de caballa – 2025*. https://www.imarpe.gob.pe/reportes-e-informes/?path_to_pdf=wp-content/uploads/pdfs/reportes%20e%20informes/reportes/Reportes_pelagicos/Indicadores_Reproductivos_de_anchoveta_y_caballa/Reporte_mensual_de_la_condicion_reproductiva_de_caballa/Reporte_mensual_2025
3. Instituto del Mar del Perú (IMARPE). (2025). *Reporte de la pesquería de jurel y caballa – 2025*. https://www.imarpe.gob.pe/reportes-e-informes/?path_to_pdf=wp-content/uploads/pdfs/reportes%20e%20informes/reportes/Reportes_pelagicos/Reportes_de_la_pesqueria_de_jurel_y_caballa_mensual/Reporte%20de%20la%20pesqueria%20de%20jurel%20y%20caballa%202025

C1.2	**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.**
Outcome	*Pass*	

Rationale

Data for the 2025 stock assessment draws from December 2024. The model used was an adaption of the Joint Jack Mackerel (JJM) assessment model, developed within the framework of the Scientific Committee (SC) meetings of the South Pacific Regional Fisheries Management Organization (SPRFMO)[1]. The most recent updates of the model from 12th SC SPRFMO meeting in October 2024 were included[2].

Total biomass and spawning biomass estimates have shown downturns since 2020-2021 following progressive increases since 2011. However, results of the latest population dynamics model applied to the fishery indicate that the Spawning Biomass (SB) is above the level required for the Maximum Sustainable Yield (MSY), and Fishing Mortality (F) is below the reference level[3]. IMARPE underscore the need for the precautionary management of fishery in coming years considering the downward trend and lower recruitment levels.

For the time being however, it is thought the resource is in good condition. In setting the 2025 LMTCP, three exploitation scenarios were considered namely, a capture equivalent to 80% of MSY (E = 0.096), 90% of MSY (E = 0.109), and 100% of MSY (E = 0.121)[3].

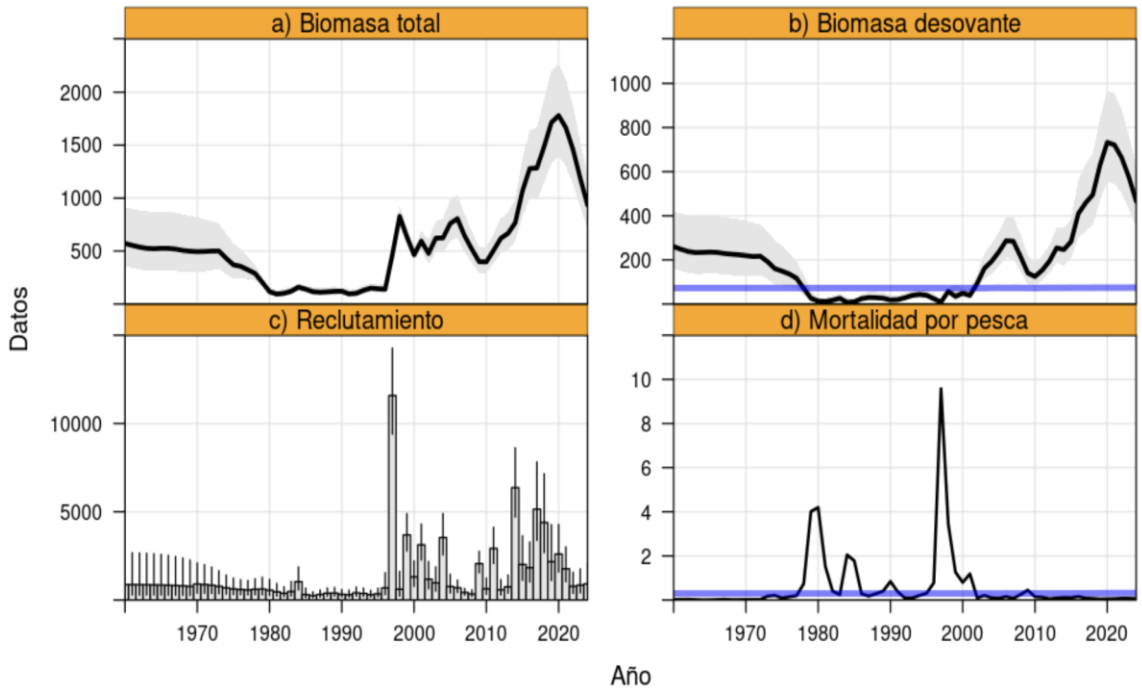

Figure 8. Estimated population indicators for mackerel present in Peruvian waters: a) Total annual biomass (thousands of tons); b) Annual spawning biomass (thousands of tons); c) Annual recruitment (millions of individuals), and d) Annual fishing mortality rate[3].

Based on the above, the fishery passes Clause C1.2.

References

1. Geronimo, M., Lujan, C., Torrejón, J., & Quispe, E. (2024). *The Joint Jack Mackerel (JJM) model:*

A user guide – IMARPE's proposal. Instituto del Mar del Perú (IMARPE). https://sprfmo.int/assets/Meetings/02-SC/12th-SC-2024/Jack-Mackerel/SC12-JM08-PER-Joint-Jack-Mackerel-Model-User-Guide.pdf
2. Secretariat of the South Pacific Regional Fisheries Management Organisation (SPRFMO). (2024). *12th Scientific Committee meeting (SC12)*. https://sprfmo.int/meetings/scientific-committee/12th-sc-2024
3. Instituto del Mar del Perú (IMARPE). (2025, 2 de enero). *Informe sobre el desarrollo de la pesquería de caballa (Scomber japonicus) durante el 2024, situación actual y perspectivas de explotación para el 2025*. Gobierno del Perú. https://www.gob.pe/institucion/imarpe/informes-publicaciones/6342270-informe-correspondiente-al-oficio-n-0319-2024-imarpe-pe

Category D species

Category D species are assessed against a risk-based approach.

6. The Productivity-Susceptibility Analysis (PSA) in Table D(a) shall be used when assessing Category D species.
7. Table D(b) shall be used to calculate the overall PSA risk rating for the Category D species.
8. Should the PSA indicate a high risk, further assessment shall be completed against the requirements in Table D(C).

Productivity Susceptibility Analysis (PSA) and scores

Table D(a) provides detailed values and scores for the species productivity and susceptibility attributes and attributes, the assessor shall use Table D(a) to the PSA table.
Table D(b) is used to calculate the overall PSA risk rating for the Category D species.

Species name	Carrot/red squat lobster, munida (*Pleuroncodes monodon*)	
Productivity attributes	**Value**	**Score**
Average age at maturity	5[1,4]	2
Average maximum age	<10[1,2,4]	1
Fecundity	1000 – 50,000[2,9,10]	2
Average maximum size	80 mm[3,4,6]	1
Average size at maturity	32 mm[1,2,4,5,10]	1
Reproductive strategy	Demersal spawner	2
Mean Trophic Level (MTL)	3.2[6,7]	2
Density dependence (to be used when scoring invertebrate species only)	Precautionary (no information found)	3
Susceptibility attributes		

Areal overlap (availability): Overlap of the fishing effort with a species concentration of the stock	<10% overlap. Carrot/red squat lobster are widely distributed and can be found as far north as Mexico (16°N) and Chiloe Island, Chile (44°S) in the south. The species is found along the vast majority of the coast between these points out to as far west as Easter Island (109°W)[6]. This area significantly exceeds that of the fishery.	1
Encounterability: The position of the stock/ species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low encounterability. Carrot/red squat lobster off the coast of Peru primarily exhibit pelagic habits where they can be found between 70 and 150 meters depth however, significant variation in that range can be seen throughout it geographical extent[8]. Anchovy in this fishery are caught between the surface and at most 80 meters depth with the greatest abundances found at approximately 20 meters[11]. This suggests low overlap between the fishing gear and the species as can be seen in the catch composition records (~0.20%).	1
Selectivity of gear type: Potential of the gear to retain species	Precautionary (no information found)	3
Post-capture mortality (PCM): The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Retained	3
Average productivity score		1.75
Average susceptibility score		2
PSA risk rating (from Table D(b))		Pass
Compliance rating		Pass

1. Kilada, R., & Acuña, E. E. (2015). Direct age determination by growth band counts of three commercially important crustacean species in Chile. *Fisheries Research, 170*, 134–143. https://wbsg8v.xyz/d3/x/1754509801/10000/g4/scimag/16600000/16615000/10.1016/j.fishres.2010.11.010.pdf
2. Marine Stewardship Council. (n.d.). *Chile: Squat lobsters and nylon shrimp Crustáceos Sur S.A. demersal trawl fishery*. https://fisheries.msc.org/en/fisheries/chile-squat-lobsters-and-nylon-shrimp-crustaceos-sur-s.a.-demersal-trawl-fishery/@@assessments
3. Hernández, P., & Wehrtmann, I. S. (2014). Comportamiento reproductivo y variación de la proporción sexual de *Pleuroncodes monodon* (Crustacea: Galatheidae) en la costa peruana. *ResearchGate*. https://www.researchgate.net/publication/262618538_Comportamiento_reproductivo_y_variacion_de_la_proporcion_sexual_de_Pleuroncodes_monodon_Crustacea_Galatheidae_en_la_costa_peruana
4. Roa, R., & Tapia, F. (1998). Spatial differences in growth and sexual maturity between branches of a large population of the squat lobster Pleuroncodes monodon. *Marine Ecology Progress Series, 167*, 185–195. https://www.int-res.com/articles/meps/167/m167p185.pdf
5. Meléndez, F., & Teresa, M. (2003). Aspectos biológico-pesqueros del camaroncito rojo Pleuroncodes monodon (M. Edwards, 1837) en el litoral peruano. *Repositorio UNAC*. https://repositorio.unac.edu.pe/item/c6ffaf7c-199a-49d8-9a99-97e35da8b430
6. Froese, R., & Pauly, D. (Eds.). (n.d.). *Pleuroncodes monodon*. SeaLifeBase. https://www.sealifebase.ca/summary/Pleuroncodes-monodon.html
7. Neira, S., & Arancibia, H. (2004). Trophic interactions and community structure in the upwelling system off Central Chile (33–39°S). *Journal of Experimental Marine Biology and Ecology*. https://kmr.annas-archive.org/scidb/10.1016/j.jembe.2004.07.011/
8. Yapur-Pancorvo, A. L., Quispe-Machaca, M., Guzmán-Rivás, F., Urzúa, Á., & Espinoza, P. (2023). The Red Squat Lobster Pleuroncodes monodon in the Humboldt Current System: From Their Ecology to Commercial Attributes as Marine Bioresource. *Animals, 13*(14), 2279. https://www.mdpi.com/2076-2615/13/14/2279
9. Guzmán, F., Bascur, M., Olavarría, L., Riera , R., Urzúa, Á., & Mora, S. (2019). Seasonal and interannual changes in reproductive parameters and eggs biochemical composition of the fishery resource Pleuroncodes monodon (Decapoda: Munididae) from the Humboldt Current System. Fisheries Research, 221. https://www.researchgate.net/publication/338236821_Seasonal_and_interannual_changes_in_reproductive_parameters_and_eggs_biochemical_composition_of_the_fishery_resource_Pleuroncodes_monodon_Decapoda_Munididae_from_the_Humboldt_Current_System
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Further assessment for Category D species

Should the PSA indicate a high risk, further assessment shall be completed against the requirements D1 and D2 – Table D(c).

D1	**D1. The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.**
Outcome	Choose an item.
Rationale	
References	

D2	**D2. There is no substantial evidence that the fishery has a significant negative impact on the species.**
Outcome	Choose an item.
Rationale	
References	

Ecosystem requirements

This section, or module, assesses the impacts that the fishery under assessment may have on key ecosystem components: ETP species, habitat and the wider ecosystem.

9. All ecosystem criteria must be met (pass) for a fishery to pass the Ecosystem Requirements.
    - The sub-criteria offer a structured evidence base to demonstrate that the fishery sufficiently meets the ecosystem criteria, it is not expected that sub-criteria are assessed independently of the main criterion.

E1 Impact on Endangered, Threatened or Protected species (ETP species)

E1.1	**E1.1 Information on interactions between the fishery and ETP species is collected.** *In reaching a determination for E1.1, the assessor should consider if the following is in place:*
	E1.1.1 ETP species which may be directly affected by the fishery have been identified.
	E1.1.2 Interactions between the fishery and ETP species are recorded and reported to management organisations.
	E1.1.3 Collection and analysis of ETP information is adequate to provide a reliable indication of the impact the fishery has on ETP species.

Outcome	*Pass*

Rationale

There are two mechanisms in Peru for the collection of interactions between the fishery and ETP species. One is a public programme run by IMARPE, while the other is a private programme called Salvamares.

The aforementioned IMARPE run programme is the national observer venture (Programa Bitácoras de Pesca, PBP). PBP has been in operation since 1996 and provides IMARPE the ability to characterise the dynamics of the fleet and bycatch, quantify discarding and interactions with predators, and describe the behaviour, distribution, and demographic structure of the target fishery[1]. The program monitors 4–5% of the trips with the scientific reports published on the IMARPE website[2]. During November, observers made 243 fishing trips on the industrial purse seine fleet targeting anchovy. A total of 922 fishing trips were recorded, of which 85.4% were positive for the target species[3].

The second programme, Salvamares, is a more recent initiative, being set up in 2017 owing to the FIP[4]. The FIP was established for the fishery and is specifically designed to train crew members to collect data on Endangered, Threatened, and Protected (ETP) species interactions[5]. In October 2017, SNP and IMARPE signed a specific agreement to collaborate on activities related to this FIP, including workshops on the impacts of the fishery on top predators, bycatch species, and ETP species. The Salvamares programme monitors around 10% of trips, although recently it has increased considerably (≥60%), but no report is available from recent years[2]. The PESCADATA-SNP database was created to contain all the information gathered[5].

When considering these measures, there is both action and intent by IMARPE to improve the collection of ETP species data.

Based on the above, the fishery passes Clause E1.1.

References

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2. Gómez, A. (2023). *Three-year evaluation report: Peru anchovy industrial purse-seine fishery improvement project (FIP)*. FishChoice. https://fisheryprogress.org/sites/default/files/indicators-documents/Anchoveta%20CHI_FisheryProgress_Three_Year_Evaluation_Template_dic_23_1.pdf
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consumption: Fishery improvement project status. CeDePesca. https://cedepesca.net/prome/peruvian-anchovy-indirect-human-consumption/

E1.2	**E1.2 The fishery has no significant negative impact on ETP species.** *In reaching a determination for E1.2, the assessor should consider if the following is in place:*
	E1.2.1 The information collected in relation to E1.1.3 indicates that the fishery does not have a significant negative impact on ETP species.
Outcome	*Pass*

Rationale

Interactions with seabirds, cetaceans, and pinnipeds including ETP species within the fishery are recorded by PBP and Salvamares. Interactions with animals, while numerous, are believed to result in a low mortality rate[1]. ETP species, as per the MarinTrust definition, are those that are CITES listed or are in the IUCN Red List as either Endangered or Critically Endangered and occur rarely within the fishery.

Seabirds represent a constant presence during fishing operations. Research indicates that, on average between 2000 and 2019, seabirds were present on 58% of all trips and 63% of all fishing gear setting operations[2]. A wide variety of seabirds were sighted during setting, as displayed in Figure 9. Notably, the Galapagos albatross (*Phoebastria irrorata*), Galapagos petrel (*Pterodroma phaeopygia*), and Peruvian tern (*Sternula lorata*) were observed, with the first two listed as Critically Endangered and the latter as Endangered on the IUCN Red List[3,4,5]. While interactions with these species have historically occurred, there is little evidence to suggest they happen at levels that would negatively impact populations[6].

This is corroborated by a 2023 IMARPE survey, which did not record any of the aforementioned ETP seabird species[7]. Instead, only the Guanay cormorant (*Phalacrocorax bougainvilli*), Peruvian booby (*Sula variegata*), pelican (*Pelecanus thagus*), Inca tern (*Larosterna inca*), and sooty shearwater (*Ardenna grisea*) were observed. All of these are listed as Near Threatened on the IUCN Red List, except for the Peruvian booby, which is Least Concern[8,9,10,11,12].

However, since the first recorded outbreak of avian influenza (H5N1) in 2022, which negatively impacts seabird health, the disease continues to affect populations. The same IMARPE study also found that seabird interactions were heightened and many birds were afflicted by H5N13.

There is significant year-on-year variability in interactions. For example, during the second season of 2022, a total of 70,670 bird interactions were recorded; however, the mortality rate was only 0.14%[13].

Interactions between cetaceans and pinnipeds have been recorded with the South American sea lion (*Otaria byronia*), Dusky dolphin (*Lagenorhynchus obscurus*), common dolphin (*Delphinus delphis*), and South American fur seals (*Arctocephalus australis*), all of which are listed as Least Concern on the IUCN Red List[14,15,16,17]. During the aforementioned second season of 2022, 7,600 mammal interactions were recorded, with a mortality rate of 0.17%[13].

While interactions between the fishery and seabirds, cetaceans, and pinnipeds are common, the mortality rate is low. This is believed to result from the tendency of these species to swim or fly out of the net prior to hauling. Interactions with ETP species, although previously recorded, appear to occur very infrequently. Given the low mortality rate observed for seabird species as a result of these interactions, it is likely that there is no significant negative impact on the populations.

NOMBRE CIENTÍFICO	NOMBRE COMÚN	ESTADO DE CONSERVACIÓN UICN	NOMBRE CIENTÍFICO	NOMBRE COMÚN	ESTADO DE CONSERVACIÓN UICN
Ardenna creatopus	**Pardela patas rosadas**	Vulnerable (VU)	*Hydrobates markhami*	**Golondrina de Markham**	Casi Amenazado (NT)
Ardenna grisea	**Pardela gris**	Casi Amenazado (NT)	*Pelecanoides garnotii*	**Potoyunco**	Casi Amenazado (NT)
Chroicocephalus cirrocephalus	**Gaviota cabeza gris**	Preocupación Menor (LC)	*Pelecanus thagus*	**Pelícano**	Casi Amenazado (NT)
Creagrus furcatus	**Gaviota de Galápagos**	Preocupación Menor (LC)	*Poikilocarbo gaimardi*	**Chuita**	Casi Amenazado (NT)
Fregata magnificens	**Fragata**	Preocupación Menor (LC)	*Phoebastria irrorata*	**Albatros de Galápagos**	En Peligro Crítico (CR)
Larosterna inca	**Zarcillo**	Casi Amenazado (NT)	*Pterodroma phaeopygia*	**Petrel de Galápagos**	En Peligro Crítico (CR)
Larus belcheri	**Gaviota peruana**	Preocupación Menor (LC)	*Spheniscus humboldti*	**Pingüino**	Vulnerable (VU)
Larus dominicanus	**Gaviota dominicana**	Preocupación Menor (LC)	*Sternula lorata*	**Gaviotín peruano**	En Peligro (EN)
Leucocarbo bougainvilliorum	**Guanay**	Casi Amenazado (NT)	*Sula nebouxii*	**Piquero patas azules**	Preocupación Menor (LC)
Larus modestus	**Gaviota gris**	Preocupación Menor (LC)	*Sula variegata*	**Piquero peruano**	Preocupación Menor (LC)
Larus pipixcan	**Gaviota de Franklin**	Preocupación Menor (LC)	*Thalassarche bulleri*	**Albatros de Buller**	Casi Amenazado (NT)
Oceanites oceanicus	**Golondrina de Wilson**	Preocupación Menor (LC)	*Thalassarche melanophris*	**Albatros ceja negra**	Preocupación Menor (LC)
Hydrobates hornbyi	**Golondrina de collar**	Casi Amenazado (NT)	*Thalasseus elegans*	**Gaviotín elegante**	Casi Amenazado (NT)

Figure 9. Complete list of seabird species sightings during setting operations between 2000 and 2019[2].

Based on the above, the fishery passes Clause E1.2.

References

1. FisheryProgress. (2023). Anchoveta CHI: Three-year evaluation template (Version 1.3). https://fisheryprogress.org/sites/default/files/indicators-documents/Anchoveta%20CHI_FisheryProgress_Three_Year_Evaluation_Template_dic_23_1.pdf#overlay-context=node/3546/improvement
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8. International Union for Conservation of Nature (IUCN). (2025). Diomedea exulans. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/22696810/133553624
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https://www.iucnredlist.org/species/22696686/132589026
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12. International Union for Conservation of Nature (IUCN). (2025). Puffinus griseus. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/22698209/154440143
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15. International Union for Conservation of Nature (IUCN). (2025). Diomedea exulans. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/11146/175604493
16. International Union for Conservation of Nature (IUCN). (2025). Thalassarche salvini. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/134817215/199893039
17. International Union for Conservation of Nature (IUCN). (2025). Phoebastria nigripes. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/2055/45223529

E1.3	**E1.3 There is an ETP management strategy in place for the fishery.** *In reaching a determination for E1.3, the assessor should consider if the following is in place:*	
	E1.3.1	There are measures applied to the fishery which are designed to manage the impacts of the fishery on ETP species.
	E1.3.2	The measures are considered likely to achieve the objectives of regional, national and international legislation relating to ETP species.
Outcome	*Pass*	

Rationale

In recognition of the high levels of interactions with seabirds, cetaceans, and pinnipeds characteristic of the fleet and to minimise interactions with ETP species, significant efforts have been made to manage the impact on these species.

Peru has extensive legislation for protecting marine species, including prohibitions on hunting sea lions, protection of birds associated with guano production, and a national system of marine protected areas around islands, inlets, and guano points[1]. Other spatial measures include the exclusion of the IHC fleet from fishing within 5 nautical miles of the coast. While the DHC fleet is allowed within this zone, interactions with the industrial fleet are still limited, as all islands (except one) fall within the protected zone and naturally attract aggregations of seabirds[1].

Several government departments are responsible for ETP management. The Ministry of Agriculture (MINAGRI) prohibits the catch and transport of ETP species, SERNANP oversees

protected areas, and SERFOR manages flora and fauna outside of these areas. Within IMARPE, the Research Unit on Top Predators conducts research aimed at developing indicators of change in the marine environment. Their activities include research cruises to monitor the distribution and abundance of ETP species and to study the reproductive parameters of guanera birds, including the Peruvian pelican, Peruvian booby, and Guanay cormorant[1].

The aforementioned Salvamares program includes the objectives of characterizing and estimating bycatch, identifying and quantifying interacting species, collecting information to identify potentially impacted habitats, and providing guidance to crew members who are a part of the program. It currently covers 10% of the fleet, and the information collected is validated by the other onboard observer program[1].

Based on the above, the fishery passes Clause E1.3.

References

1. FisheryProgress. (2023). Anchoveta CHI: Three-year evaluation template (Version 1.3). https://fisheryprogress.org/sites/default/files/indicators-documents/Anchoveta%20CHI_FisheryProgress_Three_Year_Evaluation_Template_dic_23_1.pdf#overlay-context=node/3546/improvement

E2 Impact on the habitat

E2.1	**E2.1**	**Information on interactions between the fishery and marine habitats is collected.** *In reaching a determination for E2.1, the assessor should consider if the following is in place:*
	E2.1.1	Habitats which may be directly affected by the fishery have been identified, including any habitats which may be particularly vulnerable.
	E2.1.2	Information on the scale, location and intensity of fishing activity relative to habitats is collected.
	E2.1.3	Collection and analysis of habitat information is adequate to provide a reliable indication of the impact the fishery has on marine habitats.
Outcome	*Pass*	

Rationale

The anchovy fishery is a pelagic purse seine fishery that operates in the water column[1]. By design, this gear is not intended to come into contact with the seabed and is therefore not considered to impact the marine habitat. Given the extensive body of evidence supporting this conclusion for all pelagic purse seine fisheries, it is highly unlikely that the anchovy fishery differs in this regard.

Based on the above, the fishery passes Clause E2.1.
References 1. Bahri, T., Vasconcellos, M., Welch, D.J., Johnson, J., Perry, R.I., Ma, X. & Sharma, R., eds. 2021. Adaptive management of fisheries in response to climate change. FAO Fisheries and Aquaculture Technical Paper No. 667. Rome, FAO. https://doi.org/10.4060/cb3095en

E2.2	**E2.2 The fishery has no significant impact on marine habitats.** *In reaching a determination for E2.2, the assessor should consider if the following is in place:*
	E2.2.1 The information collected in relation to E2.1.3 indicates that the fishery does not have a significant negative impact on marine habitats.
Outcome	*Pass*
Rationale The fishery uses pelagic purse seines, which are designed to operate in the water column and not impact the marine habitat. However, given the shallow waters in which vessels can at times operate, Salvamares allows for possible bottom contact that may occur in shallow-water inlets (estimated at 5% of all operations under these conditions)[1]. Even when considering this, there is no evidence to suggest otherwise. Based on the above, the fishery passes Clause E2.2.	
References 1. Sociedad Nacional de Pesca & CeDePesca. (2019). Informe n.º 3: Programa "Salvamares" del proyecto de mejora de la pesquería de anchoveta peruana CHI – Temporada de pesca 2019-I. https://cedepesca.net/wp-content/uploads/2020/01/2019-10-16_Report-of-the-Private-Observer-Program-on-board.pdf	

E2.3	**E2.3 There is a habitat management strategy in place for the fishery.** *In reaching a determination for E2.3, the assessor should consider if the following is in place:*
	E2.3.1 There are measures applied to the fishery which are designed to manage the impact of the fishery on marine habitats.
	E2.3.2 The measures are considered likely to prevent the fishery from having a significant negative impact on marine habitats.
Outcome	*Pass*
Rationale	

Considering that pelagic purse seine fisheries generally do not come into contact with the seabed, beyond a few exceptions, and therefore do not impact the marine habitat, a specific habitat management strategy is not considered necessary. However, several laws and regulations are in place to limit any potential for impact. Primarily, the 2023 amendments to the LGP recognised the first five nautical miles adjacent to the Peruvian coastline as a protection zone[1]. This prohibits large-scale fishing within these five nautical miles, bans mechanised purse seiners within the first three nautical miles, and prevents the use of gear that could harm the habitat in this area.

Additionally, Supreme Decree 012-2001-PE forbids the use of an antifango, a device that attaches to purse nets and, when used in shallow waters, can disrupt the seabed[2].

Based on the above, the fishery passes Clause E2.3.

References

1. Oceana. (2023). *Peru passes important ocean protection law to protect the first five nautical miles at sea*. Oceana. https://oceana.org/press-releases/peru-passes-important-ocean-protection-law-to-protect-the-first-five-nautical-miles-at-sea/
2. Seafood Watch. (2024). *Anchoveta, Chile–Peru: Seafood Watch assessment*. Seafood Watch. https://www.seafoodwatch.org/globalassets/sfw-data-blocks/reports/a/seafood-watch-anchoveta-chile-peru-27723.pdf

E3 Impact on the ecosystem

E3.1	**E3.1**	**Information on the potential impacts of the fishery on marine ecosystems is collected.** *In reaching a determination for E3.1, the assessor should consider if the following is in place:*
	E3.1.1	The main elements of the marine ecosystems in the area(s) where the fishery takes place have been identified.
	E3.1.2	The role of the species caught in the fishery within the marine ecosystem is understood, either through research on this specific fishery or inferred from other fisheries.
	E3.1.3	Collection and analysis of ecosystem information is adequate to provide a reliable indication of the impact the fishery has on marine ecosystems.
Outcome	*Pass*	

Rationale

Anchovy population dynamics are strongly influenced by environmental conditions that affect prey availability, natural mortality, growth, recruitment success, and availability to the fishery and predators. The Peruvian Current Ecosystem is highly productive and highly variable, primarily driven

by the El Niño Southern Oscillation (ENSO)[1].

As a low trophic-level species of high abundance, anchovy are an important resource for many other species, including ETP species within the system. Due to the inherent unpredictability of environmental conditions under the ENSO regime, IMARPE has acknowledged the difficulty of producing reliable forecasts. As a result, its management approach prioritizes maintaining the resilience of target species to environmental variability rather than attempting precise predictions[1].

IMARPE conducts an extensive ecosystem monitoring program, sampling all levels of the ecosystem from algae to marine macrofauna, top predators, marine mammals, and seabirds. Data are collected from a variety of sources, including multiple observer programs and dedicated research cruises, with explicit consideration of environmental drivers[2]. The relationship between anchovy abundance, food availability during reproductive periods, and the population dynamics of other species was characterized in a 2017 CeDePesca report (visualised in figure 10)[3].

Consequently, the anchovy fishery is managed under an MSY based framework to ensure, among other objectives, that the stock continues to provide essential ecosystem services.

Figure 10. Overlapping fishing seasons and reproductive seasons of the main anchovy predators[3].

Based on the information, the fishery passes Clause E3.1.

References

1. Bahri, T., Vasconcellos, M., Welch, D.J., Johnson, J., Perry, R.I., Ma, X. & Sharma, R., eds. 2021. Adaptive management of fisheries in response to climate change. FAO Fisheries and Aquaculture Technical Paper No. 667. Rome, FAO. https://doi.org/10.4060/cb3095en
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E3.2	**E3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.** *In reaching a determination for E3.2, the assessor should consider if the following is in place:* E3.2.1 The information collected in relation to E3.1.3 indicates that the fishery does not have a significant negative impact on marine ecosystems.
Outcome	*Pass*

Rationale

The primary resource for determining the impact of the anchovy fishery on the marine ecosystem is the 2017 report "Impact Study of Anchovy Fishery on By-Catch and Protected Species"[1]. This study focused on the main predators of anchovy within the Humboldt Current ecosystem off the coast of Peru. The identified predators and their estimated diet composition of anchovy were: mackerel (8–27%), jack mackerel (4–21%), mahi mahi (0–50%), guitarfish (89%), bat ray (87%), Chilean eagle ray (91%), cabinza grunt (45%), and Peruvian weakfish (77–92%). The report concluded that fishing activity at then-current levels was not having a significant negative impact on the marine ecosystem[1].

A subsequent IMARPE study in 2020 examined the broader ecosystem impacts of the fishery. In this assessment, predators with more than 50% anchovy in their diets included boobies, cormorants, pelicans, bonitos, other large pelagics, sea lions, catfishes, and fur seals[2]. Predators with anchovy consumption greater than 2 $t \cdot km^{-2} \cdot y^{-1}$ included bonito, medium demersals, horse mackerels, other large pelagics, and Pacific mackerels.

Depletion experiments conducted as part of the 2020 study set fishing mortality at the status quo level (F = 0.784) and estimated anchovy depletion at around 19% of unfished biomass (B_0). The findings indicated that, under these conditions, the fishery would not reduce the abundance of more than 15% of other species and trophic groups by over 40% and would not reduce the abundance of any other species or trophic group by more than 70%[2]. The status of individual species is further investigated in table 1.

Table 1. Summary of the current status of the populations and proposed management objectives, taking into account the requirements of the MSC standard. Table headings are species, Maximum Population (PM), Current Population (PA), %PA/PM, Management Objectives (OM) and %OM/PM[2].

Especie	Población Máxima (PM)	Población Actual (PA)	% PA/PM	Objetivos de manejo (OM) > que	% OM/PM
Guanay	9.000.000	5.500,000	61.11	5.500.000	61.11
Piquero	2.700.000	2.700.000	100.00	2.700.000	100.00
Pelicano	700.000	102.000	**14.57**	420.000	60.00
Pingüino	40.000	40.000	100.00	40.000	100.00
Lobo chusco	230.000	230.000	100.00	138.000	60.00
Lobo fino	68.000	9.500	**13.97**	30.000	44.12
Bonito (t)	64.000	65.000	101.56	38.400	60.00

Based on the information, the fishery passes Clause E3.2.

References

1. CeDePesca. (2017). *Fichas de impacto de la pesquería de anchoveta sobre especies de by-catch y protegidas*. CeDePesca. https://cedepesca.net/wp-content/uploads/2018/04/CeDePesca_Fichas-de-impacto-de-la-pesquer%C3%ADa-de-anchoveta-2017-11-29.pdf
2. Tam, J., Taylor, M., & Ñiquen, M. (2020). *Ecosystem impacts of fishing the low trophic level Peruvian anchovy in the Northern Humboldt Current Ecosystem*. Instituto del Mar del Perú. https://cedepesca.net/wp-content/uploads/2021/01/Tam-Ecosystem-impacts-2020.pdf

E3.3	**E3.3 There is an ecosystem management strategy in place for the fishery.** *In reaching a determination for E3.3, the assessor should consider if the following is in place:*	
	E3.3.1	There are measures applied to the fishery which are designed to manage the impacts of the fishery on marine ecosystems.
	E3.3.2	The measures are considered likely to prevent the fishery from having a significant negative impact on marine ecosystems.
Outcome	*Pass*	

Rationale

The impacts of the anchovy fishery are managed through a range of measures designed to prevent any significant negative effects on the marine ecosystem.

The fishery is subject to a consistent and intensive monitoring regime that quantifies not only anchovy-specific factors but also broader oceanographic conditions and interactions with other species. This is achieved through three distinct observer programs, between two and four dedicated research cruises each year, logbooks, and other fisheries data collection. These inputs inform a LMTCP that is based on an MSY approach, with near real-time landings data ensuring progress toward the limit is closely monitored. The LMTCP is reviewed annually, using up-to-date scientific

advice, historical catch records, and the results of annual monitoring surveys. This process is publicly available and transparent.

Spatial restrictions, such as Marine Protected Areas (MPAs) and the 5 nautical mile inshore exclusion zone, further protect the ecosystem. These measures safeguard critical breeding and resting areas while mitigating potential seabed impacts. Additionally, the fishery can be closed if the proportion of juvenile catch exceeds established thresholds[1].

Based on the above, the fishery passes Clause E3.3.

References

1. FisheryProgress. (2019). Peruvian anchovy Indirect Human Consumption (IHC) Fishery Improvement Project review – Three-Year Audit Template. FisheryProgress. https://fisheryprogress.org/sites/default/files/indicators-documents/Peruvian_Anchovy_IHC_FIP_Review_2019_GB2338_5.pdf#overlay-context=node/3546/actions-progress

Annex 1: External Peer Review report

Assessment and determination summary

Fishery name	**Peru - Anchovy (Engraulis ringens) - FAO 87, Northern Border of Peruvian EEZ to 16° South**
MarinTrust report code	**WF02**
Type 1 species (common name, Latin name)	*Anchovy (Engraulis ringens)*
Fishery location	*FAO 87, Northern Border of Peruvian EEZ to 16° South*
Gear type(s)	*purse seine*
Management authority (country/state)	*PRODUCE- DVPA*
Certification Body recommendation	*Approved*
FAPRG reviewer recommendation	Agree with CB determination

Summary of peer review outcomes

Summary
Provide any information about the fishery that the reviewers feel is significant to their decision. This summary is used by the Certification Body in the Fishery Assessment Report.

This fishery is one of the well managed in the world, it has recived awards and recognition in Peru and internationally (World Bank, OCDE, Yale Univ ersity, MBARI etc). It succesfully completed a Fisheries Improvement Project (FIP, intended to obtain the MSC label) which extended to all industrial companies and fleet the "CuidaMar Program" founded by the largest company (TASA) in 2008. This program systematized the collection of data on interactions with ETP species including protocols for the safe liberation of ETP individuals that accidentally are often caught by the purse seeine nets. The Salvamares Program (inspired by the Cuidamar Program, was founded in 2017) has also receive awardas inside and outside Peru. Licandeo et al. (2023) concluded that "we highlight that the Peruvian management system has contributed to maintaining a healthy and profitable stock despite high ocean-climate variability and uncertainty" (Licandeo R., S. de la Puente, V. Christensen, R. Hilborn & C. Walters. (2023): A delay-differential model for representing small pelagic fish stock dynamics and its application for assessing alternative management strategies under environmental uncertainty).
General comments on the draft report provided to the peer reviewer
I agree with peer reviewer regarding the whole document, I woul just add that there are HCR not cited, for instance that in 2006 IMARPE recommended not to exceed 6 MT of annual catch of anchovy, something that has been strictly accomplished. Also, in some fishing seasons the provided TAC was not caught due to the restrictions (dynamic closing of fishing grounds) when juvenile fish over 10% in number are detected ijn the electronic fishing logbooks avaialble in the whole fleet.

Peer reviewers should review the fishery assessment report with the primary objective of answering the key questions listed in the table below. When the situation is more complicated, reviewers may answer "See Notes" instead.

1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	Yes
2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	Yes
3. Are the scores in the following sections consistent with the MarinTrust requirements (i.e. do the scores reflect the evidence provided)?	Yes
Section M – Management Requirements	Yes
Category A Species	Yes
Category B Species	n/a
Category C Species	Yes
Category D Species	Yes
Section E – Ecosystem Impacts	Yes

Detailed Peer Review Justification

Peer reviewers should provide support for their answers in the boxes provided, by referring to specific

scoring issues and any relevant documentation as appropriate.
Detailed justifications are only required where answers given are one of the 'No' options. In other (Yes) cases, either confirm 'scoring agreed' or identify any places where weak rationales could be strengthened (without any implications for the scores).
Boxes may be extended if more space is required.

1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	Yes
scoring agreed	
Certification Body response	
N/A	

2. Does the species categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	Yes
scoring agreed	
Certification Body response	
N/A	

3. Is the scoring of the fishery consistent with the MarinTrust requirements, and clearly based on the evidence presented in the assessment report?	Yes
scoring agreed	
Certification Body response	
N/A	

3a. Are the "Category A Species" scores clearly justified?	Yes
scoring agreed	
Certification Body response	
N/A	

3b. Are the "Category B Species" scores clearly justified?	n/a

N/A
Certification Body response
N/A

3c. Are the “Category C Species” scores clearly justified?	Yes
scoring agreed	
Certification Body response	
N/A	

3d. Are the “Category D Species” scores clearly justified?	Yes
scoring agreed	
Certification Body response	
N/A	

Are the scores in “Section M – Management Requirements” clearly justified?	Yes
scoring agreed	
Certification Body response	
N/A	

Are the scores in “Section E – Ecosystem Impacts” clearly justified?	Yes
scoring agreed	
Certification Body response	
N/A	

Optional: General peer reviewer comments on the draft report

Scomber japonicus (caballa or chub mackerel) is considered as well managed (category C species), it has -together with Trachurus murphyi (Jurel or Jack mackerel- its own management plan. Pleuroncodes monodom (Red squat lobster, category D species), an abundant species in the coastal area, has a draft of Management Plan, not approved yet by PRODUCE due to the lack of interest of stakeholders to catch it, in despite of the fact that, for instance in Chile, there is a dedicated fishery over this species MSC certified.
Certification Body response
N/A