MarinTrust Whole fish fishery assessment report

Anchovy (Engraulis ringens) – Chile – FAO 87, Chilean EEZ Regions XV-IV

Surveillance 1
WF16

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Table 1: Whole fish fishery assessment scope

Fishery name	**Anchovy (*Engraulis ringens*) – Chile – FAO 87, Chilean EEZ Regions XV-IV**
MarinTrust report code	**WF16**
Type 1 species (common name, Latin name)	*Anchovy (Engraulis ringens)*
Fishery location	*Chile – FAO 87, Chilean EEZ Regions XV-IV*
Gear type(s)	*Purse seine*
Management authority (country/state)	*Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA)*

Table 2: Applicant and Certification Body details

Application details			
Applicant(s)		*Coquimbo (Orizon SA), Pesquera La Portada S.A, Salmonoil SA (Fiordo Austral), Coronel (Camanchaca Pesca Sur SA), Coronel (Orizon SA), Arica (Corpesca SA), Mejillones (Corpesca SA), Iquique (Compañia Pesquera Camanchaca SA), Iquique Sur (Corpesca SA)*	
Applicant country		*Chile*	
Certification Body details			
Name of Certification Body		LRQA	
Contact Information for CB (e.g. email address/address/telephone number)		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		Sam Peacock	
Number of assessment days	2.5	**Assessment period**	12/2025 to 12/2026

Table 3: Assessment outcome

Assessment outcome (See Table 4 for a summary of assessment determination)		*Approve*
Approval validity	Valid from*: 10/2025*	Valid until*: 10/2026*
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 Chilean anchovy (*Engraulis ringens*) fishery is a productive industrial and artisan pelagic purse seine fishery. This assessment considers two stocks, the northern stock (XIV-II) and the northern-central stock (III-IV) where anchovy comprise, on average, 97.15% and 97.52% of the total landings, respectively. Bycatch occurs in small quantities and consists primarily of jack mackerel (*Trachurus murphyi*) and chub mackerel (*Scomber japonicus*), at around 1.77% and 0.84% of landings, respectively. The remaining 0.12% of landings consist of two species, with neither exceeding the 0.1% threshold of assessment. This assessment is designated as the first surveillance assessment under the MarinTrust Version 3 whole fish fishery criteria. Following the reapproval of the fishery in 2024 under the same version and covers anchovy in FAO Area 87, from 18°21' to 32°10' South. Both anchovy and chub mackerel are listed as Least Concern by the IUCN, while the jack mackerel 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). The fishing industry is an important component of the Chilean economy. As such, it is subject to a well-informed management regime designed to absorb the environmental perturbations characteristic of the ecosystem. As reported at the 2025 Scientific and Technical Committee on Small Pelagic Fisheries (CCT-PP), the northern stock during the second half of the year is in favourable biological condition. Spawning biomass (SB) was estimated at approximately 66% of the virgin biomass (B_0), exceeding the management target. In contrast, the CCT-PP found the north-central stock to be significantly degraded, with the projected SB near the limit reference proxy. Fishing mortality during this period is effectively zero, as no catches have occurred since the second half of 2023. The decline has been attributed not to fishing pressure but to the 2023/24 El Niño event. An active Management Committee and an accompanying Management Plan are in place. Therefore, anchovy in both stocks are assessed as a Category A species and meets the requirements of this section. The latest jack mackerel stock assessment was conducted in 2025 at the 13th SPRFMO Scientific Committee Meeting following the 2022 benchmark assessment and removals of the species were included in the stock assessment process. The biomass remains above the limit reference point, and, as such, jack mackerel is assessed as a Category C species and meets the requirements of this section. The chub mackerel is not subjected to management by the Under Secretariat for Fisheries and Aquaculture (SUBPESCA) 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). Management measures to address the impact of the fishery on the ecosystem are in place and consequently, the impact of these fisheries on various ecosystem components is considered low for ETP species. Interactions between the fishery and ETP species are reported on annually. The fishery, using pelagic purse seines, has a minimal impact on the marine habitat. The fishery

management framework considers an ecosystem approach to ensure the long-term conservation and sustainable use of the resources while safeguarding the marine ecosystem. 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, with the Chilean EEZ Regions XV-IV passed all the MarinTrust requirements in this assessment; therefore, its approval is recommended to continue to be used as raw material in MarinTrust-certified products. Last data accessed: December 4, 2025.	
Summary of CB peer review	*This surveillance assessment continues the previous approach of merging the assessment of two distinct anchovy stocks in the Northern and North-Central areas. The surveillance provides a thorough and well-evidenced appraisal of the current status of the fishery, and the peer reviewer agrees with its conclusion that the fishery continues to meet the MT whole fish requirements.*
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 (Engraulis ringens), northern stock*	A1	Pass
		A2	Pass
		A3	Pass
		A4	Pass
Category A	*Anchovy (Engraulis ringens), northern-central stock*	A1	Pass

		A2	Pass
		A3	Pass
		A4	Pass
Category B	No species identified	/	
Category C	*Jack mackerel (Trachurus murphyi)*	Pass	
Category D	*Chub mackerel (Scomber japonicus)*	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 (Engraulis ringens)	XIV-II	No	LC[1]	97.15	Y	A
Anchovy (Engraulis ringens)	III-IV	No	LC[1]	97.52	Y	A
Jack mackerel (Trachurus murphyi)	South Pacific stock	No	DD[2]	1.77	Y	C
Chub mackerel (Scomber japonicus)	South Pacific stock	No	LC[3]	0.84	N	D

Rationale

To determine the catch composition of the fishery, data from the Chilean observer programme was used. The most recent report, released in 2024, has not been used on the basis that there was almost no activity for the anchovy (*Engraulis ringens*) for either stock and therefore accurate catch estimates could not be made[4]. As a result, the previous year's report, released in 2023, has been used for this surveillance assessment[5].

The regions considered in this assessment are regions XV-IV of which anchovy is the target in the northern stock (regions XV-II) and northern-central stock (regions III and IV) for both the industrial and artisanal fleet. With no industrial catch in northern-central stock reported, the catch compositions used in this assessment is the average of these three sources from the 2023 report.

This report indicated that catches of anchovy represented the majority of the catch composition with an average of 97.15% in stock XIV-II (94.33% in the industrial fleet and 99.97% in the artisanal fleet) and 97.52% in stock III-IV. Jack mackerel (*Trachurus murphyi*) was caught with an average

catch composition of 1.77% (northern industrial fleet was 3.1% with no catch in the artisanal fleet and 2.21% in the northern-central artisanal fleet). Chub mackerel (*Scomber japonicus*) was caught with an average catch composition of 0.84% (northern industrial fleet was 2.38% with no catch in the artisanal fleet and 0.13% in the northern-central artisanal fleet). The remaining ~0.12% of the averaged landings were comprised of two species: bonito (*Sarda chiliensis*), and jellyfish (*Scyphozoa*). On average, neither 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.

Both anchovy stocks within the fishery were assessed as a Category A species and are considered concurrently here forward, since it is listed as Least Concern by the IUCN, not listed in any CITES appendix, managed by the Under Secretariat for Fisheries and Aquaculture (SUBPESCA), and on average comprise more than 95% of the fishery's total catch.

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

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

References

1. International Union for Conservation of Nature. (n.d.). Engraulis ringens. The IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/183775/102904317
2. International Union for Conservation of Nature. (n.d.). Strangomera bentincki. The IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/183965/8207652
3. International Union for Conservation of Nature. (n.d.). Scomber japonicus. The IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/170306/170083106
4. IFOP (2024). Informe Final. Convenio de Desempeño 2021. Programa de observadores científicos: Programa de investigación y monitoreo del descarte y de la captura de pesca incidental en pesquerías pelágicas, año 2022-2023. https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/2024/P-581201.pdf
5. IFOP (2023). Informe Final. Convenio de Desempeño 202. Programa de observadores científicos: Programa de investigación y monitoreo del descarte y de la captura de pesca incidental en pesquerías pelágicas, año 2022-2023. Available at: https://www.ifop.cl/busqueda-de-informes/

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

The fishing industry is an important aspect of the Chilean economy, and this significance is reflected in the fisheries management structure. At the highest level, it is managed by the Under Secretariat for Fisheries and Aquaculture (SUBPESCA), operating under the Ministry of Economy, Development and Tourism (MINECON), which is responsible for the rational and sustainable management of the country's hydro-biological resources[1].

SUBPESCA is supported by the National Fisheries and Aquaculture Service (SERNAPESCA), which is responsible for regulating and managing fishing and aquaculture activities through policies, regulations, and management measures[2]. In turn, the Fisheries Development Institute (IFOP) provides SUBPESCA with the information needed to manage and regulate resource extraction, establish integrated fisheries management, deploy management models and technical assistance, and promote sustainable fishing[3].

The National Fisheries Society (SONAPESCA) was formed in 2015 and is a trade federation that brings together the main unions and actors in industrial fishing in Chile. SONAPESCA promotes the sustainable exploitation of marine resources through strict compliance with regulations and

through collaboration with authorities to eradicate non-compliance with fishing quotas along the Chilean coast[4].

Anchovy fisheries in Chile are managed at the national level, with management plans in place for both fisheries assessed in this report. Management plans for the northern and northern-central regions were released in 2018 (Executive Resolution N° 1197/2018) and 2017 (Executive Resolution N° 3893/2017), respectively, and the implementation of the former was reported on in 2022[5,6,7]. The northern fishery is shared with Peru; however, the resource is managed independently. Workshops are held regularly, with scientists from around the world invited to review input data, evaluate the stock assessment model, and propose revisions. The jack mackerel fishery falls under the jurisdiction of the South Pacific Regional Fisheries Management Organisation (SPRFMO), which coordinates the conservation and sustainable use of fishery resources in the South Pacific Ocean[8].

In addition to the aforementioned government agencies, SUBPESCA has also established Scientific Technical Committees (CCT) and Management Committees under Law N° 20.657[9]. These committees include representatives from various institutions, organisations, and sectors, thereby ensuring a comprehensive approach to fisheries management. Their responsibilities include updating stock status and catch projections and issuing official recommendations to the authorities. To maintain transparency, all acts, reports, and news resulting from the committees' work are published on the SUBPESCA website[10]. Other relevant information is also available on the IFOP website[11]. This information is collated annually by SUBPESCA in reports titled 'Current Status of the Main Chilean Fisheries'[12].

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

References

1. SERNAPESCA. (n.d.). ¿Qué es SERNAPESCA? https://www.sernapesca.cl/que-es-sernapesca/
2. Ministerio de Economía, Fomento y Turismo. (n.d.). Subsecretaría de Pesca y Acuicultura. https://www.economia.gob.cl/subsecretaria-de-pesca-y-acuicultura
3. IFOP. (n.d.). Who we are: Our organisation. https://www.ifop.cl/en/quienes-somos/nuestra-organizacion/
4. SONAPESCA. (n.d.). ¿Quiénes somos? https://www.sonapesca.cl/quienes-somos/#1471544785863-41fb10f5-a197
5. Subsecretaría de Pesca y Acuicultura. (n.d.). Res. Ex N° 1197-2018 aprueba plan de manejo para las pesquerías de anchoveta y sardina española – Regiones de Arica y Parinacota, Tarapacá y Antofagasta. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Planes-de-Manejo/100223:Res-Ex-N-1197-2018-Aprueba-Plan-de-Manejo-para-las-Pesquerias-de-Anchoveta-y-Sardina-Espanola-Regiones-de-Arica-y-Parinacota-Tarapaca-y-Antofagasta-Publicado-en-Pagina-Web-10-04-2018-F-D-O-14-04-2018
6. Subsecretaría de Pesca y Acuicultura. (n.d.). Res. Ex N° 3893-2017 aprueba plan de manejo para la pesquería de anchoveta y sardina española — III-IV regiones. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Planes-de-Manejo/98874:Res-Ex-N-3893-2017-Aprueba-Plan-de-Manejo-para-la-Pesqueria-de-Anchoveta-y-Sardina-Espanola-III-IV-Regiones-Publicado-en-Pagina-Web-22-11-2017-F-D-O-29-11-2017
7. Subsecretaría de Pesca y Acuicultura. (2022). Report on the implementation of the management plan for the anchovy and Spanish sardine fishery Arica and Parinacota, Tarapacá

and Antofagasta regions, year 2022. https://www.subpesca.cl/portal/616/articles-117662_documento.pdf
8. Southern Pacific Regional Fisheries Management Organisation. (n.d.). Jack mackerel. https://www.sprfmo.int/science/jack-mackerel
9. Subsecretaría de Pesca y Acuicultura. (n.d.). Institutionality. https://www.subpesca.cl/portal/sitio/Secciones-Auxiliares/English/General-Aspects/86168:Institutionality
10. Subsecretaría de Pesca y Acuicultura. (n.d.). Publications. https://www.subpesca.cl/portal/publicaciones/
11. IFOP. (n.d.). Homepage. https://www.ifop.cl/en/
12. Subsecretaría de Pesca y Acuicultura. (2025). Status of the Major Chilean Fisheries, Year 2024. https://www.subpesca.cl/portal/618/articles-125250_recurso_1.pdf

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

The design and implementation of fisheries management policies and strategies are derived from Chile's General Fisheries and Aquaculture Law (LGPA)[1]. This overarching legislation governing the industry was introduced in 1976 and updated in 2013. The LGPA emphasises sustainable use and conservation of marine resources and gives priority to scientific information in decision-making.

Under the LGPA, SUBPESCA is responsible for several commitments. According to Title 2 of the LGPA, SUBPESCA is legally empowered to take specific management actions. These include the establishment of Biological Reference Points (BRPs) for all targeted stocks (Transitional Article 5), which must be reviewed and updated every five years and the implementation of Biologically Acceptable Catches (BACs) and resource recovery plans (Article 9)[1]. In addition to BRPs and BACs, SUBPESCA provides authorisations for extractive fishing activities (Article 2, N°10), which are conditional upon compliance with obligations specified in the relevant resolutions. Details on the

authorisation process are available on the SUBPESCA website, enhancing transparency and accessibility. The recommendations of the CCT are now mandatory for all stakeholders, ensuring that conservation measures are based on scientific evidence above all other considerations.

The Registry of Related Activities (RAC) arises within the framework of the implementation of Law N° 21.370, which promotes gender equality in the fishing and aquaculture sector[2]. The RAC was created under the premise that 'it is the duty of the State to generate conditions to encourage, reduce, and/or eliminate job insecurity, which mainly affects women in the artisanal fishing sector, through the mainstreaming of a gender approach in the design of public policies by SUBPESCA. It is also necessary to advance mechanisms that recognise and value the important work involved in related activities, which have historically been linked to extractive activity.' The RAC is administered by SERNAPESCA, which supervises and manages the protection of the hydrobiological resources and their environment by promoting compliance with regulations and is responsible for carrying out training and registration in the RAC, maintaining the integrity and accuracy of the data[1,4].

In December 2023, a proposal for a new General Fishing Law was submitted for consideration to the Chilean Congress[5]. In March 2024, the project was approved unanimously and received international support from the Food and Agriculture Organization of the United Nations (FAO)[6]. The new legislation aims to establish a modern, transparent, sustainable, and equitable regulatory framework for Chilean fishing activities. Key aspects of the law include the sustainable development of fisheries, equity in the sector, social protection for artisanal fishers, a scientific-technical approach to management, and incentives for human consumption of fish. As of 2025, there is no evidence that the law has entered into force.

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

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf
2. Servicio Nacional de Pesca y Acuicultura. (n.d.). ¿Qué es SERNAPESCA? https://www.sernapesca.cl/que-es-sernapesca/
3. Servicio Nacional de Pesca y Acuicultura. (2024). Mujeres y hombres en el sector pesquero y acuicultor de Chile 2024. https://www.sernapesca.cl/app/uploads/2024/12/Mujeres-y-Hombres-en-el-sector-pesq-y-acui-2024.pdf
4. Biblioteca del Congreso Nacional de Chile. (n.d.). Ley N° 21.370. https://www.bcn.cl/leychile/navegar?idNorma=1164124
5. Gobierno de Chile. (n.d.). Nueva ley de pesca. https://www.gob.cl/nuevaleydepesca/
6. Food and Agriculture Organization of the United Nations. (2024, August 1). Chile's fisheries law set to change in 2024. https://www.fao.org/legal-services/news/detail/es/c/1680976/

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

IFOP is a non-profit private-law body aimed at supporting the sustainable development of the fisheries and aquaculture sector in Chile. It was established in 1964 by the Production Development Corporation (CORFO) and the SONAPESCA through an international technical assistance project on fisheries matters involving the Government of Chile, the United Nations Development Program (UNDP), and FAO[1].

IFOP acts as the scientific reference for the LGPA and is responsible for providing the information required for decision-making regarding the management of fisheries resources and aquaculture. It provides ongoing advice to SUBPESCA, samples fish stocks, conducts annual acoustic surveys, and collects biological data, ensuring science-based fisheries management[1]. In addition to managing and collecting data, IFOP creates alliances with domestic and international stakeholders as well as Chilean universities.

IFOP plays a crucial role within the Scientific Technical Committee for Small Pelagic Fisheries (CCT-PP), which is jointly formed by IFOP and SUBPESCA. The CCT-PP analyses stock status updates, provides catch projections, and makes official recommendations to authorities, guiding sustainable fishing practices. To maintain transparency, all acts, reports, and news resulting from the committee's work are published on the SUBPESCA website[2]. SPRFMO also coordinates with IFOP in managing highly migratory stocks within the mixed pelagic fisheries[3]. SERNAPESCA compiles the necessary data for creating the Fisheries and Aquaculture Statistical Yearbooks[4].

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

References

1. Instituto de Fomento Pesquero (IFOP). (n.d.). Nuestra historia. https://www.ifop.cl/en/quienes-somos/nuestra-historia/
2. Subsecretaría de Pesca y Acuicultura de Chile (Subpesca). (n.d.). Comités de manejo. https://www.subpesca.cl/portal/normativa/Institucionalidad/Comites-de-manejo/
3. South Pacific Regional Fisheries Management Organisation (SPRFMO). (n.d.). Homepage. https://sprfmo.int/
4. Servicio Nacional de Pesca y Acuicultura (SERNAPESCA). (n.d.). Homepage. https://www.sernapesca.cl/

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 Chile's fisheries management system to sustainable fishing and the precautionary approach is evident at all levels of the system. At the highest level, the LGPA underscores these principles in Article 1(B), which states: "The objective of this law is the conservation and sustainable use of hydrobiological resources, through the application of the precautionary approach, an ecosystem approach to fisheries regulation, and the safeguarding of marine ecosystems in which these resources exist"[1].

In order to achieve this objective, the LGPA sets out guiding principles of the national fisheries policy for adopting conservation and management measures, as well as for interpreting and applying the law:

- Establishing long-term objectives for the conservation and management of fisheries and the protection of their ecosystems, along with periodic evaluation of the effectiveness of the measures adopted.
- Applying the precautionary principle in the management and conservation of hydrobiological resources and the protection of their ecosystems.

This approach permeates SUBPESCA and the wider sector, which states its mission as: "To regulate and manage fishing and aquaculture activities through policies, regulations, and management measures based on a precautionary principle and an ecosystem approach, informed by available scientific information. We work transparently towards sustainable development, promoting equity and the participation of men and women in the fishing and aquaculture sector"[2]. In compliance with SUBPESCA resolution N° 291/2015, all fish stocks must be exploited around the Maximum Sustainable Yield (MSY) level, making MSY the primary objective when establishing quotas[3].

IFOP's mission is: "To advise the decision-making of the national fishing and aquaculture institutions, through the preparation of scientific and technical information of public value for the administration and sustainability of the resources of fisheries, aquaculture, and their ecosystems"[4].

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

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf
2. Subsecretaría de Pesca y Acuicultura. (n.d.). Acerca de la Subsecretaría. https://www.subpesca.cl/portal/sitio/Subsecretaria/Acerca-de-la-Subsecretaria/

3. Subsecretaría de Pesca y Acuicultura. (2015, February 7). R EX N° 291-2015: Establece puntos biológicos de referencia para pesquerías administradas con licencias transables de pesca. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Puntos-Biologicos-de-Referencia-Licencias-Transables-de-Pesca/86859:R-EX-N-291-2015-Establece-Puntos-Biologicos-de-Referencia-para-Pesquerias-Administradas-con-Licencias-Transables-de-Pesca-Publicada-en-Diario-Oficial-07-02-2015
4. Instituto de Fomento Pesquero (IFOP). (n.d.). Nuestra organización. https://www.ifop.cl/en/quienes-somos/nuestra-organizacion/

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

SUBPESCA has established two advisory bodies: the Management Committee and the CCT. As mandated by the LGPA, these bodies are consulted regarding conservation and management measures. The Management Committee includes the main stakeholders of each fishery, as well as officials from SUBPESCA and SERNAPESCA, and must establish the period in which the plan will be evaluated, which may not exceed five years from its formation[1,2]. CCT's are advisory bodies to SUBPESCA, with members nominated through public competition.

Transparency is a key component of this process. Meeting minutes, reports, and proceedings from these committees are publicly accessible on the SUBPESCA and IFOP websites. The CCT-PP's documentation has been available since 2013, while the Management Committee's records date back to 2014, ensuring free access to information for stakeholders and the public[3]. SUBPESCA also releases annual reports titled 'Current Status of the Main Chilean Fisheries'[4].

The National Fisheries Council (CNP) contributes to the effective participation of the fisheries stakeholders at a national level regarding fisheries and aquaculture activities. It is an advisory and consultative body concerning the subjects established by the law with recommendations, proposals, and technical reports are submitted to the SUBPESCA[5].

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. Subsecretaría de Pesca y Acuicultura. (n.d.). Institutionality. https://www.subpesca.cl/portal/sitio/Secciones-Auxiliares/English/General-Aspects/86168:Institutionality 2. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf 3. Subsecretaría de Pesca y Acuicultura. (n.d.). Comité Científico de Pesquerías de Pequeños Pelágicos. https://www.subpesca.cl/portal/sitio/Institucionalidad/Comites-Cientificos-Tecnicos-Pesqueros/Comite-Cientifico-de-Pesquerias-de-Pequenos-Pelagicos/ 4. Subsecretaría de Pesca y Acuicultura. (2025). Status of the Major Chilean Fisheries, Year 2024. https://www.subpesca.cl/portal/618/articles-125250_recurso_1.pdf 5. Subsecretaría de Pesca y Acuicultura. (n.d.). Consejo Nacional de Pesca (CNP). https://www.subpesca.cl/portal/sitio/Institucionalidad/Consejo-Nacional-de-Pesca-CNP/#

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

SERNAPESCA is responsible for ensuring compliance within Chile's Exclusive Economic Zone (EEZ). This is achieved through a regime of inspections, surveillance mechanisms, and data collection.

To fulfil its mandate, SERNAPESCA manages inspection processes through inspection plans and programs. National Supervision Plans (NSP) are developed annually based on a strategic framework that outlines compliance priorities across various technical areas, including fisheries, aquaculture, and foreign trade[1]. The NSP establishes several inspection programs such as satellite monitoring,

landing certification, weighing systems, joint operations, and special control programs.

Since 2020, a video-camera monitoring system has been installed across the entire fleet, and Vessel Monitoring Systems (VMS) are mandatory for industrial vessels. Additionally, SERNAPESCA conducts audits of capture fisheries and enforces compliance through surveillance and control mechanisms. An on-board observer program is also in place to provide oversight and collect data. The Chilean Navy patrols the EEZ as well, safeguarding marine resources. A periodic observer program collects information on both target species and other harvested resources, enhancing monitoring efforts.

According to SERNAPESCA's most recent 2024 Report on Oversight Activities in Fishing and Aquaculture, a total of 68,777 field inspections and 38,664 landing certifications were conducted[2]. Through the vessel monitoring system, daily oversight was maintained over an average of 87 industrial fishing vessels and 280 artisanal vessels[2].

In addition to domestic efforts to minimise Illegal, Unreported and Unregulated (IUU) fishing, Chile also provides its VMS data to Global Fishing Watch (GFW)[3]. This collaboration, which began in 2019, signals Chile's strong commitment to combating IUU fishing.

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

References

1. Servicio Nacional de Pesca y Acuicultura. (2023). Plan de fiscalización. https://www.sernapesca.cl/app/uploads/2023/11/mfi_20-040-00-000_plan_de_fiscalizacion.pdf
2. Servicio Nacional de Pesca y Acuicultura. (2025). IFPA 2024 v8-0F. https://www.sernapesca.cl/app/uploads/2025/04/IFPA_2024_v8-0F.pdf
3. Global Fishing Watch. (n.d.). Our work in Chile. https://globalfishingwatch.org/our-work-in-chile/

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 LGPA provides the framework of sanctions for infringements against fisheries laws and regulations in Chile under Title 9. In particular, Article 108 sets out the available sanctions, which include fines, suspension or revocation of the skipper's licence, closure of commercial or industrial

establishments, confiscation of equipment used in the violation, and confiscation of hydrobiological species or by-products[1].

The severity of these sanctions depends on several factors. When the violation refers to products derived from hydrobiological resources, the fine is calculated based on the quantity of hydrobiological resources required for their production (Article 108(B))[1]. Offenders are sanctioned with a fine of one to four times the result of multiplying the penalty value of the respective species, as well as with the confiscation of the hydrobiological species and the fishing gear or equipment used to commit the infraction. Some offences are also punishable with additional monthly tax units (UTM). In cases of recidivism, defined as the repetition of any violation within a two-year period, monetary penalties and closure periods are doubled (Article 108(A))[1].

As reported in SERNAPESCA's 2024 Report on Oversight Activities in Fishing and Aquaculture[2], approximately 1,280 tonnes of hydrobiological resources were seized in 2024[2]. Of this total, 113 tonnes were anchovy, and 282 tonnes were jack mackerel[2]. Given the low catches of anchovy in 2024, there were no cases of quota exceedance, a trend also observed in 2023[3].

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

References

1. Subsecretaría de Pesca y Acuicultura. (2013). Ley General de Pesca y Acuicultura (texto refundido, coordinado y sistematizado). https://www.subpesca.cl/portal/615/articles-88020_documento.pdf
2. Servicio Nacional de Pesca y Acuicultura. (2025). IFPA 2024 v8-0F. https://www.sernapesca.cl/app/uploads/2025/04/IFPA_2024_v8-0F.pdf
3. Servicio Nacional de Pesca y Acuicultura. (2024). IFPA 2023 v20240522-1. https://www.sernapesca.cl/app/uploads/2024/03/IFPA_2023_v20240522-1.pdf

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		

SERNAPESCA demonstrates a strong commitment to ensuring compliance in the fishery and preventing IUU fishing.

Pursuant to Article 4(B) of the LGPA, SERNAPESCA compiles a publicly available annual report outlining the level of compliance within the fishery[1]. The law states: "the Service must, in the month of March each year, prepare a report on the inspection activities and actions carried out in the area of fishing and aquaculture during the previous year. The report must also include the results of these inspection actions and the level of compliance with administration and conservation measures from the previous year. It must be published on the Service's website"[1]. This ensures that compliance within the fishery is documented, updated, and made publicly available each year.

Additionally, Article 63 of the LGPA requires industrial and artisanal shipowners to report their catches and landings for each vessel to the Service[1]. Hydrobiological resources may only be landed at points or ports authorized by SERNAPESCA. Article 64(A) further stipulates that fishing and research vessels operating at sea must have an automatic positioning system[1]. The data generated by this system must be publicly accessible, updated monthly, and published on SERNAPESCA's website. These articles highlight the legal obligations of fishers to collaborate with SERNAPESCA and comply with a range of regulatory requirements. Such compliance is essential to demonstrate the legality of their operations and maintain their fishing permits.

Since 2020, Chile has provided GFW with its VMS data. GFW works with various government agencies to operationalise transparency initiatives and build local capacity to improve internal tools and processes, helping the country meet its domestic fisheries management goals[2].

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

References

1. Subsecretaría de Pesca y Acuicultura. (2023). Ley General de Pesca y Acuicultura (texto refundido, coordinado y sistematizado de la Ley N.º 18.892, de 1989 y sus modificaciones). https://www.subpesca.cl/portal/615/articles-88020_documento.pdf
2. Global Fishing Watch. (n.d.). Our work in Chile. https://globalfishingwatch.org/our-work-in-chile/

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

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

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

Anchovy (*Engraulis ringens*). Two stocks are covered in this section, the northern (region XV-II) and northern-central (region III-IV) stocks.

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

Fishery removal data are collected through mandatory logbooks, port sampling of landings conducted by SERNAPESCA, and IFOP fisheries observers. The most recent complete report on landings was released in 2025 and describes the previous year.

For the northern zone, which spans from 18°21' S to 24°00' S, the total commercial quota for 2024 was set at 687,000 tonnes, of which 128,000 tonnes were extracted[1]. Monthly landings by the purse-seine fleet are shown in Table 1.

Table 1. Monthly anchovy landings (tonnes) in 2024 by the purse seine fleet in the northern stock, by port[1].

PUERTO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEPT	OCT	NOV	DIC	TOTAL
ARICA	945	11.057	12.681	10.019	387	13	27.441	2.482	7.786	9.586	18.074	13.967	114.438
IQUIQUE	44	0	19	28	0	128	4.062	233	143	1.449	4.956	2.532	13.593
MEJILLONES	0	0	0	0	0	0	0	0	0,04	0	0	0	0,04
ARICA-MEJILLONES	989	11.057	12.700	10.046	387	141	31.503	2.715	7.929	11.035	23.030	16.499	128.031

The north-central zone spans from 24°00' S to 32°10' S. The total commercial quota for 2024 was set at 61,103 tonnes, of which 238 tonnes were extracted[1]. Monthly landings by the purse-seine fleet are shown in Table 2.

Table 2. Monthly anchovy landings (tonnes) in 2024 by the purse seine fleet in the northern-central stock, by port[1].

PUERTO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEPT	OCT	NOV	DIC	TOTAL
CALDERA	0	0	0	0	0	0	0	0	0	0	0	0	0
COQUIMBO	0	0	0	0	0	0	0	0,08	2,26	0,04	0	0	2,38
CALDERA-COQUIMBO	0	0	0	0	0	0	0	0,08	2,26	0,04	0	0	2,38

IFOP also considers discards of the target species. Discarded catch estimates are design-based and rely on a stratified two-stage cluster sampling method, where trips serve as the first-stage unit and fishing sets as the second. Stratification is based on spatial (region or macro-zone), temporal (year or semester), and operational (fleet) factors, with annual fishing trips of the fleet used as an expansion factor, sourced from the SERNAPESCA landing database. Only trips by vessels exceeding a specific length, which carry scientific observers, are considered[2].

Based on the above, the fishery meets the requirements of Clause A1.1.

References

1. Instituto de Fomento Pesquero (IFOP). (2025). Informe P-581220. https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/2025/P-581220.pdf
2. IFOP. (2024). Segundo Informe. Estatus y posibilidades de explotación biológicamente sustentable de anchoveta y sardina española, Región de Atacama a la Región de Coquimbo, CBA año 2024. Subsecretaría de Economía y EMT Junio 2024. 133 pp. Available at: www.ifop.cl

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

Rationale

Within both anchovy fisheries considered in this assessment, hydroacoustic surveys are conducted twice yearly. These surveys have been carried out since 1999 and consist of a January (summer) RECLAS cruise and a May (autumn) PELACLAS cruise[1]. This is supplemented by assessments of Spawning Stock Biomass (SSB) for small pelagic fish with partial spawning, conducted using the Daily Egg Production Method (DEPM). These research surveys contribute to updates of stock assessments, management advice, and quotas as information becomes available, typically between April–May and December–January.

Research conducted in the northern stock in 2024 includes[2]:

- Monitoring program for the main pelagic fisheries in northern Chile between the Arica and Parinacota and Coquimbo Regions, 2024.
- Status and possibilities for biologically sustainable exploitation of the main national fishery resources, 2025. Anchovy from the Arica and Parinacota, Tarapacá, and Antofagasta Regions.

- Hydroacoustic assessment of anchovy recruitment in the Arica and Parinacota, Tarapacá, and Antofagasta Regions, 2023.
- Research and monitoring program on discards and bycatch in pelagic fisheries, 2024.
- Determination of the factors causing structural changes in the anchovy population of northern Chile in the recent period, and their implications.

Research conducted in the northern-central stock in 2024 includes[2]:

- Monitoring program for the main pelagic fisheries in northern Chile, Arica-Parinacota and Coquimbo Regions, 2024.
- Status and possibilities for biologically sustainable exploitation of the main national fishery resources, 2025. Anchovy between the Atacama and Coquimbo Regions.
- Hydroacoustic assessment of anchovy recruitment between the Atacama and Coquimbo Regions, 2023.
- Assessment of the anchovy spawning stock between the Atacama and Coquimbo Regions, 2024.
- Research and monitoring program on discards and bycatch in pelagic fisheries, 2024.

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

Based on the above, the fishery meets the requirements of Clause A1.2.

References

1. Instituto de Fomento Pesquero (IFOP). (2025). Informe P-581220. https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/2025/P-581220.pdf
2. Subsecretaría de Pesca y Acuicultura. (2025). Status of the Major Chilean Fisheries, Year 2024. https://www.subpesca.cl/portal/618/articles-125250_recurso_1.pdf

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. In recognition of this, the stocks are subjected to regular stock assessments, which generally occur twice yearly and integrate information from multiple sources. The results of these assessments inform precautionary catch quota recommendations.

For the northern stock, biomass and fishing mortality reference points are dynamic and recalculated

annually[1]. Two assessments of the stock are conducted each season with one in October and the second in March. For the northern-central stock, management advice is updated several times per year[1].

The results of the stock assessments are presented by IFOP to the relevant management committees of SUBPESCA: the Comité de Manejo de la Pesquería de Anchoveta y Sardina Española XV–II for the northern stock, and the Comité de Manejo de la Pesquería de Anchoveta y Sardina Española III–IV for the northern-central stock[2,3]. In these committees, the provided information is reviewed, and the management advice is validated.

Based on the above, the fishery meets the requirements of Clause A2.1.

References

1. Subsecretaría de Pesca y Acuicultura. (2025). ESTADO DE SITUACIÓN DE LAS PRINCIPALES PESQUERÍAS CHILENAS, AÑO 2024. https://www.subpesca.cl/portal/616/articles-125250_recurso_1.pdf
2. Subsecretaría de Pesca y Acuicultura. (n.d.). Comité de manejo – Anchoveta y sardina española XV–II. https://www.subpesca.cl/portal/sitio/Institucionalidad/Comites-de-manejo/Comite-de-manejo-Anchoveta-y-Sardina-espanola-XV-II/#collapse05
3. Subsecretaría de Pesca y Acuicultura. (n.d.). Comité de manejo – Anchoveta y sardina española III–IV. https://www.subpesca.cl/portal/sitio/Institucionalidad/Comites-de-manejo/Comite-de-manejo-Anchoveta-y-Sardina-espanola-III-IV/#collapse00

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 CCT-PP defines the biological reference points for the northern region and northern-central region in the Report No. 01/2015, reflected in Ex. Res. No. 291 of 2015.

In 2024, for the northern anchovy stock, reference points were calculated as[1,2]:
Proxy $F_{MSY:}$ $F_{55\%\ SSBR}$ = 0.82
Proxy SSB_{MSY}: 55% SSBR (or 50% B_0) = 624,000 t.
$B_{lim:}$ 25% B_0 = 312,000 t.

In 2024, for the northern-central anchoveta stock, reference points were calculated as[1,2]:
Proxy $F_{MSY:}$ $F_{60\%\ SSBR}$ = 0.85
Proxy SSB_{MSY}: 60% SSBR (or 55% B_0) = 59,500 t.
B_{lim}: 27.5% B_0 = 29,750 t

F_{MSY}: The level of fishing mortality that will maintain a stock at MSY
SSBR: Spawning Biomass per Recruit
SSBMSY: Spawning Biomass at MSY
B_0: Biomass of equilibrium, without fishery exploitation

B_{lim}: Biomass limit reference point

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

References

1. Subsecretaría de Pesca y Acuicultura. (2025). ESTADO DE SITUACIÓN DE LAS PRINCIPALES PESQUERÍAS CHILENAS, AÑO 2024. https://www.subpesca.cl/portal/616/articles-125250_recurso_1.pdf
2. Subsecretaría de Pesca y Acuicultura. (2025). Attached is Technical Report No. 2 from the sixth session of the Scientific and Technical Committee on Small Pelagic Fisheries, 2025. https://www.subpesca.cl/portal/615/articles-127768_documento.pdf

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

Based on the stock assessment, the CCT-PP provides advice on a Biologically Acceptable Quota (CBA) for the fishery. The advice considered two scenarios: one assuming potential approval of the Remnants Law, and one without considering this law. The Remnants Law allows artisanal fisheries to take the remaining quotas not captured during the year, provided that the global catch quota has at least 10% uncaptured availability and that the fishery has not been declared depleted or collapsed by the Scientific Committee[1]. This law was approved as a transitory measure in 2024, and its renewal has been requested for 2025.

For the northern region, the CCT-PP recommendations for 2025 are[2]:

- Without the Remnants Law: Maximum CBA of 573,920 tonnes, excluding discards; the recommended range is 459,136–573,920 tonnes of anchovy.
- With the Remnants Law: Maximum CBA of 436,180 tonnes, excluding discards and remnants; the recommended range is 348,944–436,180 tonnes of anchovy.

For the northern-central region, the CCT-PP recommendations for 2025 are[2]:

- Without the Remnants Law: Maximum CBA of 23,142 tonnes, excluding discards; the recommended range is 18,803–23,504 tonnes of anchovy.
- With the Remnants Law: Maximum CBA of 11,267 tonnes, excluding discards and remnants; the recommended range is 9,013–11,267 tonnes of anchovy.

For the determination of both CBA ranges in the northern-central region, a 2.47% discard discount, a historical average recruitment, and a 30% risk of not reaching the management objective were considered, equivalent to a safeguard of 7% and 13%, without and with remnants, respectively[1].

Based on the above, the fishery meets the requirements of Clause A2.3.

References

1. Subsecretaría de Pesca y Acuicultura. (2025). ESTADO DE SITUACIÓN DE LAS PRINCIPALES

PESQUERÍAS CHILENAS, AÑO 2024. https://www.subpesca.cl/portal/616/articles-125250_recurso_1.pdf

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

Rationale

IFOP carries out the stock assessment, which is then presented to the CCT-PP. The CCT-PP conducts peer reviews of all processes and updates during regular meetings throughout the year. According to the LGPA, Article 153 states that the CCT must be consulted and requested through SUBPESCA[1]. The CCT is responsible for determining the state of the fishery, establishing biological reference points, and defining the range within which the global catch quota can be set, ensuring that the fishery is maintained at or brought to maximum sustainable yield[1].

These peer reviews can be considered both internal and external, as members of the committees may also be independent of the assessment process. In the most recent assessment report, participants in the review process represented several universities, Fisheries Research Institute (INPESCA), the Centre for Applied Marine Research (CIAM), IFOP, SUBPESCA, and other independent experts[2].

Based on the above, the fishery meets the requirements of Clause A2.4.

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf
2. Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. (2025).Adjunta Reporte de la primera sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos, año 2025. https://www.subpesca.cl/portal/616/articles-125985_documento.pdf

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

Rationale

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

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

References

1. Subsecretaría de Pesca y Acuicultura. (n.d.). Publicaciones. https://www.subpesca.cl/portal/publicaciones/
2. Instituto de Fomento Pesquero (IFOP). (n.d.). Project Report Search. https://www.ifop.cl/en/busqueda-de-informes/

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

In Chile, the mechanism to limit the total fishing mortality of anchovy is through the LGPA (1).

SERNAPESCA plays a key role in regulating the fishery by setting catch quotas based on scientific assessments and stock data to ensure the sustainability of the resource. The government, through SERNAPESCA, establishes catch quotas that limit the amount of anchovy that can be caught in a given period. These quotas, reviewed and updated annually, are based on scientific recommendations, historical data, and biannual surveys. Total Allowable Catches (TACs) are divided into categories for research, industrial, and artisanal fisheries. While TACs are set at the start of the fishing season, they can be adjusted mid-year based on acoustic and fishery surveys. The LGPA mandates that catch recommendations be provided as a range, with the lower boundary set at 80% of the MSY[1].

Additional management measures include regulating the fishing season, enforcing minimum catch size restrictions, and controlling fishing effort to limit total mortality. Temporary closures are imposed when high numbers of juvenile anchovy are detected. Workshops provided by the government also promote best fishing practices, including measures to reduce discards and bycatch. These regulations are continuously updated in response to scientific studies and changes in the status of the resource, ensuring the long-term sustainability of the anchovy fishery and the broader marine ecosystem.

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

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf

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

As previously mentioned, annual quotas are established by SUBPESCA based on recommendations from IFOP and the management committees. These quotas may be adjusted during the year. Table 3 displays the CBA and landings for anchovy in both the industrial and artisanal fleets over the last five years[1,2,3,4,5]. During this period, the quota was exceeded on two occasions, once in 2022 and once in 2021, with both occurrences in the artisanal fleet in the northern zone. However, in 2022 and 2021, the quotas were exceeded by only 0.08% and 1%, respectively, significantly lower than the 10% threshold and in both cases, the stock was above limit reference point[6,7].

Table 3. Anchovy CBA, landings and % of CBA used in the northern (XV-II) and northern-central (III-IV) stocks.

Year	Region	Industrial			Artisanal		
		CBA (t)	Landings (t)	% of CBA used	CBA (t)	Landings (t)	% of CBA used
2024	XIV-II	387,069	3,526	1%	100,154	69,908	70%
	III-IV	20,980	0	0%	23,441	0	0%
2023	XIV-II	580,872	55	0%	119,004	100,531	84%
	III-IV	8,658	0	0%	31,127	4,238	14%
2022	XIV-II	556,602	62,873	11%	153,621	153,742	100%
	III-IV	195	0	0%	25,102	24,368	80%
2021	XIV-II	442,130	100,577	23%	117,221	118,824	101%
	III-IV	5,534	0	0%	34,598	18,980	55%
2020	XIV-II	458,284	56,614	12%	123,745	122,728	99%
	III-IV	7,159	0	0%	45,069	34,226	76%

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

References

1. Servicio Nacional de Pesca y Acuicultura. (2024). IFPA 2023 v20240522-1. https://www.sernapesca.cl/app/uploads/2024/03/IFPA_2023_v20240522-1.pdf
2. Servicio Nacional de Pesca y Acuicultura. (2025). IFPA 2024 v8-0F. https://www.sernapesca.cl/app/uploads/2025/04/IFPA_2024_v8-0F.pdf
3. Servicio Nacional de Pesca y Acuicultura. (2023). IFPA 2022. https://www.sernapesca.cl/app/uploads/2023/11/ifpa_2022.pdf
4. Servicio Nacional de Pesca y Acuicultura. (2023). IFPA 2021. https://www.sernapesca.cl/app/uploads/2023/10/ifpa_2021_0.pdf
5. Servicio Nacional de Pesca y Acuicultura. (2023). IFPA 2020. https://www.sernapesca.cl/app/uploads/2023/10/ifpa_2020_0.pdf
6. Subsecretaría de Pesca y Acuicultura. (2022). Status of the Major Chilean Fisheries, Year 2021. Subsecretarv≠a de Pesca y Acuicultura. (2025). Status of the Major Chilean Fisheries, Year 2024. https://www.subpesca.cl/portal/618/articles-125250_recurso_1.pdf
7. Subsecretaría de Pesca y Acuicultura. (2023). Status of the Major Chilean Fisheries, Year 2022. Subsecretarv≠a de Pesca y Acuicultura. (2025). Status of the Major Chilean Fisheries, Year

2024. https://www.subpesca.cl/portal/618/articles-125250_recurso_1.pdf

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

The LGPA does not mandate catch restrictions when stocks fall below the limit biomass, primarily for social, economic, and research-related reasons. Instead, in cases where a fishery is in a state of overexploitation or depletion, according to biological reference points, a recovery program must be established within the management plan, with the prior agreement of the Management Committee (Article 9)[1]. Article 39 indicates that a recovering fishery is understood as one that is overexploited and subject to an extractive ban of at least three years for the purpose of its recovery, and in which it is possible to set a global catch quota[1].

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

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf

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

A summary of the biological reference framework used by the CCT-PP for the 2026 decision-making process is displayed in Table 4.

Table 4. Summary of the biological reference framework used by the CCT-PP for the 2026 decision-making process[1].

RECURSO	*Proxy* F_{RMS} ($año^{-1}$)	*Proxy* B_{RMS} (toneladas)	B_{RMS} (toneladas)
Anchoveta Zona Norte Regiones (AyP - TPCA – ANTOF)	$F_{55\% BDPR}$ 0,13 ($semestre^{-1}$)	$55_{\% BDPR}$ (ó 50%BD_0) 624.000	25% BD_0 312.000
Anchoveta Zona Centro Norte, Regiones Atacama y Coquimbo.	$F_{60\% BDPR}$ 0,65	60% $_{BDPR}$ (ó 55 %BD_0) 57.900	27,5% BD_0 29.000
Anchoveta Regiones Valparaíso a Los Lagos.	$F_{60\% BDPR}$ 0,62	60% $_{BDR}$ (ó 55 %BD_0) 465.000	27,5% BD_0 232.500
Sardina Común Regiones Valparaíso a Los Lagos.	$F_{60\% BDPR}$ 0,31	60% $_{BDPR}$ (ó 55 %BD_0) 859.000	27,5% BD_0 429.500
Sardina Austral Región de Los Lagos Aguas Interiores (A.I.)	$F_{60\% BDPR}$ 0,30	60% BDPR (ó 55 %BD_0) 28.900	27,5% BD_0 14.450

Northern anchovy stock:
The most recent IFOP stock assessment, applying a length-based model with age dynamics at a semi-annual and fleet-specific scale, indicates that the northern anchoveta stock is in favourable biological condition[1,2]. During the second semester of 2024, spawning biomass (SB) was estimated at approximately 66% of virgin biomass (SB_0), exceeding the management target BDRMS = 50% SB_0. Fishing mortality (F) during this period remained 87% below FRMS, reflecting precautionary exploitation.

Annual-scale estimates show similarly low fishing mortality (approximately 85% below FRMS), with annual SB marginally below BDRMS (−1%). This divergence between annual and semester scales is consistent with recruitment variability and environmental fluctuations observed regionally. Nonetheless, the multi-year pattern indicates sustained precautionary fishing pressure (mean F/FRMS ≈ 0.36 since 2020).

These results demonstrate that the northern anchoveta stock is above the target reference point, with fishing mortality well below the corresponding reference level. There is no evidence of overfishing or biological deterioration.

Northern-central anchovy stock:
Monitoring and stock assessment information from IFOP indicate a significant deterioration in the biological condition of the north-central anchoveta stock beginning in mid-2023[1,2]. Biological and fishery indicators derived from 1988–2024 monitoring show no anchoveta landings in Atacama or Coquimbo from the second half of 2023 onward, due to both unfavourable environmental conditions and the absence of available biomass.

The IFOP assessment (annual, age-structured model) reports a 2025 projected spawning biomass near the limit reference proxy (SB/BDRMS = 0.5), with an estimated probability of depletion of approximately 0.53. Fishing mortality during this period is effectively zero, as no catches have occurred since H2-2023[1]. The decline has been attributed not to fishing pressure but to the 2023/24 El Niño, which produced anomalously warm temperatures, reduced upwelling, low productivity, compressed stock distribution, and elevated predator presence.

Given the state of the stock, fishery removals have effectively prohibited. This is confirmed by the lack of landings in the region since the second half of 2023. Additionally, an active Management

Committee and accompanying management plan exists for the stocks[3,4]. Considering the somewhat precarious state of the north-central stock, special attention should be given in the forthcoming surveillance assessment to confirm the cessation of fishing and the effectiveness of management measures. Based on the information, the fishery passes Clause A4.1.
References 1. Subsecretaría de Pesca y Acuicultura. (2025). Attached are the minutes of the sixth session of the Scientific and Technical Committee on Small Pelagic Fisheries, 2025.. https://www.subpesca.cl/portal/615/articles-127529_documento.pdf 2. Subsecretaría de Pesca y Acuicultura. (2025). Attached is Technical Report No. 2 from the sixth session of the Scientific and Technical Committee on Small Pelagic Fisheries, 2025. https://www.subpesca.cl/portal/615/articles-127768_documento.pdf 3. Subsecretaría de Pesca y Acuicultura. (2017). APRUEBA PLAN DE MANEJO PARA LA PESQUERÏA DE ANCHOVETA Y SARDINA ESPAÑOLA III REGIONES.https://www.subpesca.cl/portal/616/articles-98874_documento.pdf 4. Subsecretaría de Pesca y Acuicultura. (2024, December 10). Dec. Ex. Folio 202400178: Establece cuota de captura de unidades de pesquería de anchoveta y sardina española Atacama-Coquimbo sometidas a licencias transables de pesca, año 2025. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Cuotas-de-captura/123937:Dec-Ex-Folio-202400178-Establece-Cuota-de-Captura-de-Unidades-de-Pesqueria-de-Anchoveta-y-Sardina-Espanola-Atacama-Coquimbo-Sometidas-a-Licencias-Transables-de-Pesca-Ano-2025-Publicado-en-Pagina-Web-12-12-2024-F-D-O-21-12-2024

Category B species

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

2.2. 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.

2.3. 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

2.4. All clauses must be met for a species to pass the Category C assessment.

2.4.1. 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.

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

Members and Cooperating Non-Contracting Parties (CNCPs) participating in the Jack mackerel (*Trachurus murphyi*) fishery are required to report the monthly catches of their flagged vessels in an electronic format to the SPRFMO Secretariat within 20 days of the end of the month, in accordance with Conservation and Management Measures (CMM) 02-2022.

Since 2013, the SPRFMO has conducted annual stock assessments of jack mackerel in the South East Pacific, utilizing catch data from all member nations. Detailed information on the stock assessment process, including catch and other data and assumptions, can be found on the SPRFMO website. The most recent SPRFMO Scientific Committee Meeting was the 13th, held in 2025[1].

In 2024, the total catch of jack mackerel was estimated at around 1,296,740 tonnes (Figure 1). Chile accounted for the majority of the catch in 2024 (Table 5).

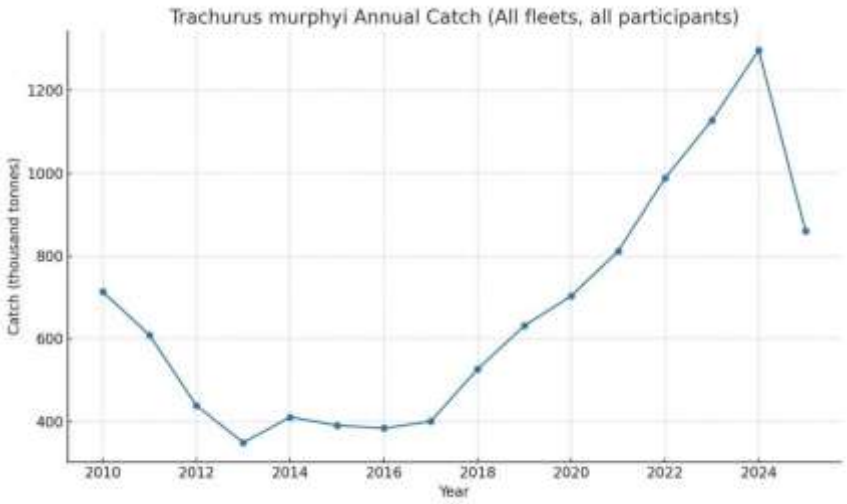

Figure 1. Total jack mackerel catch in 2024[2].

Table 5. Annual catch by top participants as in 2024[2].

Participant	Catch (t)	Catch of 2024 total (%)
CHL	1,079,417	83.2
PER	181,839	14.0
EU	17,774	1.4
RUS	15,857	1.2
KOR	1,797	0.1

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

References

1. Southern Pacific Regional Fisheries Management Organisation. (n.d.). SC13-JM01_rev2 – Catch history and predicted 2025 catches (Jack Mackerel). https://sprfmo.int/assets/Meetings/02-SC/13th-SC-2025/Jack-Mackerel/SC13-JM01_rev2-CJM-Catch-history-and-predicted-2025-catches.pdf
2. Southern Pacific Regional Fisheries Management Organisation. (n.d.). 13th Scientific Committee 2025 meeting – Agenda & documents. https://sprfmo.int/meetings/scientific-committee/13th-sc-2025

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

Jack mackerel was most recently assessed in 2022 during the 10th annual SPRFMO Scientific Committee meeting[1]. This assessment followed a benchmark workshop held earlier in the year, where scientists from around the world reviewed input data, evaluated and revised the assessment model, and developed model diagnostics to ensure the most accurate scientific guidance for the stock assessment[1].

The assessment was conducted using the Joint Jack Mackerel (JJM) statistical catch-at-age model, which has been the standard assessment method since its adoption in 2010. With updated data inputs and indicators, the model results indicate that the jack mackerel stock status has remained relatively stable since the 2022 benchmark assessment, and the population trend is showing signs of increase (figure 2)[1]. The status of the stock as in 2023 and 2024 is displayed in table 6.

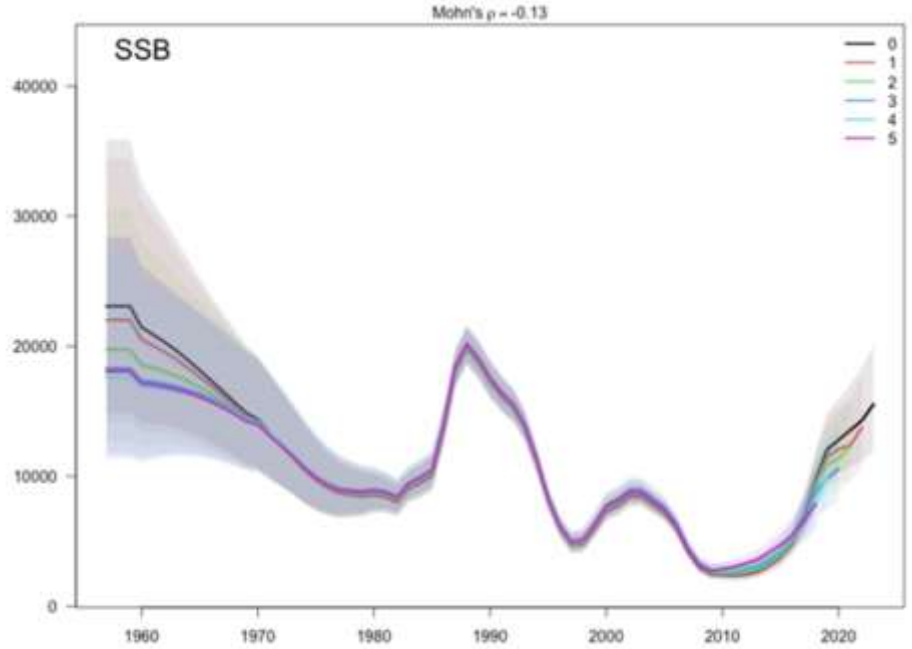

Figure 2 Model retrospective of spawning biomass from five separate model runs, based on the single-stock hypothesis[1].

Table 6. Jack mackerel stock status[2].

		2023	2024
Fishing mortality in relation to:	F_{MSY}	Below	Below
Spawning stock biomass in relation to:	B_{MSY}	Above 100%	Above 100%

The overall biomass in 2024 was estimated at around 17.6 million tonnes and is considered to be exploited sustainably, with fishing mortality estimated to be well below F_{MSY}. The biomass is estimated to be well above B_{MSY}. The 2025 TAC is set at or below 1,428,000 tonnes. This represents a 15% increase over the 2024 TAC and applies throughout the range of jack mackerel (table 7). The SC noted that this level of catch was estimated to be approximately equal to the effort (F) estimated for 2024. This advice is also independent of alternative stock structure hypotheses.

Table 7. Catch scenarios from the 1-stock assessment model[2].

Catch Scenario	Catch 2025 (kt)	Catch 2026 (kt)	B_{2026}	$P(B_{2026} > B_{MSY})$%	B_{2030}	$P(B_{2030} > B_{MSY})$%	B_{2034}	$P(B_{2034} > B_{MSY})$%
F = 0	0	0	19 461	100	19 008	100	17 509	99
*F = F_{2024}	1 462	1 679	16 724	100	12 409	90	10 694	72
*F = F_{MSY}	4 997	3 818	11 598	93	6 852	14	5 847	6
F=F_{2024} x 0.75	1 117	1 337	17 331	100	13 489	94	11 660	80
*F=F_{2024} x 1.25	1 794	1 981	16 159	100	11 534	83	9 933	63
TAC = TAC_{2024}	1 242	1 464	17 108	100	13 073	93	11 284	77
TAC = TAC_{2024} +15%	1 428	1 647	16 781	100	12 504	90	10 779	72

** Catch options are considered outside the agreed MP*

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

References

1. SPRFMO. (n.d.). Jack Mackerel – Science. https://sprfmo.int/science/jack-mackerel
2. SPRFMO. (2024). 12th Scientific Committee meeting report. https://sprfmo.int/assets/Meetings/02-SC/12th-SC-2024/SC12-Report_rev1-15Nov2024.pdf

Category D species

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

2.5. The Productivity-Susceptibility Analysis (PSA) in Table D(a) shall be used when assessing Category D species.

2.6. Table D(b) shall be used to calculate the overall PSA risk rating for the Category D species.

2.7. 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	Chub mackerel (*Scomber japonicus*)	
Productivity attributes	**Value**	**Score**
Average age at maturity	2.5[1]	1
Average maximum age	9.5[1]	1
Fecundity	86,616[1]	1
Average maximum size	64 cm[1]	1
Average size at maturity	26.1 cm[1]	1
Reproductive strategy	Broadcast spawning[1]	1
Mean Trophic Level (MTL)	3.4[1]	3
Density dependence (to be used when scoring invertebrate species only)	/	/
Susceptibility attributes		
Areal overlap (availability): Overlap of the fishing effort with a species concentration of the stock	<10% overlap. Chub mackerel are widely distributed and be found between 60°N and 48°S and 116°E and 70°W. This area significantly exceeds that of the fishery[1,2].	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	Medium overlap. Chub mackerel are usually found between 50 and 200 meters depth[1]. Anchovy in this fishery are caught between the surface and at most 80 meters depth with the greatest abundances found at approximately 20 meters[2]. This suggests medium overlap between the fishing gear and the species as can be seen in the catch composition records (0.84).	2
Selectivity of gear type: Potential of the gear to retain species	High susceptibility. The minimum mesh size for the fishery is 13mm and given the length at maturity of chub markerel is 26.1 cm, the vast majority of individuals would be retained[1,2].	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		9 (1.29)
Average susceptibility score		9 (2.25)
PSA risk rating (from Table D(b))		Pass
Compliance rating		Pass

1. Froese, R. & Pauly, D. (Eds.). (2025). Scomber japonicus. In FishBase (04/2025). https://www.fishbase.se/summary/Scomber-japonicus.html
2. Seafood Watch. (2024). Anchoveta – Chile / Peru (Seafood Watch report 27723). https://www.seafoodwatch.org/globalassets/sfw-data-blocks/reports/a/seafood-watch-anchoveta-chile-peru-27723.pdf

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.

3.1. All ecosystem criteria must be met (pass) for a fishery to pass the Ecosystem Requirements.

3.1.1. 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 In Chile, the collection of information on interactions between fisheries and Endangered,	

Threatened, and Protected (ETP) species is carried out under Law N° 20.625/2012[1], specifically through the IFOP Research Program on Discards and Bycatch, which has been collecting data on pelagic and demersal fisheries since 2014[2,3].

Data is collected in two forms. The first is through scientific observers on board vessels, who are formally trained to observe and record fishing operations, including operational, biological, and environmental data. The second is through self-reporting logbooks that are provided to operators in all ports where the fleet operates. The use of these logbooks is mandatory for fisheries included in research programs and voluntary for those in the monitoring phase in purse-seine fisheries. The logbooks specifically record information on the capture and incidental mortality of birds, sea turtles, and marine mammals.

Additionally, in accordance with Supreme Decree N° 76/2015, industrial and artisanal fishing vessel owners operating vessels 15 metres in length or longer must install and maintain Electronic Monitoring Systems (EMS) throughout each fishing trip[4,5]. These EMS consist of an Image Recording Device (IRD) and an Electronic Logging System (SIBE), and they serve as tools to improve the collection of discarding and bycatch data and to support prevention measures, as illustrated in Figure 3.

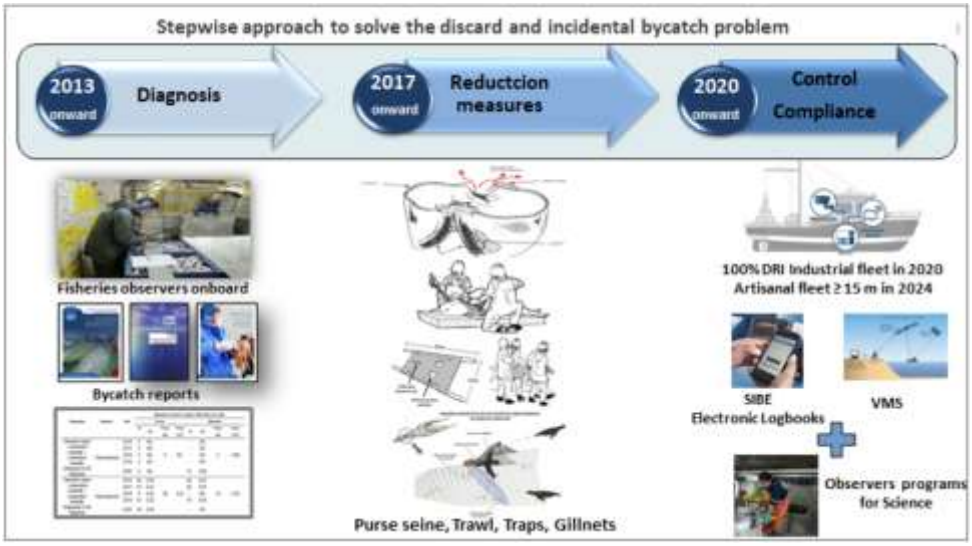

Figure 3. Step wise approach of the Chilean Law N° 20625/2012 to; first diagnose through on-board observers, second reduce through regulatory changes, the use of selectivity devices and good practices and third control through EMS (DRI + SIBE), discards and incidental bycatch in fisheries[6].

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

References

1. Subsecretaría de Pesca y Acuicultura. (2012). Ley N° 20.625: Define el descarte de especies hidrobiológicas y establece medidas de control y sanciones para quienes incurran en esta práctica en las faenas de pesca. https://www.subpesca.cl/portal/normativa/Leyes/Modificaciones-a-la-Ley-de-pesca-y-acuicultura/80306:Ley-N-20-625-Define-el-Descarte-de-Especies-Hidrobiologicas-y-Establece-Medidas-de-Control-y-Sanciones-para-quienes-incurran-en-esta-practica-en-las-Faenas-de-

Pesca
2. Instituto de Fomento Pesquero (IFOP). (n.d.). Discard Program of demersal and pelagic fisheries. https://www.ifop.cl/en/nuestro-que-hacer/la-investigacion-pesquera/depto-de-evaluacion-de-pesquerias/proyectos-de-descarte/
3. Servicio Nacional de Pesca y Acuicultura. (n.d.). Implementación del sistema de fiscalización del descarte. https://www.sernapesca.cl/informacion-utilidad/implementacion-del-sistema-de-fiscalizacion-del-descarte/
4. Subsecretaría de Pesca y Acuicultura. (2015, March 18). D.S. N° 76-2015 aprueba Reglamento del dispositivo de registro de imágenes para detectar y registrar descarte (F.D.O. 18-03-2017). https://www.subpesca.cl/portal/normativa/Regulaciones-de-pesca-extractiva/Reglamentos-de-pesca-artesanal/96157:D-S-N-76-2015-Aprueba-Reglamento-del-Dispositivo-de-Registro-de-Imagenes-para-Detectar-y-Registrar-Descarte-F-D-O-18-03-2017
5. Southern Pacific Regional Fisheries Management Organisation (SPRFMO). (2022). Electronic monitoring systems in Chile (SC10-Doc29). https://sprfmo.int/assets/Meetings/SC/10th-SC-2022/SC10-Doc29-Electronic-monitoring-systems-in-Chile-CL.pdf

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

The most recent IFOP Research and Monitoring Program on Discards and Bycatch in Pelagic Fisheries provides the relevant data for the industrial fleet targeting anchovy species off the coast between Arica and Parinacota and Antofagasta. A total of 7,081 animals were recorded as incidental catch, comprising 20 species and one unidentified dolphin. These data were collected by scientific observers across 4,026 commercial fishing hauls during the period 2017–2023[1].

Catch and incidental mortality by species in the industrial and artisanal fleets in Arica–Parinacota, Antofagasta, Atacama and Coquimbo regions are displayed in table 8, 9 and 10.

Table 8. Catch and incidental mortality by species in the industrial purse-seine fleet operating on the anchovy resource in the Arica–Parinacota and Antofagasta area[1].

Nombre común	Nombre Científico	Captura	Muertos	Mort (%)	CIP	CV_{CIP}	MIP	CV_{MIP}
Lobo Marino Común	*Otaria flavescens*	5.708	9	0,16	1,42	351,5	0,002	2.112,9
Fardela negra	*Ardenna grisea*	568	390	68,7	0,14	3513,1	0,10	3.450,2
Cormorán guanay	*Phalacrocorax bougainvilli*	452	420	92,9	0,11	4.125,4	0,10	4.407,5
Delfín común	*Delphinus delphis*	72	23	31,9	0,02	2.255,2	0,006	2.571,5
Piquero común	*Sula variegata*	71	59	83,1	0,02	2.166,8	0,015	2.366,6
Gaviotín monja	*Larosterna inca*	61	0	0	0,02	6.241,9	0	-
Delfín oscuro	*Lagenorhynchus obscurus*	56	38	67,9	0,01	2.611,8	0,009	2.701,2
Pelícano peruano	*Pelecanus thagus*	31	17	54,8	0,008	2.154,4	0,004	2.268,4
Delfín sin especificar	-	15	0	0	0,004	6.345,1	0	-
Pingüino de Humboldt	*Spheniscus humboldti*	12	1	8,3	0,003	2.478,4	0,0002	6.345,1
Fardela blanca	*Ardenna creatopus*	8	8	100	0,002	6.345,1	0,002	6.345,1
Gaviota garuma	*Leucophaeus modestus*	6	6	100	0,001	6.345,1	0,001	6.345,1
Delfín nariz de botella	*Tursiops truncatus*	4	4	100	0,001	6.345,1	0,001	6.345,1
Cormorán yeco	*Phalacrocorax bougainvilli*	4	4	100	0,001	6.345,1	0,001	6.345,1
Tortuga verde	*Chelonia mydas*	3	0	0	0,001	3.662,4	0	-
Tortuga olivácea	*Lepidochelys olivacea*	3	0	0	0,001	3.662,4	0	-
Gaviota de Franklin	*Larus pipixcan*	2	2	100	0,000	6.345,1	0,0005	6.345,1
Tortuga laúd	*Dermochelys coriacea*	2	0	0	0,000	4.486,1	0	-
Albatros de ceja negra	*Thalassarche melanophris*	1	1	100	0,0002	6.345,1	0,0002	6.345,1
Tortuga cabezona	*Caretta caretta*	1	0	0	0,0002	6.345,1	0	-
Lobo fino austral	*Arctocephalus australis*	1	0	0	0,0002	6.345,1	0	-

Mort (%) = Mortalidad = Número de animales muertos/Número de animales capturados
Captura Incidental Promedio (CIP) = Número de animales capturados/Número de lances observados
Coeficiente de Variación Captura Incidental Promedio (CV_{CIP})
Mortalidad Incidental Promedio (MIP) = Número de animales muertos/Número de lances observados
Coeficiente de Variación Tasa Mortalidad Incidental (CV_{MIP})

Table 9. Catch and incidental mortality by species in the artisanal purse seine fleet operating against the anchovy resource between the Arica and Parinacota and Antofagasta regions[1].

Nombre común	Nombre Científico	Captura	Muertos	Mort (%)	CIP	CV_{CIP}	MIP	CV_{MIP}
Lobo marino común	*Otaria flavescens*	1.363	4	0,29	1,154	283,9	0,003	2.103,0
Cormorán guanay	*Phalacrocorax bougainvilli*	217	216	99,54	0,184	3.172,1	0,183	3.186,6
Piquero común	*Sula variegata*	58	55	94,83	0,049	1.731,4	0,047	1.814,3
Pelícano peruano	*Pelecanus thagus*	29	4	13,79	0,025	2.976,3	0,003	2.103,0
Fardela negra	*Ardenna grisea*	8	8	100	0,007	2.716,2	0,007	2.716,2
Delfín común	*Delphinus delphis*	4	0	0	0,003	3.436,6	0	-
Gaviota garuma	*Larus modestus*	2	0	0	0,002	3.436,6	0	-
Delfín nariz de botella	*Tursiops truncatus*	2	2	100	0,002	3.436,6	0,001	3.436,6
Tortuga verde	*Chelonia mydas*	1	0	0	0,001	3.436,6	0	-
Tortuga sin especificar	-	1	0	0	0,001	3.436,6	0	-
Cormorán sin especificar	-	1	0	0	0,001	3.436,6	0	-

Mort (%) = Mortalidad = Número de animales muertos/Número de animales capturados
Captura Incidental Promedio (CIP) = Número de animales capturados/Número de lances observados
Coeficiente de Variación Captura Incidental Promedio (CV_{CIP})
Mortalidad Incidental Promedio (MIP) = Número de animales muertos/Número de lances observados
Coeficiente de Variación Tasa Mortalidad Incidental (CV_{MIP})

Table 10. Catch and incidental mortality by species in the artisanal purse seine fleet operating against anchovy and jack mackerel between the Atacama and Coquimbo regions[1].

Nombre común	Nombre Científico	Captura	Muertos	Mort (%)	CIP	CV_{CIP}	MIP	CV_{MIP}
Lobo marino común	*Otaria flavescens*	699	3	0,43	0,990	281,5	0,004	1.979,3
Cormorán guanay	*Phalacrocorax bougainvilli*	211	159	75,36	0,299	1.799,8	0,225	2.010,3
Fardela negra	*Ardenna grisea*	76	76	100	0,108	2.453,5	0,108	2.453,5
Pelícano peruano	*Pelecanus thagus*	37	18	48,65	0,052	988,1	0,025	1.668,3
Yunco común	*Pelecanoides garnotii*	31	25	80,65	0,044	2.010,9	0,035	2.453,4
Piquero común	*Sula variegata*	15	15	100	0,021	1.262,0	0,021	1.262,0
Pingüino de Magallanes	*Spheniscus magellanicus*	9	0	0	0,013	1.694,2	-	-
Delfín oscuro	*Lagenorhynchus obscurus*	6	0	0	0,008	2.657,1	-	-
Pingüino de Humboldt	*Spheniscus humboldti*	4	1	25	0,006	1.625,2	0,001	2.657,1
Cormorán yeco	*Phalacrocorax brasilianus*	3	3	100	0,004	2.657,1	0,004	2.657,1
Gaviota dominicana	*Larus dominicanus*	2	1	50	0,003	1.877,5	0,001	2.657,1

Mort (%) = Mortalidad = Número de animales muertos/Número de animales capturados
Captura Incidental Promedio (CIP) = Número de animales capturados/Número de lances observados
Coeficiente de Variación Captura Incidental Promedio (CV_{CIP})
Mortalidad Incidental Promedio (MIP) = Número de animales muertos/Número de lances observados
Coeficiente de Variación Tasa Mortalidad Incidental (CV_{MIP})

Marine mammal bycatch consisted of six species, with reports ranging from the northern boundary of the Arica and Parinacota Region (18°21'S) to Punta Piedras (24°40'S). The South American sea lion showed the highest average catch levels, while dolphins exhibited a 44% mortality rate[1].

Coastal seabird bycatch was concentrated mainly between the Port of Arica and the Port of Tocopilla (22°07'S), where the guanay cormorant accounted for 71% of captures and 93% of the mortality within this group[1]. Bycatch of Procellariiformes occurred primarily between the regions of Tarapacá and Antofagasta, where the sooty shearwater (*Ardenna grisea*) represented 98% of captures and 69% of mortalities in this group[1].

Marine reptiles represented 1% of total captures, mainly observed between the regions of Arica and Tarapacá. Several IUCN-listed Vulnerable species were recorded, including the Loggerhead Turtle (*Caretta caretta*), Olive Ridley Turtle (*Lepidochelys olivacea*), Leatherback Turtle (*Dermochelys coriacea*), and Green Turtle (*Chelonia mydas*, East Pacific subpopulation)[2,3,4,5]. However, no mortality was reported for these captures.

In Chile, the Ministry of the Environment (MMA) publishes an annual list of species present in the country, including protected species. Both the sooty shearwater (*Ardenna grisea*) and the guanay cormorant (*Leucocarbo bougainvilliorum*) show relatively high rates of capture and mortality in this fishery, and both are listed as Near Threatened (NT) on the IUCN Red List[6,7]. The pink-footed shearwater, listed as Vulnerable, was also reported, although only six individuals were captured over the study period[8].

The sooty shearwater is listed as Near Threatened due to a suspected moderately rapid population decline resulting from fisheries impacts, harvesting of chicks, and possibly climate change. Similarly, the guanay cormorant is declining due to interactions with fisheries, including bycatch and competition for anchovies, its primary prey, along with direct persecution and climate variability linked to El Niño events.

Despite these concerns, both species maintain relatively high global population sizes: an estimated 19.0–23.6 million individuals for the sooty shearwater and 2.5–5.0 million for the guanay cormorant. Mortality levels attributed to this fishery are estimated at 0.004% for the sooty shearwater and 0.025% for the guanay cormorant.

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

References

1. Instituto de Fomento Pesquero (IFOP). (2024). P-581201. https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/2024/P-581201.pdf
2. International Union for Conservation of Nature. (n.d.). Species 3897. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/3897/119333622
3. International Union for Conservation of Nature. (n.d.). Species 11534. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/11534/3292503
4. International Union for Conservation of Nature. (n.d.). Species 6494. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/6494/43526147
5. International Union for Conservation of Nature. (n.d.). Species 220970302. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/220970302/220970304
6. International Union for Conservation of Nature. (n.d.). Species 22696810. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/22696810/133553624
7. International Union for Conservation of Nature. (n.d.). Species 22698209. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/22698209/154440143
8. International Union for Conservation of Nature. (n.d.). Species 22698195. IUCN Red List of Threatened Species. https://www.iucnredlist.org/species/22698195/132633266

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

The LGPA requires, under Article 7, that SUBPESCA develop discard and bycatch reduction plans for the main fisheries, with the aim of minimizing the impact of fishing activities on ETP species[1]. Accordingly, in 2019 SUBPESCA approved the Plan for the Reduction of Discards and Incidental Catches for the industrial and artisanal anchovy fisheries operating in the maritime areas of the Arica and Parinacota, Tarapacá, and Antofagasta Regions (Exempt Resolution N° 1.625/2019)[2]. This plan is detailed in Technical Report (R. Pesq.) N° 105-2019, which forms part of the resolution[3].

Technical Report (R. Pesq.) No. 58/2021 provides the basis for establishing a reduction plan for discards and incidental catches in the artisanal fisheries for anchovy (*Engraulis ringens*), horse mackerel (*Trachurus murphyi*), and associated fauna in the Atacama and Coquimbo Regions, in accordance with Title II, Paragraph 1° bis of the LGPA[4]. A corresponding Plan for the Reduction of Discards and Incidental Catches for these fisheries was approved the same year through Exempt Resolution N° 1.468/2021.

Additionally, specific regulations to reduce the capture and incidental mortality of seabirds during fishing operations were established through Exempt Resolutions No. 2,110/2014, 2,941/2019, and 2,569/2021[5,6,7]. These regulations mandate the use of deterrent devices, such as bird-scaring lines, and promote good fishing practices, including night setting and appropriate discard management to avoid attracting seabirds.

Similarly, in 2021 a series of measures were enacted addressing incidental catches of marine mammals in industrial purse-seine fisheries, artisanal traps, industrial trawling, and artisanal gillnets. Through Exempt Resolutions No. 2,667/2021, No. 2,827/2021, No. 3,120/2021, and No. 3,122/2021, the use of specific mitigation devices was required, along with the implementation of release manoeuvres to safely return captured individuals to the water, onboard handling protocols, codes of good practice, and mandatory reporting of incidental catches in logbooks[8].

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

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf
2. Subsecretaría de Pesca y Acuicultura. (2019, May 3). Res. Ex N° 1625-2019: Autoriza plan de reducción del descarte y de la captura de pesca incidental – pesquería industrial y artesanal de anchoveta y su fauna acompañante, Regiones de Arica y Parinacota, Tarapacá y Antofagasta. https://www.subpesca.cl/portal/normativa/Regulaciones-de-investigacion-cientifica/Plan-de-reduccion-del-descarte/104137:Res-Ex-N-1625-2019-Autoriza-Plan-de-Reduccion-del-Descarte-y-de-la-Captura-de-Pesca-Incidental-Pesqueria-Industrial-y-Artesanal-de-Anchoveta-y-su-Fauna-Acompanante-Regiones-de-Arica-y-Parinacota-Tarapaca-y-Antofagasta-Publicado-en-Pagina-Web-03-05-2019
3. Subsecretaría de Pesca y Acuicultura. (2019). Plan de Reducción del Descarte y de la Captura de Pesca Incidental para la pesquería de anchoveta (Engraulis ringens) y su fauna acompañante entre las Regiones de Arica y Parinacota yAntofagasta. https://www.subpesca.cl/portal/615/articles-104139_documento.pdf
4. Subsecretaría de Pesca y Acuicultura. (2021, August 27). Informe técnico R-PESQ N° 58-2021: Plan de reducción del descarte y de la captura de pesca incidental para la pesquería artesanal de anchoveta (Engraulis ringens), jurel (Trachurus murphyi) y su fauna acompañante en las Regiones de Atacama y Coquimbo. https://www.subpesca.cl/portal/normativa/Regulaciones-de-investigacion-cientifica/Plan-de-reduccion-del-descarte/111941:INFORME-TECNICO-R-PESQ-N-58-2021-Plan-de-Reduccion-del-Descarte-y-de-la-Captura-de-Pesca-Incidental-para-la-pesqueria-artesanal-de-anchoveta-Engraulis-ringens-jurel-Trachurus-murphyi-y-su-fauna-acompanante-en-las-Regiones-de-Atacama-y-Coquimbo-Publicado-en-Pagina-Web-27-08-2021
5. Subsecretaría de Pesca y Acuicultura. (2014, August 19). R-Ex N° 2110-2014: Establece medidas de administración para reducir las capturas incidentales de aves de las pesquerías de palangre que se indica. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Artes-y-aparejos-de-pesca/84597:R-EX-N-2110-2014-Establece-Medidas-de-Administracion-para-Reducir-las-Capturas-Incidentales-de-Aves-de-las-Pesuqerias-de-Palangre-que-se-Indica-Publicada-en-Pag-Web-13-08-2014-F-D-O-19-08-2014
6. Subsecretaría de Pesca y Acuicultura. (2019, September 5). Res. Ex N° 2941-2019: Establece medidas de administración para reducir las capturas incidentales de aves marinas en las

pesquerías de arrastre que indican. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Artes-y-aparejos-de-pesca/105375:Res-Ex-N-2941-2019-Establece-Medidas-de-Administracion-para-Reducir-las-Capturas-Incidentales-de-Aves-Marinas-en-las-Pesquerias-de-Arrastre-que-Indican-Publicado-en-Pagina-Web-29-08-2019-F-D-O-05-09-2019

7. Subsecretaría de Pesca y Acuicultura. (2021, September 24). Res. Ex N° 2569-2021: Modifica Res. Ex N° 2941-2019 – establece medidas de administración para reducir las capturas incidentales de aves marinas en las pesquerías de arrastre que indican. https://www.subpesca.cl/portal/normativa/Medidas-de-administracion-y-regimenes-de-acceso/Artes-y-aparejos-de-pesca/112252:Res-Ex-N-2569-2021-Modifica-Res-Ex-N-2941-2019-Establece-Medidas-de-Administracion-para-Reducir-las-Capturas-Incidentales-de-Aves-Marinas-en-las-Pesquerias-de-Arrastre-que-Indican-Publicado-en-Pagina-Web-24-09-2021-F-D-O-24-09-2021

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 and there is no evidence found during this assessment to suggest otherwise. Based on the above, the fishery passes Clause E2.2.	
References	

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, aside from a few exceptions, and therefore do not impact marine habitats, a specific habitat management strategy is not deemed necessary. However, several laws and regulations are in place to limit any potential impact. Primarily, Article 5 of the LGPA designates the first nautical mile adjacent to the Chilean coastline as a protection zone from extractive fishing activities that affect the seabed[1]. Additionally, Article 47 of the LGPA establishes that the first five nautical miles are reserved for small-scale fisheries[1]. Within this area, the first mile is exclusively for vessels less than 12 meters in length, from the northern limit of the country to the southern limit of Chiloé Island. Based on the above, the fishery passes Clause E2.3.	
References 1. LGPA (2023). Ley General de Pesca y Acuicultura.	

https://www.subpesca.cl/portal/615/articles88020_documento.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. In recognition of this, IFOP conducts regular surveys to assess the status of the target species, while fisheries observers collect data on bycatch and monitor the status of species potentially affected by the fishery. Management measures and specific plans for reducing discards and incidental catch are based on the results of this monitoring.

The marine ecosystem in northern Chile, where the pelagic fishery operates, has undergone significant short and long-term oceanographic and climatic changes. For anchovy, a species with a surface-oriented and coastal distribution, these oceanographic alterations create destabilizing factors that affect migration, recruitment, and reproduction processes, as well as alter schooling behaviour. In Chile, studies have shown that anchovy and Araucanian herring are important components of the diet of sea lions, sharks, and other species of economic importance, such as horse mackerel and hake[1].

Management of this fishery is supported by a permanent annual research program mandated under Article 91 of the LGPA and executed by IFOP[2]. This program comprises research and monitoring projects that include assessments of status and sustainable exploitation levels, summer and autumn hydroacoustic surveys, spawning stock evaluations, pelagic fishery monitoring, and fundamental fishery biological studies[1].

The data collected through these projects allow for the monitoring of management measures and ensure that the fishery is conducted sustainably and with minimal impact on the ecosystem.

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

References

1. Subsecretaría de Pesca y Acuicultura. (n.d.). Comité de manejo – Anchoveta y Sardina común. https://www.subpesca.cl/portal/sitio/Institucionalidad/Comites-de-manejo/Comite-de-manejo-Anchoveta-y-Sardina-comun/#collapse05
2. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf

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

There is no evidence that the fishery has a significant negative impact on the marine ecosystem. Where there is an impact or the potential for one, Chile implements adequate measures to mitigate them.

As previously mentioned, anchovy serve as key prey for several top predators and at 2024, the northern and northern-central stock were considered to be overexploited as of 2024 (table 10). This indicates that the current stock biomass is below the level that can produce MSY.

Table 10. Status of the pelagic fisheries in Chile from 2014 to 2024[1].

ESTATUS DE LAS PRINCIPALES PESQUERIAS NACIONALES, AÑOS 2014 A 2024												
TIPO DE PESQUERIA	PESQUERIA	REGIONES	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pelagicos	Jurel	AYP- LAGOS											
	Anchoveta	AYP-ANTOF											
	Anchoveta	ATCMA-COQ											
	Anchoveta	VALPO-LAGOS											
	Sardina común	VALPO-LAGOS											
	Sardina española	AYP-ANTOF											
	Sardina española	ATCMA-COQ											
	Sardina austral	LAGOS											
	Sardina austral	AYSEN											

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

References

1. Subsecretaría de Pesca y Acuicultura. (2025). Status of the Major Chilean Fisheries, Year 2024. https://www.subpesca.cl/portal/618/articles-125250_recurso_1.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

At the core of the LGPA is the objective to ensure the conservation and sustainable use of hydrobiological resources through the application of the precautionary approach, an ecosystem approach to fisheries regulation, and the safeguarding of the marine ecosystems in which these resources exist[1]. This includes the development of management plans, the establishment of management committees, the creation of technical scientific committees, the incorporation of regulations on bycatch, the establishment of biological reference points, and changes in the responsibilities of the National Fisheries and Aquaculture Council[2].

This framework is supported by a stringent programme of surveys conducted by IFOP to assess stock status, as well as monitoring by fisheries observers to quantify bycatch. Various technical and management measures, such as seasonal closures, have been implemented to protect spawning stocks and juveniles.

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

References

1. LGPA (2023). Ley General de Pesca y Acuicultura. https://www.subpesca.cl/portal/615/articles88020_documento.pdf
2. Porobic et al (2018): Porobic, J., Fulton, E. A., Frusher, S., Parada, C., Haward, M., Ernst, B., & Stram, D. (2018). Implementing Ecosystem-based Fisheries Management: lessons from Chile's experience. Marine Policy, 97, 82-90. https://www.sciencedirect.com/science/article/pii/S0308597X17307510

Annex 1: External Peer Review report

Assessment and determination summary

Fishery name	**Anchovy (Engraulis ringens) – Chile – FAO 87, Chilean EEZ Regions XV-IV**
MarinTrust report code	**WF16**
Type 1 species (common name, Latin name)	*Anchovy (Engraulis ringens)*
Fishery location	*Chile – FAO 87, Chilean EEZ Regions XV-IV*
Gear type(s)	*Purse seine*
Management authority (country/state)	*Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA)*
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.*
During 2023 and 2025 several meeting have been held in Peru and Chile (IMARPE by Peru, IFOP by Chile) in order to harmonize the methods used to estimate pupulation paramenters (M, F, Bo, recruitment, biomass etc). All this effort has been made under the umbrella of the phase II od the binational Humboldt Large Marine Ecosystem Project, wich is intended, among others, to assess jointly several common species, but mainly anchovy. These are good news and will permit to strength the sustainability of several shared fisheries.
General comments on the draft report provided to the peer reviewer
The draft report is consistent and reflect the best available scientific evidence. It has been drafted following strictly the MT standar to reflect the current situation of anchovy, jack mackerel and chub mackerel. One aspect to highlight is the maintenance of the effort to collect data on interactions with ETP species, which demonmstrate the low and negligible impact of the pelagic purse seine fishery on marine mega fauna. However, some actions are yet to be implemented to reduce more the mortality of individuals.

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	Yes

fishery?	
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	

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	

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	

3a. Are the “Category A Species” scores clearly justified?	Yes
scoring agreed	
Certification Body response	

3b. Are the “Category B Species” scores clearly justified?	n/a
Certification Body response	

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

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

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

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

Optional: General peer reviewer comments on the draft report
Thanks to the current fruitfull cooperation between Imarpe (Peru) and Ifop (Chile), it has been superated the justified criticism made by Sustainable Fishery Partnership (SFP) since the two countries were producing fishiong quotas without coordination. Happily the problem was approacehd by the Humboldt pahse II Project. Under the obtained agreements it is expected that from now on Peru and Chile not only produce joint surveys and assessments of shared stocks, but also an agreement to issue a single quota for every season. In this way the risk of overfishing noticed by SFP and others wil be non existent.
Certification Body response
CAB is happy with the peer review comments.