Australian Government

Australian Fisheries Management Authority

Application for assessment of the Commonwealth Western Tuna and Billfish Fishery (WTBF) for approval under the *Environment Protection and Biodiversity Conservation Act 1999*

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Contents

1. Introduction

This submission has been produced to enable the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to assess the Western Tuna and Billfish Fishery (WTBF) management arrangements against the *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition* and the requirements set out in relevant sections of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The WTBF was declared an approved Wildlife Trade Operation (WTO) under the EPBC Act on 30 November 2004 and has been re-approved four times since then, with the current WTO accreditation expiring on 11 November 2025.

2. The fishery

2.1 Description of the fishery

The WTBF operates primarily off the western coast of Australia, extending from Cape York in Queensland, around Western Australia, to the South Australian/Victorian border (Figure 1), and includes waters around Cocos (Keeling) and Christmas Islands, and the high seas area under the competence of the Indian Ocean Tuna Commission (IOTC). In recent years, fishing effort has concentrated off south-west Western Australia, with Fremantle and Albany as the major ports used by the WTBF fleet. See Table 1 for an overview of the fishery and how it is managed.

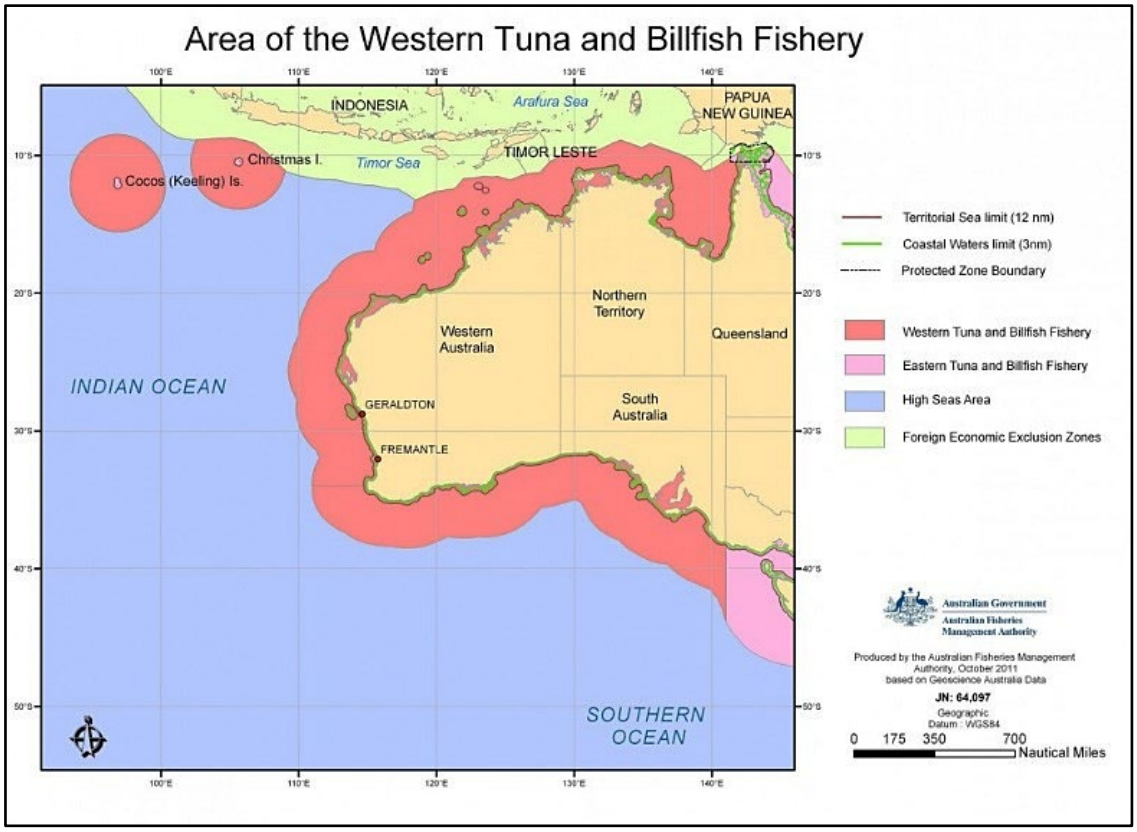


Figure 1. Area of the Western Tuna and Billfish Fishery (WTBF). Source: AFMA website

Table 1 Overview of the Western Tuna and Billfish Fishery (WTBF) and how it is managed.

Fishery at a glance	
Target (quota) species	Yellowfin tuna (*Thunnus albacares*), Bigeye tuna (*T. obesus*), Broadbill Swordfish (*Xiphias gladius*) and Striped Marlin *(Tetrapturus audax)*. Southern Bluefin Tuna (SBT) is also caught by WTBF licensed boats, but SBT catch is managed under the *Southern Bluefin Tuna Management Plan 1995*.
Fishing methods	Pelagic longline, minor line (handline, troll, rod and reel), purse seine
Fishing season	12-month season, beginning on 1 February
No. concessions in 2024	93 boat statutory fishing rights (SFR) 974,994 bigeye tuna quota SFR 981,425 broad billed swordfish quota SFR 82,861 striped marlin quota SFR 988,508 yellowfin tuna quota SFR
No. of active vessels in 2024	Pelagic longline: 2; Minor line: 3
Estimated catch and value for 2022-2023 financial year*	Yellowfin tuna (51 t); Bigeye tuna (41 t); Broadbill Swordfish (95 t); Striped Marlin (1 t); Other (20 t) (including Albacore tuna, 8 t); Total (208 t). Gross value of production (GVP) for individual stocks and the total fishery is confidential.
Main markets	• Fresh product - Domestic, Japan, United States • Frozen product – Domestic, Japan, United States
Major ports	Fremantle, Geraldton and Albany (Western Australia)
Stock status*	Stock assessments are conducted on the broader region (Indian Ocean) and the reported status reflects the species status in this region. • Yellowfin tuna - not overfished and subject to overfishing • Bigeye tuna – not overfished and subject to overfishing • Striped Marlin - overfished and subject to overfishing • Broadbill Swordfish - not overfished and not subject to overfishing
Management Plan	The *Western Tuna and Billfish Fishery Management Plan 2005* (the Management Plan) was implemented on 22 October 2005. The Management Plan enabled the introduction of quota management into the WTBF.
Management regime	Under the Management Plan, the WTBF is managed through output controls with a Total Allowable Commercial Catch (TACC) limit set for each of the four quota species. Quota SFRs allow an operator to fish in the fishery and catch a portion of the TACC for each quota species. These fishing rights are fully transferable and are also known as Individually Transferable Quotas (ITQs). Under these arrangements, each fisher is limited to catching up to the amount of quota that they hold, and the whole fishery is limited to the TACC that is set each season. Through a combination of SFR conditions, directions and

	regulations, AFMA implements a range of other obligations to manage the broader impacts of fishing on the marine environment (for example, requiring bycatch mitigation measures) and to support effective monitoring (for example, to support the implementation of vessel monitoring systems and electronic monitoring).
Management of broader impacts	AFMA's management of broader impacts comprises having monitoring and data collection programs, implementing management measures to mitigate bycatch and endangered, threatened and protected species (ETP) interactions, supporting relevant research and undertaking ecological risk assessments. In line with AFMA's Fisheries Management Paper 14 - AFMA's Approach to Ecological Risk Assessments and Management (Sep 2024), AFMA consults with its advisory committees on Ecological Risk Management responses to identified high risks. The most recent ERA for the WTBF was completed in in 2025.
Consultative mechanism	The Tropical Tuna Management Advisory Committee (TTMAC) is the management advisory body for the WTBF. TTMAC discusses and provides advice on issues relating to the management of the WTBF. The Tropical Tuna Resource Assessment Group (TTRAG) provides research and scientific advice for the WTBF. TTRAG advises on the status of fish stocks, sub-stocks, species (target and non-target), and on the impact of fishing on the marine environment.
International obligations and management	Australia is a member of the IOTC. In managing the WTBF, AFMA must have regard for Australia's obligations to IOTC.

*Australian Bureau of Agricultural Resource and Economics Science (ABARES) Fishery status reports 2024.

2.2 Fishing methods and gear

The methods used to target tuna and billfish in the WTBF are pelagic longline and minor line gears (trolling, handlining and rod and reel fishing). Fishing using purse seine is also permitted in the WTBF for species other than skipjack tuna (*Katsuwonus pelamis*). However, as of 2004, there has not been any purse seine activity in the fishery.

Pelagic longline fishing is predominantly used and involves the use of branch lines attached to a mainline (Figure 2). Each branch line (snood) is fitted with one or more baited hooks. The longline is set in such a manner that the mainline, branch lines and hooks are suspended in the water column by floats at the sea surface. By setting a different number of hooks between floats, longer float lines and varying line setter and vessel speed, fishers can set gear at different depths in the water column allowing them to target different species.

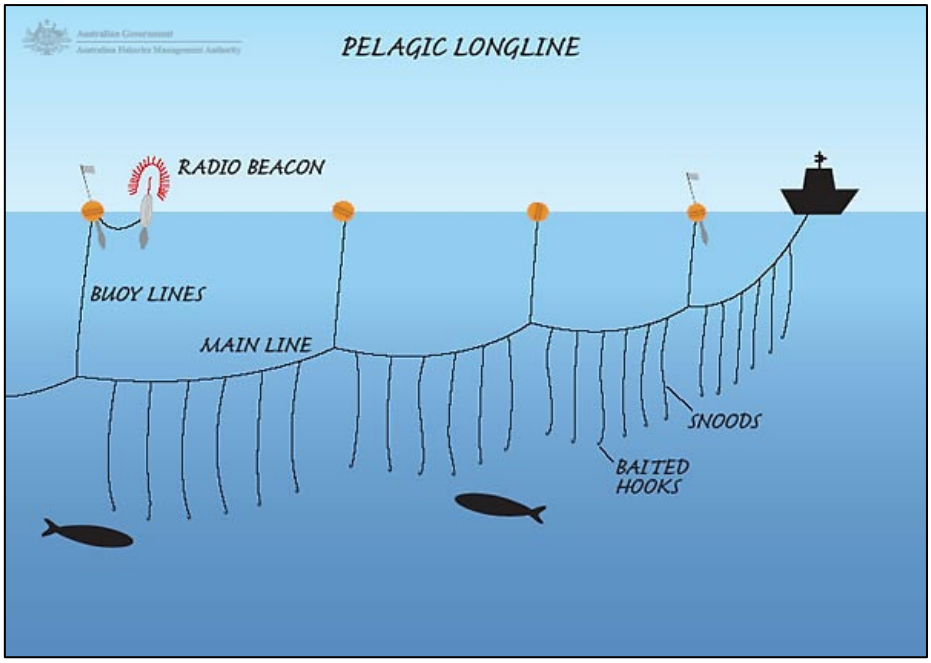


Figure 2. Illustration of a pelagic longline (a longline [baited] hook is attached to each snood and termed a longline clip).

2.3 Target and byproduct species

Effort in the fishery is targeted at four quota species: bigeye tuna, broadbill swordfish, striped marlin, and yellowfin tuna. Under the Management Plan there are additional primary species (not subject to quota management) that are taken as byproduct catch. These include albacore tuna, longtail tuna, northern bluefin tuna, Rays bream and skipjack tuna. Based on AFMA logbook data over the 2020-2024 period, the main byproduct species taken were albacore tuna, rudderfish, mahi mahi and wahoo (Appendix 1).

Southern bluefin tuna (SBT) is not a quota species in the WTBF. However, boats licenced to fish in the WTBF also catch SBT along the South Australian and Western Australian coasts during certain times of the year. All catch of SBT is managed under the *Southern Bluefin Tuna Management Plan 1995*.

2.4 Value of the fishery

The net economic returns for the WTBF are reported as likely low due to low fishing effort and high latent effort (ABARES Fishery status reports 2024). The GVP of the fishery is confidential. This is due to the small number of boats operating in the WTBF.

3. Management regime

3.1 Description of the management regime

Commonwealth fisheries are administered by AFMA under the *Fisheries Management Act 1991* (FMA), *Fisheries Administration Act 1991*, and *Fisheries Management Regulations 2019*. In line with the FMA,

AFMA has determined a statutory management plan for the WTBF (the Management Plan). SFRs have been granted under the Management Plan and are required to fish the fishery. There are two types of SFRs; boat SFRs and quota SFRs (applicable for four species, Bigeye tuna, Broadbill Swordfish, Striped Marlin and Yellowfin tuna – see section below '3.4 controlling the level of harvest'). A person must hold both a boat SFR and uncaught quota SFRs to fish in the fishery. Boat SFRs are subject to conditions. Through a combination of SFR conditions, directions and regulations, AFMA implements a range other obligations to manage the broader impacts of fishing on the marine environment (for example, requiring bycatch mitigation measures) and to support effective monitoring (for example, to support the implementation of vessel monitoring systems and electronic monitoring). Management arrangements implemented for the WTBF must have regard for Australia's obligations to the IOTC, of which Australia is a member.

3.2 Consultation processes

AFMA consults with a range of stakeholders when making key decisions about the fishery and developing fisheries management arrangements. Consultation is primarily undertaken through the Tropical Tuna Resource Assessment Group (TTRAG) and Tropical Tuna Management Advisory Committee (TTMAC).

The TTRAG provides scientific advice on TACCs, and other scientific fisheries matters, for the WTBF. TTRAG comprises scientific, industry, recreational fishing and management stakeholders who are appointed following a public application process. Casual observers, together with invited participants, also attend TTRAG meetings. Tuna Australia, the peak industry body, is an invited participant to TTRAG. Advice from TTRAG is considered by the TTMAC (comprising the same stakeholder groups as TTRAG) and the AFMA Commission. Having regard for relevant advice from TTRAG, TTMAC provides advice on TACCs and other issues relating to the management of the WTBF.

3.3 Performance against objectives, performance indicators and performance measures

A statement of the performance of the WTBF against its objectives, performance indicators and performance measures is made annually in AFMA's Annual Report. A copy of the 2023-24 Annual Report can be found on the AFMA website.

3.4 Controlling the level of harvest

Harvest of quota species in the WTBF is managed using output controls, specifically TACCs per fishing season (12-month season from 1 February to 31 January), with quota that is allocated across quota SFRs. In determining TACCs, and overcatch and undercatch limits and determined weight, AFMA, in consultation with TTRAG and TTMAC, consider agreed catch limits set by IOTC[1] and estimates of all sources of mortality on each stock, including commercial, recreational, charter and traditional fishing impacts where that information is available. The TACCs, overcatch and undercatch limits, and determined weight for the WTBF quota species for the 2025-26 fishing season is shown in Table 2.

[1] AFMA procedures for setting TACCs for tropical tunas in the WTBF

Table 2. Tropical tuna TACC recommendations for the 2025-26 fishing season.

Quota species	2025-26 TACC recommendation (t)	Overcatch and undercatch	Determined weight (t)
Bigeye tuna	2,000	10%	2
Yellowfin tuna	2,000	10%	2
Broadbill swordfish	3,000	10%	2
Striped marlin	125	10%	2

AFMA implements catch limits for some by-product species taken in the WTBF that may vary according to the state and territory. These are as follows:

- an annual 35 t catch limit for Longtail tuna across the WTBF. AFMA will impose a 10 fish trip limit per operator should the 35 t catch limit be reached.
- Other limits as detailed under the Offshore Constitutional Settlement (OCS) fisheries arrangements between the Commonwealth and States.

Catch limits are implemented through SFRs conditions and the *Fisheries Management Regulations 2019* (see sections 44-65 of the FMR) and are further described in the WTBF Management Arrangements Booklet.

3.5 Harvest strategy

The WTBF is managed in line with the Commonwealth Fisheries Harvest Strategy Policy 2018 (CHSP) and the Australian Government Guidelines for the Implementation of the Policy (the Guidelines, 2018; harvest strategy policy and guidelines). The CHSP provides a framework for the development of harvest strategies for key commercial species taken in Australia's Commonwealth fisheries and outlines processes for monitoring and assessing the biological and economic conditions of commercial fish species in relation to fishery specific reference levels (a reference point or points); and pre-determined rules that control fishing activity according to the biological and economic conditions of the fishery (as defined by monitoring or assessment). These rules are referred to as harvest control rules or decision rules.

For jointly managed, international fisheries such as the WTBF, the CHSP further states that AFMA must set Commonwealth fishery catch levels taking into account available science and evidence, the Australian negotiating position, advice from government and any relevant decisions of applicable regional organisations (Regional Fisheries Management Organisations; RFMO). For international stocks, the domestic catch level must be the same or less than that permitted under the relevant international arrangements.

The Guidelines identify important considerations for determining the likely effectiveness of a domestic harvest strategy for an internationally shared stock including stock structure, trends in foreign fisheries and the proportion of Australian catch. If Australia is a major harvester of the stock (catch relative to region is greater than 30 per cent) and no harvest strategy has been determined internationally, AFMA must develop and implement a domestic harvest strategy consistent with the objectives of the Policy.

The Guidelines state that there is unlikely to be a specific point at which Australia is no longer a major harvester of the stock and a domestic harvest strategy is no longer effective. As general guidance, the Guidelines state that Australian catch shares above 60 per cent would be desirable and catch shares below 30 per cent are unlikely to be an appropriate circumstance for a domestic harvest strategy.

For all target species, a domestic harvest control rule based approach is not recommended as the WTBF contributes a small fraction (catch shares of less than 30%) of fishing mortality on the stock which are internationally managed by the IOTC; and any changes in WTBF fishing mortality in response to the outcome of a domestic harvest strategy is unlikely to influence the future status of the stock. The successful management of these resources cannot be undertaken by Australia alone and require a regional management approach. For these species, the management approach is based on monitoring pre-agreed indicators and having regard for relevant whole of government negotiating positions; referred to as the *indicator and whole of government approach*. The approach is outlined in the AFMA procedure for setting TACCs for quota managed species in the Western Tuna and Billfish Fishery (Nov 2024).

3.6 Recovery strategies for overfished stocks

The most recently accepted IOTC stock assessments for WTBF quota species indicate that bigeye tuna and striped marlin stocks are overfished. The WTBF Fishery Status Report 2024, as assessed by ABARES, however, assessed that only the striped marlin stock is below the Commonwealth limit reference point and therefore considered overfished under the CHSP. For further detail on the differences between Commonwealth and IOTC stock status assessments see section '5 Stock Assessments' below.

AFMA does not implement a specific rebuilding strategy for striped marlin in the WTBF since Australia contributes a very small proportion to the mortality of this stocks at a regional level (0.03% for the striped marlin in 2023; see appendix 1 and IOTC species stock status).

For striped marlin, the 2024 IOTC stock assessment estimated the spawning biomass to be below the level that would support MSY for over a decade; and concluded that there was a 100% probability that the stock is overfished. The IOTC agreed to Resolution 18/05 On Management Measures for the Conservation of the Billfishes: Stiped Marlin, Black Marlin, Blue Marlin and Indo-Pacific Sailfish in 2018 which aims to reduce fishing pressure on these species through establishing overall catch limits.

There are no other WTBF stocks assessed as being overfished.

3.7 Enforcement of the management arrangements

AFMA's compliance and enforcement program is ultimately designed to maintain the integrity of fisheries management arrangements and protect Australia's fishing resources. AFMA seeks to achieve a level of compliance consistent with its legislative objectives by maximising voluntary compliance and creating effective deterrents to non-compliance.

The main functions of the compliance program include:

- ensuring compliance with AFMA's domestic fisheries management measures;
- ensuring licensed boats comply with fishing conditions within the AFZ;
- ensuring that there are no unlicensed foreign boats operating in the AFZ;

- managing port access for foreign boats; and
- surveillance and apprehension of foreign boats fishing illegally in the AFZ.

The National Compliance and Enforcement Program is conducted via the use of a risk-based approach, which enables AFMA's resources to be targeted to the areas where they are most needed and where they will prove most effective. It involves a series of steps to identify and assess non-compliance risks and then apply appropriate enforcement actions to mitigate these risks.

Risk-based compliance has a range of benefits:

- **improved compliance outcomes** – AFMA can tailor or target compliance measures to effectively deal with the most significant non-compliance risks;
- **efficiency gains** – AFMA can tailor or target compliance measures to the most significant risks, ensuring resources are concentrated in the areas where they are most likely to improve compliance outcomes; and
- **greater industry support for compliance programs/measures** – risk management processes are widely understood by the fishing industry and the community as a whole.

In addition to the risk-based approach, it is essential that AFMA maintains a general deterrence program. By maintaining a presence at fishing ports (and at sea), AFMA discourages those members of the fishing community who do not wish to comply with the rules and regulations. It also reassures those who are complying that non-compliant activity is likely to be detected. Further, AFMA officers can assist those wishing to comply (but not knowing how) by providing advice and/or instructions on operators' responsibilities.

In the WTBF, the key compliance risks include vessel monitoring system (VMS) non-compliance; quota evasion, mis/non-reporting of bycatch, breaching navigation regulations and electronic monitoring (EM) non-compliance. To address these risks, AFMA's compliance program covers the following five main elements:

- **Integrated Computer Vessel Monitoring System (VMS)**: used to continuously monitor pelagic longline operations and the movement of boats in and out of ports and entries into closed areas. It allows AFMA to contact vessels whose reports are overdue and to ensure that the vessel and VMS is working in accordance with the conditions imposed on fishing permits. Temporary reporting schedules may be arranged for a vessel whose VMS has stopped working, or the vessel may be directed to return to port.
- **Electronic Monitoring (EM)**: program uses video and sensor data to independently validate fishing operations and logbook information. Cameras only record fishing activity, and the footage is analysed to verify catch records and protected species interactions that fishers are required to report in daily logbooks. Breaches arising from footage analyses is investigated by AFMA compliance.
- **Vessel inspections**: Random in-port and at-sea inspections are carried out on active vessels in the fishery. Additional inspections may be carried out on targeted vessels if intelligence indicates that further action is warranted.
- **Fish receiver inspections**: Regular inspections on fish receiver premises are carried out. Additional inspections may be carried out on targeted receivers if intelligence indicates further action is warranted.

- **Education and Communication Strategy**: An integral part of the National Compliance and Enforcement Program is the development and delivery of communications and education strategies to assist industry in understanding their legislative obligations. By engaging with industry, encouraging compliance and deterring non-compliance, the education and communication strategy is utilised for providers who are willing to comply and may need some assistance to comply.

AFMA enforces compliance through legislative frameworks, including penalties and sanctions such as fines, licence suspensions, or prosecution. Offending vessels or individuals may face immediate penalties or seizure of catch for severe violations. Identified compliance issues are addressed promptly through enhanced surveillance, targeted inspections, and increased industry engagement. Emerging risks are assessed annually to adapt the compliance regime to evolving challenges in fisheries management.

3.8 Mitigating impacts on the wider ecosystem

A key element of AFMA's strategy to pursue the ecological aspect of Ecologically Sustainable Development is the implementation of ERAs for all fisheries managed by AFMA. These assessments evaluate the impacts of fishing on various components of the marine environment and adopt an ecosystem-based assessment approach. The ERAs facilitate the prioritisation of research, data collection, monitoring needs, and management actions for fisheries, to evaluate and address risks posed by fishing activities on various ecosystem components ensuring they are managed sustainably and efficiently.

The 'Ecological Risk Assessment for the Effect of Fishing' (ERAEF) was developed collaboratively by CSIRO Oceans and Atmosphere (now CSIRO Environment) and the Australian Fisheries Management Authority (Hobday et al., 2007, 2011). The ERAEF provides a hierarchical framework for thoroughly assessing the ecological risks associated with fishing, evaluating impacts on five revised ecological components: key commercial species, secondary commercial species, byproduct and bycatch species, protected species, habitats, and ecological communities (see Fisheries Management Paper 14 - AFMA's Approach to Ecological Risk Assessments and Management).

The risk assessments examine key commercial species, byproduct and bycatch species, protected species, habitats, and communities. The assessments utilise a hierarchical approach that includes Level 1 (SICA) and Level 2 (PSA and SAFE) analyses. Level 2 productivity susceptibility analysis (PSA) is a semi-quantitative analysis of the risk posed by fishing to all individual species, habitats and communities identified in the scoping. The PSA analysis does not take into account management measures currently in fisheries, which can potentially over-estimate the actual risk to some species. A residual risk analysis can then take into account this constraint using guidelines developed by AFMA.

Updating of ERAs is guided by a stepped process whereby Resource Assessment Groups (RAGs) and Management Advisory Committees (MACs) will review reassessment triggers every four years within a five-year cycle and provide advice to the AFMA's Ecological Risk Management Steering Group (ERMSG) as to the need to update their ERA or seek approval to maintain their existing ERA for another 5 years. Noting the possibility of exceptional circumstances an ERA can be updated at any time in consultation with RAGs and MACs.

The most recent ERA for the WTBF is based on data from the 2018 to 2022 fishing seasons, and was completed in 2025 (Sporcic et al., 2025). Of the 38 species evaluated at Level 2, a total of three species were assessed at high risk (two marine turtles - Loggerhead Turtle *Caretta caretta*; Hawksbill Turtle *Eretmochelys imbricata*; and one cetacean - False Killer Whale *Pseudorca crassidens*), 30 were at medium risk, and none were at low risk. The two protected turtle species (the Loggerhead and Hawksbill turtles) were evaluated as potential high risk due to life history and vulnerability parameters, and uncertainty or declining genetic stocks. The False Killer Whale was evaluated as potential high risk due to data deficiencies such as estimates of Australian abundances and external factors such as stock decline. In line with AFMA's Fisheries Management Paper 14 - AFMA's Approach to Ecological Risk Assessments and Management (Sep 2024), AFMA will consult TTRAG and TTMAC on Ecological Risk Management responses to the identified high risks, noting responses will take into account existing management strategies.

3.9 National policies, plans and strategies

A range of national threat abatement plans, recovery plans, policies and international agreements are relevant to the WTBF. The WTBF management arrangements align, and where necessary support the implementation of, these national policies, plans and strategies.

3.9.1 Commonwealth Fisheries Harvest Strategy Policy

The WTBF is managed in line with the Commonwealth Fisheries Harvest Strategy Policy and associated implementation guidelines. For further information see section above '3.5 Harvest Strategy'.

3.9.2 Bycatch species

The key objective of the Commonwealth Fisheries Bycatch Policy (CFBP) is to "minimise fishing-related impacts on general bycatch species in a manner consistent with the principles of ecologically sustainable development and with regards to the structure, productivity, and biological diversity of the ecosystem"[2]. To provide assistance to Australian Government entities (principally AFMA) in interpreting and implementing the requirements of the CFBP the Australian Government has also created Guidelines for the implementation of the CFBP 2018.

A coordinated effort involving all stakeholders is necessary to address bycatch effectively, so the National Bycatch Policy (separate to the CFBP) emphasises cooperative management between Commonwealth and State authorities in reducing bycatch. AFMA coordinates and liaises with State and Territory fisheries where applicable and appropriate.

The WTBF is managed in line with the CFBP. AFMA's approach and initiatives have evolved over time but broadly fall into the following categories which are described further elsewhere in this report:

- monitoring and reporting requirements (see sections '4.1 Data collection, data validation and data monitoring programs' and '6.1 Bycatch composition');
- gear limitations and mitigations measures (see section '6.3 Bycatch mitigation measures');
- periodic industry education to improve bycatch handling and identification (see section '7.2 Mitigating risks to protected species and communities'); and

[2] Department of Agriculture and Water Resources, 2018

- research to improve bycatch reduction and mitigation (see section '9 Research')

AFMA's approach and initiatives relating to the WTBF have been documented in various forms overtime, in line with the Australian Tuna and Billfish Fisheries Bycatch and Discarding Workplan, now operationalised through Ecological Risk Management responses to identified risks (see section '3.8 Mitigating impacts on the wider ecosystem' above for further information).

3.9.3 Endangered, Threatened and Protected Species

Seabirds

The incidental catch (or bycatch) of seabirds during oceanic longline fishing operations is listed under the EPBC Act as a key threatening process (since 1995). As a result, the Australian Government has in place a threat abatement plan titled *Threat Abatement Plan for the incidental catch (or bycatch) of seabirds during oceanic longline fishing operations (2018)* (seabird TAP). The ultimate aim of the seabird TAP is to achieve a zero bycatch of seabirds, especially threatened albatross and petrel species, in all longline fisheries. Recognising the availability of current mitigation methods, the objective of the current TAP is to further reduce the seabird bycatch and bycatch rate during oceanic longline fishing operations in the Australian Fishing Zone.

The seabird TAP specifies a range of measures for AFMA to implement. These include: i) requiring the adoption of proven mitigation measures that ensure the performance criteria for each Commonwealth-managed longline fishery are achieved in all areas and seasons; ii) minimum independent monitoring; and iii) adaptive management if performance criteria are exceeded. The seabird TAP defines performance criteria as a maximum permissible bycatch rate at or above which a management response is required. The seabird TAP sets a seabird bycatch rate performance criteria for each of AFMA's longline fisheries (see Table 4 of the seabird TAP). For the purposes of the criteria, reporting is defined by two periods or TAP seasons: Summer 1 September to 30 April and Winter 1 May to 31 August. AFMA has in place management arrangements to implement the seabird TAP requirements (see detail under section '7.2 Mitigating risks to protected species and communities' below) and attends, presents and actively participates in the Seabird TAP Stakeholder Working Group annual meetings.

The then Department of Agriculture and Resources also developed the National Plan of Action for Minimising Incidental Catch of Seabirds in Australian Capture Fisheries (NPOA – Seabirds) in 2018. Measures for assessing success under the NPOA – Seabirds considers the impact of the seabird TAP, which are more prescriptive and applicable to the longline WTBF fishery.

Sharks

Australia's Second National Plan of Action for the Conservation and Management of Sharks (Shark-plan 2) "encourages improved management of shark populations in Commonwealth, State, and Northern Territory waters" and aligns with international commitments, including the International Plan of Action for Conservation and Management of Sharks (IPOA-Sharks). Shark-plan 2 provides guidance to resources users (including fisheries) to improve the conservation and management of sharks by concisely detailing issues for shark conservation and management and identifying actions to address these issues.

AFMA attends the Shark-plan Representative Group (SRG) which monitors implementation of Shark-plan 2 and provides updates and progress reports against actions. AFMA compiles data, information on management arrangements, programs and projects in response to each specific issue and action detailed in Shark-plan 2. This information is publicly available on the Department of Agriculture, Fisheries and Forestry's website.

AFMA implements specific measures to related to shark bycatch mitigation (see section '6 Bycatch' and section '7 Protected species and threatened ecological communities' below).

Turtles

The then Department of the Environment and Energy developed a national Recovery Plan for Marine Turtles in Australia. The long-term objective of this plan is for the conservation status of marine turtles to improve so that they can be removed from the EPBC Act Threatened Species List, with interim objectives and actions to achieve this objective also defined. The plan covers an extremely broad range of risks, but it does define fisheries bycatch as a specific action area (Action Area 7). In addition to the operational elements, identified under the Section 3.9.2 Bycatch species, the enabling processes AFMA has in place which support this plan include:

- best practice gear requirements specific to turtles (see section '6.3 Bycatch mitigation measures');
- supporting specific research on turtle mitigation (through provision of data and funding); and
- engagement in and support for IOTC processes with respect to turtle mitigation and management.

3.10 Changes since the previous assessment

Climate Change Adaptation Program

AFMA's Climate Adaptation Program is implementing a range of measures to incorporate climate change information and risks into decision making frameworks, to ensure that management of Commonwealth fisheries is adaptive to the impacts of climate change (AFMA Climate Adaptation Program). Climate and Ecosystem Status Reports have been developed for a range of Commonwealth fisheries. These reports are a useful tool to provide an update or indication on the current state (or health) of the environment or ecosystem, relative to longer-term trends or target states. They provide a way to integrate a variety of diverse data into a simple overview that can be easily communicated, providing managers and stakeholders with up-to-date trends for a specific region or ecosystem.

AFMA is also developing a Climate Risk Framework (CRF) in consultation with key stakeholders as an approach to integrate climate risks into formal decision-making processes at AFMA. At its November 2023 meeting, the AFMA Commission approved a proposal to proceed with a trial implementation of the CRF across several Commonwealth fisheries. The CRF involves a four-step process that seeks to:

1. Assess the overall risk to a species based on the impacts of climate change and the biological status of the stock using the best available information,
2. Consider whether there are sufficiently precautionary measures in the existing science, management or industry adaptation pathways to respond to the impacts of climate change,
3. Assess the residual risk to a species, and where required,
4. Provide advice to the AFMA Commission on any additional measures required to respond to the impacts of climate change.

AFMA established a Working Group to support the trial implementation of the CRF and provide strategic advice to the AFMA Commission and AFMA management on the development, coordination and implementation of the CRF across Commonwealth fisheries. The Working Group membership includes Dr Beth Fulton, Dr Alistair Hobday, Dr David Smith and Dr Keith Sainsbury, with administrative support from AFMA's Climate Adaptation team.

Seabird management changes

As of 19 January 2024, the WTBF Boat SFR conditions regarding the requirements to handle seabirds for the purposes of collecting a feather sample and obtaining images via the electronic monitoring camera were removed. The amendment was implemented following an assessment of the risks posed by a current outbreak of the high pathogenicity avian influenza (HPAI) virus (H5N1 strain) affecting seabirds, with subsequent risk to fishers. AFMA will continue to work with key stakeholders including the Australia Antarctic Division (AAD) and the Seabird Threat Abatement Plan Working Group to monitor the ongoing risk of the H5N1 strain.

In 2020 AFMA and the AAD jointly implemented a Seabird Feather Kit Collection program in the ETBF and WTBF. Through fishing concession conditions, AFMA required fishers operating in the WTBF to collect feathers using the feather sample kits and instructions developed by the AAD in the event of a seabird interaction that results in a mortality where a bird is landed on board the vessel. These samples are then sent by the fisher directly to AAD for genetic analyses to improve seabird identification. To date all costs of the analyses have been met by the AAD.

Multi-season TACC determination

In November 2024, the AFMA Commission approved a multi-season procedure for setting TACCs for target species in the WTBF. This procedure was developed in collaboration with TTRAG and TTMAC. The approach retains the key aspects of the previous TACC setting approach while offering guidance for setting TACCs for multiple fishing seasons in a single decision. Under this arrangement, TACCs will still be applicable for individual fishing seasons, but the TACCs for three seasons will be determined together in one decision.

4. Monitoring and data collection

4.1 Data collection, data validation and data monitoring programs

AFMA has established a range of robust monitoring systems, including advanced electronic surveillance, to ensure regulatory compliance and improve the quality of the data collected. Monitoring and data collection programs in the WTBF include the logbooks/e-logs, electronic catch disposal records (eCDRs), electronic monitoring (EM), vessel monitoring systems (VMS), size monitoring program, port visits and vessel inspections.

E-logs (see AFMA's website)

AFMA requires WTBF fishers to record all catch, fishing effort and fishing method information in electronic logbooks at sea (Longline.pdf). This includes endangered, threatened and protected species

and CITES listed species. Catch Disposal Records (CDRs) are completed (either electronically or hard copy) when the catch is unloaded at port and are more accurate than logbook information which provide an at-sea estimate of catch weight.

Fishers are required to document all bycatch, byproducts, and discards in their e-logs. They must also record any interactions with species listed under the EPBC Act in the 'Wildlife and Other Protected Species' section of their logbook.

Electronic Monitoring (see AFMA's website)

Electronic monitoring (EM) has been implemented in the WTBF for all longline boats since 2015. The EM system uses video cameras and sensors to detect and record fishing activity, which is reviewed later to validate logbook catch and effort data, verify catch composition, mitigation methods and reporting of EPBC listed species interactions. Ten percent of all footage across the fishery, is selected at random, and reviewed.

The objective of the WTBF EM program is to validate the commercial catch of WTBF quota and by-product species; catch interactions with EPBC Act listed species and other bycatch species and discards to quantify the effects of fishing on these species; and the incidence of discarding (including life status) and high grading.

In the years since the introduction of EM into the WTBF, reporting has shown improvements in data collection, compliance and fishers' behaviour that have resulted in improved overall management of the fishery and increased transparency. In 2023, ABARES published an independent evaluation of the reliability of electronic monitoring and logbook data in the ETBF. While the evaluation was for the ETBF, it is expected that the WTBF would reveal similar outcomes since the WTBF targets the same species using the same methods as the ETBF but operates at a significantly smaller scale. The analyses and results indicated that the overall congruence (similarity between EM and logbook data) for the ETBF was superior for key commercial species compared to byproduct and bycatch, higher for retained than discarded catch, and higher for ETP groups (e.g., seabirds, turtles, or marine mammals) than at a species taxonomic level.

Whilst AFMA has implemented EM in the WTBF since 2015, AFMA may still direct fishers to carry an observer if required.

Size monitoring program

Since the 1997-98 fishing season AFMA has implemented a size monitoring program in the ETBF and WTBF. The program is currently delivered by Tuna Australia through a formal co-management arrangement with AFMA. The purpose of the program is to collect individual fish size data (through weight) of fish landed to all the major processors. The size data is collected for all target species and some byproduct part of a suite of information that contributes to TACC setting in the WTBF; the development of size-based CPUE indices and regional stock assessments. The program samples as much as 80-90% of the total landed catch. These data are generally collected as individual landed weights which are converted to sizes.

Vessel Monitoring Systems (see AFMA's website)

It is mandatory for boats operating in Commonwealth managed fisheries, including the WTBF to have an approved VMS unit installed. Vessel monitoring systems help AFMA to monitor vessel position, course and speed, and to make sure Commonwealth fishing vessels are doing the right thing.

5. Stock Assessments

5.1 Key target and byproduct species

Stock assessments for WTBF target species are conducted at the regional level through the IOTC. The results of the most recent IOTC stock assessments undertaken for each of the target species in the WTBF are shown in Table 3.

It is important to note that the stock status reported for the IOTC differs from that which is measured by ABARES for the annual Fishery Status Reports (Table 3). ABARES applies the default limit reference points within the CHSP which establish the limit reference points for biomass as 20% of unfished levels ($0.2B_0$). The IOTC determines stock status using MSY-based reference points for most stocks (specifically B_{MSY} and F_{MSY}) which can result in IOTC reporting different biomass ('overfished') status for some stocks. This is the case for bigeye tuna in the WTBF which is assessed by ABARES as not overfished, and by IOTC as overfished.

Striped marlin is the only stock that is also assessed by ABARES as being overfished. For striped marlin the estimated spawning biomass is 6% of the unfished spawning biomass and therefore below the Commonwealth limit reference point (WTBF Fishery Status Report 2024, ABARES).

Table 3. Stock status for WTBF target species as assessed by ABARES and IOTC. Source: ABARES Fishery Status Reports and IOTC website. SB = Spawning Biomass. Assessments undertaken by IOTC.

Quota species	Assessment year	Median SB	Depletion (SB_{recent}/SB_{MSY})	Fishing Mortality (F_{recent}/F_{MSY})	stock status	
					IOTC	ABARES
Bigeye tuna	2022	25%	0.90	1.43	Overfished and subject to overfishing	**Not overfished** and subject to overfishing
Yellowfin tuna	2024	44%	1.32	0.75	Not overfished and not subject to overfishing	Not overfished and subject to overfishing*
Broadbill swordfish	2023	35%	1.39	0.60	Not overfished and not subject to overfishing	Not overfished and not subject to overfishing
Striped marlin	2024	6%	0.17 - 0.27	3.95 - 9.26	Overfished and subject to overfishing	Overfished and subject to overfishing**

* The latest ABARES status report (2024) considers the 2021 IOTC stock assessment. For that assessment the median SB was estimated to be 31%, the depletion (SB_{recent}/SB_{MSY}) was 0.87 and the fishing mortality was 1.32(F_{recent}/F_{MSY})

** The latest ABARES status report (2024) considers the 2021 IOTC stock assessment. For that assessment the median SB was estimated to be 6%, the depletion (SB_{recent}/SB_{MSY}) was 0.47 and the fishing mortality was 3.93(F_{recent}/F_{MSY})

Through IOTC, stock assessments are also conducted on a number of other species, including four byproduct species in the WTBF: albacore tuna (last assessed in 2022 as not overfished and not subject to overfishing); longtail tuna (last assessed in 2023 as both overfished and subject to overfishing); skipjack tuna (last assessed in 2023 as not overfished but not subject to overfishing); and shortfin mako shark (last assessed in 2024 as both overfished and subject to overfishing). These assessments are available on the IOTC website.

5.2 Distribution and spatial structure of key stocks

Bigeye tuna

The stock structure of bigeye tuna in the Indian Ocean is uncertain, but the species is assumed to be a single distinct biological stock for assessments. The assumption of a single stock is based on genetic studies (Chiang et al. 2008, Davies et al. 2020) that indicated no genetic differentiation within the Indian Ocean and tagging studies that have demonstrated large-scale movements of bigeye tuna within the Indian Ocean (IOTC 2014).

Broadbill swordfish

In the Indian Ocean, genetic and otolith microchemistry analyses have not indicated more than a single biological stock (Muths et al. 2013, Davies et al. 2019). In the Pacific Ocean, genetic studies have suggested the presence of several biological stocks (Takeuchi et al. 2017), although the degree of genetic variation among these stocks is low (Kasapidis et al. 2008).

Striped marlin

Mamoozadeh, McDowell & Graves (2018) evaluated genetic variation in striped marlin populations sampled from the eastern and western Indian Ocean, and across the Pacific Ocean. Their results suggest that there could be genetically distinct east and west stocks of striped marlin in the Indian Ocean. However, the sample size from the eastern Indian ocean was small (eight fish) and no samples were collected from the central Indian Ocean, making it difficult to delineate a border between potential stocks. Therefore, striped marlin is currently considered to be a single distinct biological stock for assessments in the Indian Ocean.

Yellowfin tuna

The stock structure of yellowfin tuna in the Indian Ocean is uncertain, but the species is a single biological stock for assessments. A recent ocean-wide genetics and otolith microchemistry study revealed evidence for genetic differentiation north and south of the equator in the Indian Ocean (Davies et al. 2020).

5.2.1 Eastern Tuna and Billfish Fishery (ETBF)

The ETBF operates in waters adjacent to the WTBF, but genetic studies have found differences between target species stocks in the Indian Ocean compared to the Pacific Ocean, although the current level of mixing remains unclear.

5.3 Estimates of total removals

Regional catches are estimated by the IOTC. In 2023, the reported catches were as follows: 400,950 t for yellowfin tuna; 105,369 t for bigeye tuna; 3,553 t for striped marlin; and 26,525 t for swordfish.

The mean annual catches for 2019-2023 for each species were 423,142 t for yellowfin tuna; 94,691 t for bigeye tuna; 3,024 t for striped marlin; and 28,142 t for swordfish. For the WTBF, the reported annual landed catch for each quota species for the period 2020-2024 is shown in Table 4 (and in Appendix 1). WTBF catches represent a small proportion of both total IOTC reported catch and MSY estimates for each stock (0.04% of total IOTC reported catch for bigeye tuna, 0.03% for striped marlin, 0.36% for swordfish and 0.01% for yellowfin tuna in 2023).

Table 4. Target species catch from 2020 to 2024 in WTBF. Bold figures indicate the largest reported annual catch for each species. Data sourced from AFMA catch disposal records (CDR).

Species	Retained (t)				
	2020	2021	2022	2023	2024
Bigeye Tuna	30.458	**60.132**	24.337	41.091	39.137
Striped Marlin	0.133	0.696	0.300	**1.102**	0.564
Swordfish	96.434	**150.842**	85.698	94.944	115.571
Yellowfin Tuna	17.791	22.803	17.390	**51.126**	35.745

Commonwealth fisheries that have overlapping area of waters with the WTBF include the areas of the SBT Fishery, Western Deepwater Trawl Fishery, Northwest Slope Trawl Fishery, Small Pelagic Fishery, Commonwealth Trawl Fishery, Gillnet Hook and Trap Fishery, and Northern Prawn Fishery. Annual catches of WTBF quota species in the period 2020-2024 have only been recorded in the Gillnet Hook and Trap Fishery at low levels (Table 5). Catch of WTBF quota species is required to be covered with WTBF quota.

Table 5. Annual catch of WTBF target species in other, overlapping Commonwealth fisheries during the period 2020-2024. Includes data west of 141°E (the eastern most boundary for WTBF) to exclude ETBF catch. Data sourced from AFMA logbooks.

Fishery & Species	Retainted (t)				
	2020	2021	2022	2023	2024
GHAT – Gillnet, Hook and Trap Fishery					
Swordfish	0.093				
Yellowfin tuna		0.010			

Many state fisheries operate adjacent to the waters of the WTBF. The management of tuna and tuna-like species is the jurisdiction of the Commonwealth through AFMA under OCS arrangements with all relevant coastal states (South Australia, Western Australia, Northern Territory and Queensland). Direct interactions are limited given that most pelagic species caught in the WTBF do not venture into near shore waters and only a few species of inshore fish are susceptible to capture on pelagic longlines.

AFMA does not manage recreational fishing. However, recreational fishing of WTBF quota species does occur. Estimates of recreational catch for WTBF species are not well known.

For estimates of byproduct, bycatch and ETP interactions please refer to relevant sections below.

5.4 Indicator byproduct species

A summary of by-product catches is provided in Appendix 1 and catch limits for a selection of by-product species is provided in the section '3.4 Controlling the level of harvest' above. There has been no identified need to use a by-product species as an indicator species to inform a broader assessment of fishing in the WTBF. Catches of non-quota species, on average between 2020 and 2024, account for 11% of the total take in the fishery (Appendix 1). As described in this document, the fishery is assessed through a combination of: 1) species specific stock assessments and annual monitoring of indicators for quota species (and where available other species assessed by the IOTC – see section '5 Stock Assessments' above); and 2) ecological risk assessments.

6. Bycatch

6.1 Bycatch composition

Fishers have mandatory reporting requirements to record all byproduct, bycatch, and discards (see section '4 Monitoring and data collection') during fishing. Appendix 2 shows all discard data from AFMA logbooks between 2020 and 2024. Blue sharks constituted the highest amount of bycatch (56.25 t). Other bycatch species included other species of sharks (13.77 t) and rudderfish (7.98 t). Please note that there is a retention limit of 20 sharks per trip, likely influencing the high discard rates for these species regardless of whether they are by-product or bycatch species.

6.2 Risk assessment on the effects of fishing on bycatch

The most recent ERA (completed in 2025) assessed only three species (two turtle and one cetacean species) as high risk with respect to the impacts of fishing in the WTBF. The WTBF currently employs best practice gear requirements with respect to turtles (see section '6.3 Bycatch mitigation measures'), is subject to the National Turtle Recovery Plan (see section '3.9.3 Endangered, Threatened and Protected species'), and has mandatory handling requirements to increase survival for all bycatch species (see section '6.3 bycatch mitigation measures'). AFMA's Ecological Risk Management responses to these identified risks will consider the current measures and any potential additional measures in line with Fisheries Management Paper 14 - AFMA's Approach to Ecological Risk Assessments and Management (Sep 2024). This process is underway. For additional information see section '3.8 Mitigating impacts on the wider ecosystem' above.

6.3 Bycatch mitigation measures

Management of the WTBF aims to mitigate and, where possible, reduce bycatch during fishing operations in line with AFMA's objectives and obligations relating to bycatch (see section '3.9.2 Bycatch species'). Along with fishery level discarding strategies, this is done through a suite of mitigation and management measures, with specific operational elements detailed below.

6.3.1 Gear specifications

Gear limitations designed to reduce bycatch are implemented and enforced through SFR conditions and include:

- **Tori lines –** tori lines create a physical and visual barrier around the area where longlines are set, preventing seabirds from accessing the baited hooks.
- **Line weighting –** line weighting is a standard practice in longline fishing to effectively position baited hooks below the diving range of seabirds. The implementation of line weighting facilitates the prompt sinking of baited hooks, reducing the likelihood of seabird interactions.
- **Non-frozen bait –** when fishing south of 25°S only non-frozen bait may be attached to the hooks, to reduce the likelihood of seabird interactions.
- **Wire trace prohibition–** In 2005, AFMA banned the use of wire trace in the WTBF to reduce shark bycatch.
- **Circle hooks –** circle hooks are specially designed to increase the likelihood of hooking fish in the mouth, unlike traditional J-hooks, which often catch fish deeper in the gut. These are easier to remove and reduces stress on the fish, improving the chances of survival for fish that are released; and can significantly reduce the capture of turtles in longline fishing.
- **Line-cutters –** must be constructed to allow the line to be cut as close to the hook as possible and be a minimum of 1.5m in length, to minimise immediate harm to bycaught species and ongoing risk from trailing line.
- **De-hooking devices –** must be designed to enable hooks embedded in bycatch species to be removed with minimum damage to the fish or protected species, which includes shielding the barb and having blunt edges**.** Where more than one size of hook is to be carried, a dehooking device (or devices) must be carried that can be used with all hooks on the boat. The use of line-cutters and de-hooking devices are intended to minimize damage to bycatch species and ensure safe handling practices.

Circle hooks, line cutters, and de-hooking devices benefit all species, including fish, marine mammals, turtles, sharks and rays.

6.3.2 Additional limitations

Retention bans and limits on a range of bycatch and byproduct species reduce the impact of fishing operations on these species. These are often due to resource sharing agreements with recreational or State fisheries, international measures, conservation status or domestic risks. Full species lists are available in the catch limit section of the WTBF Management Arrangements Booklet.

There are several shark-specific measures in place in the WTBF. A "fins naturally attached" condition to meet both national and international shark conservation standards is enforced through SFR conditions, where fishers may not carry or possess on their vessel any shark fins are not attached to the shark's carcass. Likewise, it is forbidden to carry, retain or land shark liver unless the carcass from which the liver was obtained is also landed (enforced through the *Fisheries Management Regulations 2019*, section 68). Additionally, there are limits on the number of sharks that may be taken in a single trip or the size of some shark species taken; and catch limits or retention bans may also be applied to specific shark species (for more detail refer to sections '3.9.3 Endangered, Threatened and Protected Species' above and '7.2.2 Species-specific measures' below). SFR conditions further stipulate that non-

retained sharks must be released with safe handling protocols to maximize their chances of survival post-release.

6.4 Indicator bycatch species

There has been no identified need to use a bycatch species as indicator to inform a broader assessment of fishing in the WTBF. As described in this document, the fishery is assessed through a combination of: 1) species specific stock assessments and annual monitoring of indicators for quota species (and where available other species assessed by the IOTC – see section '5 Stock Assessment' above) and 2) ecological risk assessments. For certain bycatch and protected species there are national policies in place to guide AFMA's management of those species (for example the Seabird TAP, see section '3.9 National policies, plans and strategies').

6.5 Management actions

Data collection

Mandatory reporting, verified through electronic monitoring (see section '4 Monitoring and data collection') and enforced through compliance arrangements (see section '3.7 Enforcement of the management arrangements') underpin AFMA's bycatch management actions. SFR conditions which require that, where safe, all catch that is intended to be released or discarded must be brought within view of the electronic monitoring cameras before it is released or discarded supports this.

Education campaigns

AFMA conducts periodic education programs in the WTBF to educate fishers on how to reduce interactions and improve survivability of bycatch. Although these campaigns focused mainly on turtles, sharks and seabirds (whether protected or not) benefits exist for all bycatch species.

Bycatch handling

It is the responsibility of fishers to handle bycatch species correctly to maximize their chances of survival. Improper handling practices can significantly reduce survival rates and negatively impact the long-term sustainability of these species. Mistreatment of bycatch is strictly prohibited. Such mistreatment is defined as any action taken or omitted that could likely result in death, injury, or distress to any bycatch species. These requirements are implemented and enforceable through SFR conditions.

To assist fishers, AFMA has developed a range of bycatch handling guides including a video to help ensure that fishers use best practice when handling their bycatch. These guides help fishers understand the importance of bycatch handling and provide helpful information on handling techniques and in understanding fishers obligations.

Species ID guides and guidebooks

AFMA create, manage and update identification guides and information guidebooks for a range of species, including seabirds, sharks, rays, and some fish. Species identification information is also included in the WTBF Management Arrangements Booklet each year. Collecting accurate data on

bycatch and discarded species, especially if they are endangered, threatened or protected, allows ongoing improvement and monitoring of these species.

Operational behaviours

The WTBF Management Arrangements Booklet includes suggestions for operational behaviours which can limit or reduce interactions with bycatch or ETP species (for example, seabirds). Some of these include hook positions for bait, setting speeds, and voluntary movements in response to seabird risk. Research into operational behaviours which can reduce bycatch interactions across a range of species is ongoing (see section '9 Research').

Research

AFMA supports, funds and engages in research to reduce interactions and improve outcomes for bycaught species. For further detail see section '9 Research'.

7. Protected species and threatened ecological communities

7.1 Fishery impacts on protected species and communities

All concessional holders must ensure that, as far as practicable, there is no interaction with a protected species under the EBPC Act during a fishing trip (section 70 of the FMA regulations). All interactions with listed species must be recorded (see section '4 Monitoring and data collection').

Protected species listed under the EPBC Act that may interact with longline and minor line fishing in the WTBF include sharks, seabirds, marine turtles and cetaceans. Appendix 3 summarises the recorded logbook interactions between 2020 and 2024.

In accordance with the Memorandum of Understanding between AFMA and the Department of the Environment and Heritage AFMA reports quarterly on interactions with protected species on behalf of Commonwealth fishing operators to DCCEEW. These reports are publicly available on AFMA's website (AFMA ETP quarterly reports).

AFMA conducts ERAs periodically to evaluate the impact of fishing activities on marine species, habitats, and communities. The findings from these assessments are used to prioritise management, research, data, and monitoring requirements of the fishery. The ERA process is detailed in section '3.8 Mitigating impacts on the wider ecosystem' above.

7.2 Mitigating risks to protected species and communities

7.2.1 Protected species groups

AFMA most commonly manages bycatch and wildlife interactions at a species group level which are designed to address bycatch objectives for groups of related species (e.g. turtles, sharks, seabirds, cetaceans). The mitigation and management measures above in sections '6.3 Bycatch mitigation actions' and '6.5 Management actions' apply across multiple species groups. Species which are not endangered, threatened or protected (ETP) thereby also benefit from the mitigation measures and management actions which cover ETP species. This approach also allows for consistent management

across fisheries and consideration of cumulative risks, as well as being efficient and cost-effective approaches to managing bycatch.

Seabirds

All seabirds are protected under the EPBC Act. The management settings to manage seabird interactions in the WTBF are comprehensive. Performance is measured against the performance criterion to operate below a bycatch rate of 0.05 seabirds per 1,000 hooks in any fishing area (as specified in the seabird TAP, see section '3.9.3 Endangered, Threatened and Protected species'). AFMA's approach involves management action at both a whole of fishery and individual vessel level.

At the fishery level, the use of tori lines or night setting, specified line weighting regimes, and non-frozen baits are required across the fishery when fishing south of 25°S. AFMA monitors fishing effort and reported seabird interactions across each five-degree latitude fishing area south of 25°S and in each TAP season to ensure the fishery meets the specified performance criteria. AFMA may implement additional conditions (such as area closures, daylight setting bans, or other broadscale management measures as needed) should there be an elevated level of risk beyond that manageable by individual operators.

AFMA takes an individual accountability approach to reducing seabird interactions, with escalating mitigation requirements applying throughout a season for individual operators if pre-defined interaction triggers occur. In any one TAP season, additional mitigation requirements apply to fishers who exceed the bycatch rate of 0.05 birds per 1,000 hooks in any fishing area and who have also:

- exceeded the bycatch rate in previous, successive TAP seasons; or
- interacted with more than 10 seabirds (regardless of life status, species, or conservation status); or
- been found to have an unreported seabird (regardless of life status, species, or conservation status)

Additional mitigation (i.e. in addition to standard mandatory use of tori lines, line weighting, and use of non-frozen bait), if notified by AFMA, comprise either amended line weighting to improve sink rates, night setting, hook shields, or moving the area of operation at least five degrees north of the northern most seabird interaction. If poor performance continues, further additional mitigation will be required. Any additional mitigation must be implemented on the vessel until notified by AFMA.

These arrangements are designed to be responsive to current levels of interactions and risks in the fishery; and allow for adaptive management. Monitoring, encouraging individual accountability, and ongoing assessment of risk during the season facilitates such an adaptive management approach. The ability to respond to changes in risk (for biological or operational reasons) underpins the WTBF's effective adaptive management.

Turtles

All turtles are protected under the EPBC Act. Compulsory circle hooks, line cutters, and de-hookers improve post release mortality for turtles (see section '6.3 Bycatch mitigation measures'). The WTBF is also managed consistently with the a national Recovery Plan for Marine Turtles in Australia (see section '3.9.3 Endangered, Threatened and Protected species').

Marine mammals

All cetaceans and seals are protected under the EPBC Act. Although interactions with marine mammals are rare in the WTBF, most occur due to depredation of tuna on longlines. AFMA continues to monitor interaction levels and assess risk through its ERAs. The most recent ERA for the WTBF was completed in 2025 (see section '6.2 Risk assessment on the effects of fishing on bycatch' above).

7.2.2 Species-specific measures - sharks

In some cases, mitigation measures and management approaches may be designed for a particular species only. Targeted measures applied for specific shark species in the WTBF include:

- Retention ban on oceanic whitetip shark and silky shark.
- Retention ban on longfin mako shark, shortfin mako shark and porbeagle sharks, unless dead. Any live shark of this list must be released.
- Maximum limit of 20 sharks per fishing trip in Commonwealth waters, excluding silky shark and oceanic white tip shark where a retention ban is in place; and excluding school shark, gummy shark, elephant fish sawshark which are managed through the Gillnet, Hook and Trap Fishery.
- Maximum limit of 100 sharks per trip for single jurisdiction high seas fishing trips which includes a maximum limit of 80 blue whaler sharks, and a maximum of 20 sharks that are the crocodile shark, shortfin mako shark, porbeagle shark, smooth hammerhead or pelagic stingray. Retention of any other shark and/or ray species of subclass Elasmobranchii is prohibited.
- Catch limit of 15 kg of deepwater dogfish (*Centrophorus harrissoni, C. moluccensis*, *C. zeehaani* and *Squalus chloroculus*) applied to short fishing trips (less than 6 days); and a catch limit of 90 kg of deepwater dogfish applied to longer fishing trips (greater than 6 days). Any live deepwater dogfish must be released.
- Any school or gummy shark landed must exceed 450 mm in length (from middle of the posterior edge of the aftermost gill-slit to the ventral insertion of the caudal fin).
- Retention ban on thresher sharks, in the IOTC Convention Area (include both high seas and Commonwealth Waters).
- Retention of mobulid rays is prohibited, regardless of life status, and any mobulid ray caught must be released alive and unharmed, to the extent practicable.

In addition to these shark-specific measures, purse seine nets must not be set around any species of cetacean, mobulid ray or whale shark. However, there has not been any purse seine activity in the WTBF since 2004.

7.3 CITES-listed species

The WTBF interacts with species that are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Appendix II. A summary of CITES-listed species recorded in the WTBF during the period 2020-2024 is provided in Appendix 3.

The implications of a CITES Appendix II listing include that:

- a positive CITES non-detrimental finding (NDF) must be made by Australia's CITES Scientific Authority (DCCEEW) certifying that the harvest of the species will not be detrimental to its survival in the wild

- a CITES export permit issued by Australia's CITES Management Authority under the EPBC Act is required
- listed species must be sourced from a fishery with an approved Wildlife Trade Operation (WTO) accreditation that is current at the time of harvest.

A positive NDF for the most recently added CITES listed species, shark and rays[3], that are harvested in Australian export fisheries was made in 2023 (Non-detriment finding report - sharks and rays). In November 2023, the WTO approval for the WTBF was revoked and remade to allow for the continued export of the additional shark and ray listed species. The approval was conditional on adding the following obligation (condition 9):

> *By 1 July 2024, the Australian Fisheries Management Authority must require that all catch of CITES listed species (including discards where possible) taken in the Commonwealth Western Tuna and Billfish Fishery is recorded to a species level and that these catches are reported to the Department of Climate Change, Energy, the Environment and Water as part of the annual reporting requirement referred to in Condition 4.*

As described above in sections '6.3 Bycatch mitigation measures', '6.5 Management actions', and '7.2 Mitigating risks to protected species and communities', AFMA has mitigation and management measures in place relevant to all CITES Appendix II species taken in the fishery and has arrangements in place to effectively monitor ongoing take and compliance with the mitigation measures (see sections '3.7 Enforcement of the management arrangements' and '4 Monitoring and data collection' above). Export permit issuance and monitoring are conducted by DCCEEW and DAFF in accordance with Australia's CITES commitments. AFMA reports all catches of CITES Appendix II species to DCCEEW annually in line with the WTO condition above.

8. Ecosystem

8.1 Ecosystem management actions

There are several management measures that mitigate the impact of the fishery on the wider ecosystem which are described throughout this report. The risk of fishing activities in the WTBF for ecosystems, specifically related to habitats and communities is assessed through the ERA process (see Section '3.8 Mitigating impacts on the wider ecosystem').

The results of the most recent 2025 WTBF ERA indicated that habitats and communities were assessed at Level 1 using a Scale, Intensity and Consequence Analysis (SICA) and were judged to be at low risk due to the impact of fishing. This is due to fishing activities occurring in pelagic habitats, which means that the fishing activities are not likely to impact habitat structure or associated communities. As a result, no further habitat or community-specific assessment was required.

[3] The 19th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 2022 adopted the inclusion of all species of hammerhead sharks (family Sphyrnidae), guitarfish (family Rhinobatidae), and requiem sharks (family Carcharhinidae) in CITES Appendix II

8.2 Management responses

Aside from management measures that mitigate the impact of the fishery on the wider ecosystem which are described throughout this report, no further management actions are planned. The results of the most recent ERA assessed the impacts of the fishery on habitats and communities as low risk.

8.3 Marine bioregional plans

The WTBF spans from the tip of Cape York in Queensland, around Western Australia, to the border between Victoria and South Australia. As a result, the WTBF operates within four Marine Bioregional Areas and Marine Parks (Figure 3):

1. North Marine Parks Network (NMPN): There are eight Australian Marine Parks off the coast of the Northern Territory and Queensland, covering 157,480 km^2. The *North Marine Parks Network Management Plan 2018* sets out which activities are allowed (without authorisation), allowable (with authorisation), or not allowed. Commercial fishing using pelagic longline or minor line is only authorised in the Special Purpose, Multiple Use and Habitat Protection zones of the NMPN under a class approval.

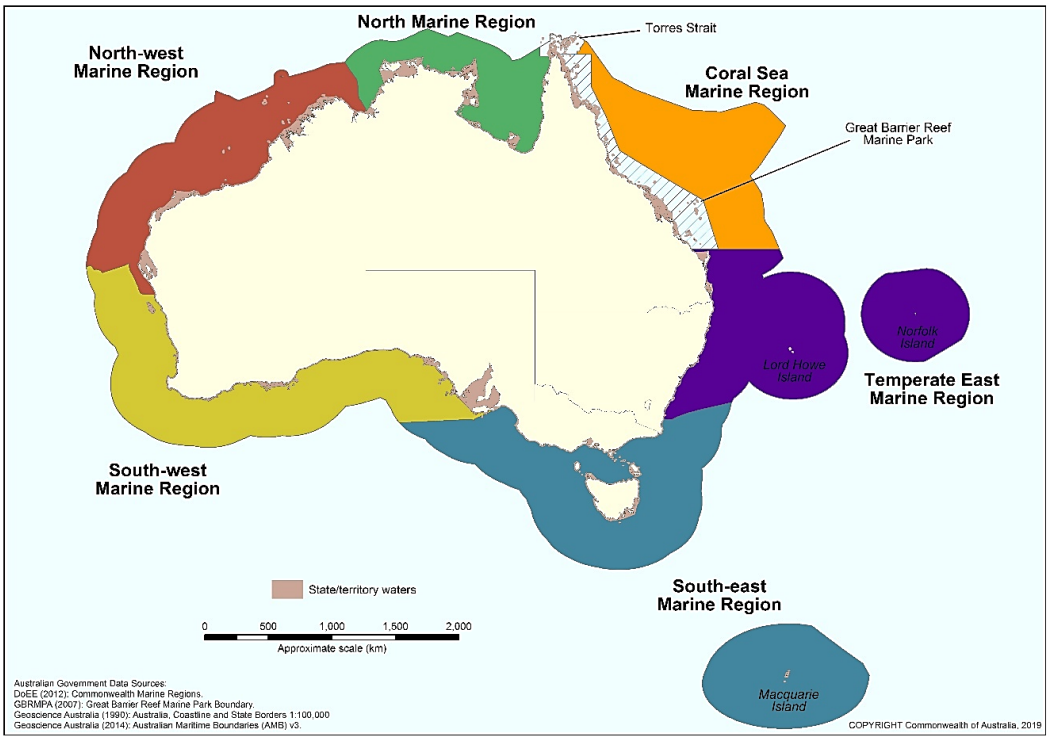
2. North-west Marine Parks Network (NWMPN): There are 13 Australian Marine Parks off the north-west coast of Western Australia that make up the North-west Network, covering 335,341 km^2. Similarly, the NWMPN is managed under the *North-west Marine Parks Network Management Plan 2018* which authorises commercial fishing using pelagic longlines and minor lines in Special Permit, Multiple Use and Habitat Protection Zones under a class approval.

3. South-west Marine Parks Network (SWMPN): There are five Australian Marine Parks off the coast of South Australia and nine off the coast of south-west Western Australia, covering 508,371 km^2, that make up the SWMPN. The SWMPN is managed under the *South-west Marine Parks Network Management Plan 2018* which authorises commercial fishing using pelagic longlines and minor lines in Special Permit, Multiple Use and Habitat Protection Zones under a class approval.

4. South-east Marine Parks Network (SEMPN): This network includes 14 Australian Marine Parks off the coasts of Victoria, South Australia and Tasmania covering a total area of 701,927 km^2. On 13 February 2025, a new management plan (*South-east Marine Parks Network Management Plan 2025*) came into effect. Similarly, under a class approval, commercial fishing using pelagic longline or minor line is authorised in the Multiple Use and Habitat Protection zones of the SEMPN.

In addition, as part of the **Indian Ocean Territories Marine Parks**, activities in waters around the Christmas Island Marine Park (CIMP) and Cocos (Keeling) Islands Marine Park (CKIMP) are managed under the *Christmas Island Marine Park Management Plan 2025* and *Cocos (Keeling) Islands Marine Park Management Plan 2025* which have been recently developed. Under both plans, commercial fishing using pelagic longline and minor line gears is authorised in the Habitat Protection Zone only, subject to a class approval. A class approval for commercial fishing in the CIMP and CKIMP authorise the use of minor line gears only.

Figure 3. Australian Marine Bioregions.



9. Research

AFMA administers an annual budget for research that is prioritised and scoped through fishery's advisory committees which provide advice to the AFMA Research Committee (ARC). The ARC, in alignment with AFMA's Five Year Strategic Research Plan 2023-28, plays a strategic role in providing advice to the AFMA Commission on major fishery and cross-fishery research issues; the strategic direction for research relevant to AFMA's information needs; and recommending research priorities and projects for potential funding through the Fisheries Research and Development Corporation (FRDC).

Research priorities in the WTBF are considered on an annual basis and the Eastern Tuna and Western Tuna and Billfish Fisheries Strategic Research Plan 2023-2028 provides a framework that identifies the key strategic research needs to support AFMA's management goals in both fisheries. The TTRAG and TTMAC play a crucial role in identifying research priorities, assessing research proposals and reviewing the outcomes of relevant research; both for essential stock assessment type research and other management-related research projects.

Key strategic WTBF research priorities, currently funded through the ARC or FRDC are described below.

Scientific advice for the management of the ETBF and WTBF (CSIRO)

This research project delivers ongoing scientific advice to TTRAG on the status of stocks within the WTBF (and ETBF) and broader WCFPC. The key objectives are to provide ongoing analysis of std-CPUE and summaries of catch, effort and size data; to review the processes for recommending TACCs (ie, harvest strategies and data indicators); to implement harvest strategies using specified data and provide indicator-based advice (for species without domestic harvest strategies) to assist TTRAG and

TTMAC in providing TACC advice; to review the potential impact of related international fisheries on the fish resources of the WTBF and ETBF; and to provide data and advice to support Australia's engagement at the relevant scientific meetings of the WCPFC and IOTC.

FRDC Project 2021-078: Improving the management of wildlife interactions in pelagic longline fisheries (Tuna Australia)

To further reduce interactions between pelagic longline fisheries and seabirds in the WTBF, this industry-led project aims to apply new seabird mitigation technologies including hook pods, hook shields and magnesium bands.

FRDC Project 2022-173: Assessing current data and alternate data collection methods relating to recreational catches of tropical tuna and billfish (IMAS)

To improve the understanding of the potential recreational catch on local abundances and availability of commercial target species, this project aims to review contemporary and traditional sources of recreational and charter catch and effort data for tropical tuna and billfish species. Outcomes and recommendations on how recreational and charter catch data can be collected and standardised will help inform future decision-making and management needs in the WTBF.

10. Progress against current conditions

The WTBF was last assessed by the DCCEEW under section 303FN of the EPBC Act 1999 to be an approved Wildlife Trade Operation (WTO) in November 2022. In accordance with this approval, a set of conditions were made for the fishery's continued operation. Below is a summary of the progress and status in addressing them since the 2022 assessment (Table 6).

Table 6. Progress on conditions since the last assessment.

Conditions for the WTBF	Due date	Progress against the conditions
Condition 1: Operation of the Commonwealth Western Tuna and Billfish Fishery will be carried out in accordance with the Western Tuna and Billfish Fishery Management Plan 2005 in force under the Fisheries Management Act *1991* (Cth) and the Fisheries Management Regulations 2019 (Cth).		**On Track.** The fishery is managed consistent with the *Western Tuna and Billfish Fishery Management Plan 2005* in force under the *Fisheries Management Act 1991 (Cth)* and the *Fisheries Management Regulations 2019 (Cth).*
Condition 2: The Australian Fisheries Management Authority must inform the Department of Climate Change, Energy, the Environment and Water of any intended material changes to the Commonwealth Western Tuna and Billfish Fishery management arrangements that may affect the assessment against which *Environment Protection and*		**On Track.** There have been no material changes to management arrangements of the ETBF that would affect the assessment. There have been some operational changes and policy initiatives that have been made since the previous assessment and are detailed in section "3.10 Changes since the previous assessment". In short,

Conditions for the WTBF	Due date	Progress against the conditions
Biodiversity Conservation Act 1999 decisions are made.		1. The Climate Risk Framework (CRF) is being developed to manage climate risks in decision-making, involving a four-step risk assessment process being trialled on broadbill swordfish in the ETBF. 2. In January 2024, in response to risks posed by avian influenza, AFMA removed certain seabird handling requirements for the purposes of genetic seabird identification research. 3. In November 2024, AFMA approved a multi-season approach for Total Allowable Commercial Catches (TACCs) for quota species in the WTBF. Under this arrangement, TACCs will still be applicable for individual fishing seasons, but the TACCs for three seasons will be determined together in one decision.
Condition 3: The Australian Fisheries Management Authority must inform the Department of Climate Change, Energy, the Environment and Water of any intended changes to fisheries legislation that may affect the legislative instruments relevant to this approval.		There have been no legislative changes, nor are there any plans to change fisheries legislation that may affect the legislative instruments relevant to this approval.
Condition 4: The Australian Fisheries Management Authority must produce and present reports on the Commonwealth Western Tuna and Billfish Fishery to the Department of Climate Change, Energy, the Environment and Water by 11 May annually, as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*.	May annually	**On track**. WTBF annual reports were submitted.
Condition 5: The Australian Fisheries Management Authority must consult with the Department of Climate Change, Energy, the Environment and Water before implementing any changes to management arrangements for species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).		There has been no changes to the management arrangements for CITES listed species.
Condition 6: By 19 February 2025, the Australian Fisheries Management Authority must:	19 February 2025	**Complete.** AFMA has conducted and completed an ERA for the WTBF. The ERA was first was submitted to DCCEEW on 12/12/24. The ERA

Conditions for the WTBF	Due date	Progress against the conditions
a) conduct and complete an updated Ecological Risk Assessment for the Commonwealth Western Tuna and Billfish Fishery and provide a copy of the completed assessment to the Department of Climate Change, Energy, the Environment and Water. The Ecological Risk Assessment must use data that reflects current management arrangements in the fishery, including fishing operation data collected since the implementation of electronic monitoring in the fishery. b) continue to implement management actions to address and mitigate risks and impacts for species that are identified as high risk, including data collection for species that are assessed as high risk because of missing information.		was then updated and resubmitted to the DCCEW on 18 March 2025. Outcomes from the most recent ERA will be considered AFMA in consultation with by TTRAG and TTMAC to determine what, if any, further actions are needed, to continue to mitigate impacts fishing on high-risk species.
Condition 7: Following the next review of the National Plan of Action for the Conservation and Management of Sharks 2012 (Shark-plan 2), the Australian Fisheries Management Authority must adopt any applicable new or adapted management obligations within 12 months of the updated plan's implementation.		**On track.** AFMA's supports the implementation of Shark-plan 2 by compiling data, providing information on management arrangements, programs and projects in response to each specific issue and action detailed in the plan. The management is consistent with the requirements of Shark Plan 2.
Condition 8: The Australian Fisheries Management Authority must continue to monitor and respond to the most recent Indian Ocean Tuna Commission stock assessments and management resolutions for striped marlin to ensure Australia's harvest does not subject the stock to further overfishing and continues to allow for the rebuilding of the stock biomass levels.		**On track**. In 2019, AFMA funded a three-year project to provide scientific and management advice that relates to both the domestic fishery and the adjacent international fisheries. Included in the project's key objectives were to provide data and advice to support Australia's engagement at the relevant scientific meetings of the IOTC (including supporting stock assessments and stock status determinations for striped marlin; and to provide advice to the AFMA Commission and advisory committees). The WTBF catch of striped marlin represents an average contribution of 0.01% to the total catch of striped marlin in the IOTC region over the previous five years (2018- 2022). Both the 125 t TACC (if it were to be fully caught) and the actual catch levels represent a very small proportion of the total fishing mortality on this stock.

Conditions for the WTBF	Due date	Progress against the conditions
Condition 9: By 1 July 2024, the Australian Fisheries Management Authority must require that all catch of CITES listed species (including discards where possible) taken in the Commonwealth Western Tuna and Billfish Fishery is recorded to a species level and that these catches are reported to the Department of Climate Change, Energy, the Environment and Water as part of the annual reporting requirement referred to in Condition 4.		**Complete.** AFMA mandates the reporting and collection of data on all target, by-product, bycatch and protected species; including CITES listed species. AFMA has reported this data to the Department as part of its annual reporting requirements under Condition 4.

11. References

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12. Appended Data Tables

APPENDIX 1 – Retained catch data (target and byproduct species)

Retained catch by species from 2020 to 2024. Source: AFMA fishery Catch Disposal Records (CDR) data. **M** – mixed, **U** – unspecified

Standard fish name	Sum of retained wt (t)					
	2020	2021	2022	2023	2024	Grand Total
Quota species						
Bigeye Tuna	30.458	60.132	24.337	41.091	39.137	195.155
Striped Marlin	0.133	0.696	0.300	1.102	0.564	2.796
Swordfish	96.434	150.842	85.698	94.944	115.571	543.491
Yellowfin Tuna	17.791	22.803	17.390	51.126	35.745	144.855
Non-quota/byproduct species						
Albacore	16.296	13.461	11.660	7.667	5.085	54.169
Rudderfish	1.507	0.188	4.291	7.373	8.527	21.887
Southern Bluefin Tuna		2.523	0.650	0.657	15.701	19.531
Mahi Mahi	0.915	0.917	0.803	1.803	0.764	5.202
Longtail Tuna	2.584					2.584
Bronze Whaler				0.999	0.378	1.377
Wahoo	0.297	0.247	0.340	0.200	0.183	1.267
Escolar	0.029		0.187	0.656	0.343	1.215
Skipjack Tuna	0.081	0.270	0.075	0.151	0.234	0.811
Northern Bluefin Tuna	0.181		0.178	0.166	0.157	0.683
Ray's Bream	0.192	0.159	0.103	0.102	0.061	0.619
Shortbill Spearfish	0.043	0.084	0.064	0.129	0.240	0.562
Moonfish (M)		0.202	0.246	0.041	0.061	0.551
Australian Bonito		0.051	0.031	0.035	0.076	0.194
Yellowtail Kingfish			0.058	0.074	0.019	0.151
Hammerhead Sharks (U)					0.015	0.015
Tuna (M)			0.014			0.014
Shortfin Mako		0.007			0.006	0.013
Blue Mackerel				0.011		0.011
Cardinalfishes				0.010		0.010
Snapper			0.004			0.004
Grand Total	166.945	252.585	146.432	208.338	222.869	997.170

APPENDIX 2 – Discarded catch data (target and non-target species)

Discarded target and non-target species from 2020 to 2024. Source: AFMA fishery logbooks. Logbook data is raw (uncleaned) and may contain errors. **M** – mixed, **U** – unspecified

Standard fish name	Sum of discarded wt (t)					
	2020	2021	2022	2023	2024	Total
Quota species						
Bigeye Tuna	0.097	1.409	0.378	1.583	1.258	4.725
Striped Marlin				0.045	0.100	0.145
Swordfish	0.230	0.728	1.401	1.649	1.209	5.217
Yellowfin Tuna		0.340	0.330	1.674	0.606	2.950
Non-quota species						
Blue Shark	1.260	11.222	5.958	22.730	15.079	56.249
Sharks (M)	0.355	2.826	2.098	6.197	2.290	13.766
Crocodile Shark	0.290	1.372	1.282	2.714	2.636	8.294
Rudderfish	0.255	1.948	0.245	4.510	1.022	7.980
Thresher Shark	0.100	0.570	0.400	2.550	2.324	5.944
Ocean Sunfish	0.025	0.750	0.355	3.532	1.026	5.688
Bronze Whaler	0.040	0.815	0.100	2.185	1.011	4.151
Oceanic Whitetip Shark	0.240	0.834	0.250	1.856	0.914	4.094
Giant Manta Ray	0.050	0.582	0.540	1.852	0.739	3.763
Lancetfishes (U)	0.186	0.477	0.825	1.324	0.614	3.426
Hammerhead Sharks (U)	0.046	0.470		1.430	0.720	2.666
Southern Bluefin Tuna		0.004	0.730	1.435	0.331	2.500
Black Marlin		0.720	0.200	0.820	0.600	2.340
Blue Marlin	0.100	0.730	0.300	0.550	0.350	2.030
Shortfin Mako					1.489	1.489
Albacore	0.110	0.154	0.226	0.544	0.383	1.417
Stingrays (U)	0.173	0.256	0.253	0.265	0.108	1.055
Tiger Shark	0.100	0.300		0.290	0.050	0.740
Oilfish	0.052	0.266	0.009	0.137	0.049	0.513
Ray's Bream		0.001	0.002	0.260	0.001	0.264
Pelagic Thresher	0.100	0.150				0.250
Mahi Mahi	0.012	0.008	0.013	0.078	0.049	0.16

Toadfishes (U)		0.015		75	10	0.100
Snake Mackerel		0.013	0.012	0.010	0.010	0.045
School Shark					0.040	0.040
Wahoo				0.010	0.010	0.020
Latchet					0.008	0.008
Smalltooth Cookiecutter Shark				0.003	0.004	0.007
Skipjack Tuna					0.005	0.005
Australian Bonito				0.001	0.003	0.004
Smooth Hammerhead					0.003	0.003
Grand Total	**3.821**	**26.96**	**15.907**	**60.309**	**35.051**	**142.048**

APPENDIX 3 – Protected species interaction data

Interactions with protected species from 2020 to 2024 (number of animals). Source: AFMA Wildlife logbook data and Logbook catch details data. Logbook data is raw (uncleaned) and may contain errors. **M** – mixed, **U** – unspecified.

Species and year	No. of animals					CITES listed*
	Alive	Dead	Injured	Unknown	Total	
Australian fur seal	**3**				**3**	**Yes**
2023	2				2	
2024	1				1	
Australian sea lion	**1**				**1**	**No**
2020	1				1	
Black Marlin				**5**	**5**	**No**
2020				2	2	
2021				2	2	
2022				1	1	
Blue Marlin				**1**	**1**	**No**
2021				1	1	
Blue Shark	**3194**	**153**	**1**	**3285**	**6633**	**Yes**
2020	77			1212	1289	
2021	448	11	1	703	1163	
2022	278	25		1092	1395	
2023	1555	116			1671	
2024	836	1		278	1115	
Bottlenose dolphin	**1**				**1**	**Yes**
2023	1				1	
Bronze Whaler	**160**	**12**	**1**	**85**	**258**	**Yes**
2020	2			20	22	
2021	31	2		4	37	
2022	2			13	15	
2023	94	10		40	144	
2024	31		1	8	40	
Crocodile Shark	**4048**	**57**		**3984**	**8089**	**No**
2020	148	3		1545	1696	

Species and year	No. of animals					CITES listed*
	Alive	Dead	Injured	Unknown	Total	
2021	658	1		1038	1697	
2022	641			870	1511	
2023	1331	32			1363	
2024	1270	21		531	1822	
Dusky Whaler				**1**	**1**	**Yes**
2022				1	1	
Flesh Footed Shearwater	**18**	**2**			**20**	**No**
2020	2	1			3	
2021	7	1			8	
2022	2				2	
2023	5				5	
2024	2				2	
Giant Manta Ray	**49**		**2**	**16**	**67**	**Yes**
2020	2			9	11	
2021	12			1	13	
2022	4		1	6	11	
2023	25				25	
2024	6		1		7	
Hammerhead Sharks (U)	**6**	**67**		**17**	**90**	**Yes**
2020	1			10	11	
2021		17		1	18	
2022				4	4	
2023	5	34			39	
2024		16		2	18	
Humpback whale	**2**				**2**	**Yes**
2022	1				1	
2023	1				1	
Leatherback Turtle	**34**	**2**			**36**	**Yes**
2020	11				11	
2021	5				5	

Species and year	No. of animals					CITES listed*
	Alive	Dead	Injured	Unknown	Total	
2022	5				5	
2023	9	2			11	
2024	4				4	
Loggerhead Turtle	**17**				**17**	**Yes**
2020	1				1	
2022	5				5	
2023	4				4	
2024	7				7	
Marlins (U)				**1**	**1**	**N/A**
2021				1	1	
Ocean Sunfish	**73**	**1**		**62**	**136**	**No**
2020	1			11	12	
2021	13			28	41	
2022	7	1		11	19	
2023	42				42	
2024	10			12	22	
Oceanic Whitetip Shark	**209**	**6**		**107**	**322**	**Yes**
2020	9			35	44	
2021	31	3		8	42	
2022	16			52	68	
2023	121	2			123	
2024	32	1		12	45	
Pelagic Thresher	**1**	**1**			**2**	**Yes**
2020	1				1	
2021		1			1	
Porbeagle				**19**	**19**	**Yes**
2020				16	16	
2021				1	1	
2022				2	2	
Port Jackson Shark				**1**	**1**	**No**

Species and year	No. of animals					CITES listed*
	Alive	Dead	Injured	Unknown	Total	
2020				1	1	
Pygmy Devil ray				**1**	**1**	**Yes**
2021				1	1	
School Shark	**5**				**5**	**Yes**
2024	5				5	
Sharks (M)	**335**	**146**		**48**	**529**	**N/A**
2020	20	6		1	27	
2021	29	25			54	
2022	102	23		4	129	
2023	123	78		16	217	
2024	61	14		27	102	
Shearwaters	**1**	**2**			**3**	**N/A**
2020	1	1			2	
2024		1			1	
Shortfin Mako		**1**		**354**	**355**	**Yes**
2020				168	168	
2021		1		112	113	
2022				74	74	
Short-finned pilot whale	**1**				**1**	**Yes**
2022	1				1	
Skates and Rays				**34**	**34**	**N/A**
2021				1	1	
2022				2	2	
2024				32	32	
Smalltooth Cookiecutter Shark	**1**	**3**			**4**	**No**
2023		2			2	
2024	1	1			2	
Smooth Hammerhead				**3**	**3**	**Yes**
2024				3	3	
Stingrays (U)	**391**	**4**		**452**	**847**	**N/A**

Species and year	No. of animals					CITES listed*
	Alive	Dead	Injured	Unknown	Total	
2020	39			164	203	
2021	114			203	317	
2022	66	2		67	135	
2023	126	2			128	
2024	46			18	64	
Toothed whales	**1**				**1**	**Yes**
2024	1				1	
Thresher Shark	**31**	**23**		**38**	**92**	**Yes**
2020	1			18	19	
2021	5	1		10	16	
2022	2	1		6	9	
2023	11	12			23	
2024	12	9		5	26	
Tiger Shark	**7**	**3**		**10**	**20**	**Yes**
2020		1		8	9	
2021	3	1			4	
2022				2	2	
2023	3	1			4	
2024	1				1	
Wilson's Storm Petrel	**1**				**1**	**No**
2023	1				1	

*CITES Appendices I, II and III valid from 7 February 2025

APPENDIX 4 – Fishing effort

Fishing effort in WTBF during the period 2020-2024. Data sourced from AFMA logbooks. Logbook data is raw (uncleaned) and may contain errors.

Gear and year	No of boats	No of hours fished	No of hooks
Pelagic longline			**1,270,003**
2020	2		231,085
2021	2		304,561
2022	2		223,713
2023	2		236,020
2024	3		274,624
Handline (mechanised)			
2020	1		
Rod and reel		**80**	**62**
2023	1	1	1
2024	1	79	61
Demersal longline			**500**
2024	1		500
Trolling		**293**	**157**
2021	2	199	99
2022	2	25	15
2023	1	14	17
2024	2	55	26
Trotline			
2021	1		
2022	1		

Australian Government

Australian Fisheries
Management Authority