



Australian Government

Department of the Environment, Water, Heritage and the Arts

Assessment of the
Western Tuna and Billfish Fishery

November, 2009

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Disclaimer

This document is an assessment carried out by the Department of the Environment, Water, Heritage and the Arts of a commercial fishery against the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*. It forms part of the advice provided to the Minister for the Environment, Heritage and the Arts on the fishery in relation to decisions under Parts 13 and 13A of the *Environment Protection and Biodiversity Conservation Act 1999*. The views expressed do not necessarily reflect those of the Minister for the Environment, Heritage and the Arts or the Australian Government.

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Table 1: Summary of the Western Tuna and Billfish Fishery (WTBF)

<p>Publicly available information relevant to the fishery</p>	<ul style="list-style-type: none"> • <i>Fisheries Management Act 1991</i> (Commonwealth) • <i>Fisheries Administration Act 1991</i> (Commonwealth) • <i>Fisheries Management (Western Tuna and Billfish Fishery) Regulations 2006</i>. • <i>Western Tuna and Billfish Fishery Management Plan 2005</i> • Australian Fisheries Management Authority (AFMA) Annual Status Report Western Tuna and Billfish Fishery 2009 (2009 Submission) • Australian Tuna and Billfish Longline Fisheries Bycatch and Discarding Workplan November 1, 2008 to October 31, 2010 • Department of the Environment, Water Heritage and the Arts (DEWHA) (then Department of the Environment and Heritage- DEH) Strategic Assessment of the Southern and Western Tuna and Billfish Fishery 2004 (2004 Assessment) • AFMA Draft assessment report - Southern and Western Tuna and Billfish Fishery 2003 (2003 Submission) • Bureau of Rural Sciences <i>Fishery Status Reports 2008</i>
<p>Area</p>	<p>The WTBF operates in Commonwealth waters. It extends from Queensland's Cape York Peninsula west to the South Australia-Victoria border. It also includes waters around Christmas Island and the Cocos (Keeling) Islands and a high seas fishing zone. Between 2003 and 2007, the areas most commonly fished were on the West Australian coast stretching from Port Hedland to Albany. Since 2007 less than 5 vessels have operated in the fishery and these data cannot be released.</p>
<p>Fishery status</p>	<p>The five target species of the WTBF are highly migratory and internationally managed by the Indian Ocean Tuna Commission (IOTC). Stock assessments were recently undertaken for Yellowfin Tuna, Bigeye Tuna and Broadbill Swordfish, and were discussed and adopted at the July and October 2009 IOTC Working Party Meetings. These assessments indicate a continuing decline of yellowfin tuna and broadbill swordfish, as indicated in stock assessments adopted by the relevant IOTC Working Parties in 2009, and the high the level of fishing of juvenile big eye tuna associated with floating objects by purse seine fleets, are current areas of particular concern.</p> <p>According to the 2008 BRS Status Report, which uses the most recent status adopted by the IOTC, and therefore do not include results from the 2009 stock assessments:</p> <p>Yellowfin Tuna- at or near an overfished state in the Indian Ocean and subject to overfishing.</p> <p>Bigeye Tuna- not overfished and not subject to overfishing in the Indian Ocean. However, there remains substantial concern over the level of fishing on juvenile big eye tuna associated with floating objects by purse seine fleets.</p> <p>Albacore Tuna- not overfished and not subject to overfishing in the Indian Ocean.</p> <p>Broadbill Swordfish- overfished status uncertain, but subject to overfishing in the Indian Ocean.</p>

	Striped Marlin- overfished and overfishing status uncertain.
Target Species	<p>Albacore Tuna (<i>Thunnus alalunga</i>), Bigeye tuna (<i>Thunnus obesus</i>), yellowfin tuna (<i>Thunnus albacares</i>), broadbill sword fish (<i>Xiphius gladius</i>) and striped marlin (<i>Tetrapturus audax</i>).</p> <p>Information on the biology of these/this species can be found in the 2004 Assessment of the fishery located on the DEWHA website.</p>
Byproduct Species	<p>Blue Shark, Mahi Mahi (Dolphinfish), and Longtail Tuna make up the most significant part of the byproduct in the WTBF. These species may come under quota management in the future.</p> <p>Other less common byproduct species include: Rudderfish, Black Oilfish, Oceanic Whitetip Shark, Shortfin Mako, Porbeagle Shark, Moonfish, Crocodile shark, Ray's Bream and Wahoo.</p>
Gear	Gear is limited to pelagic longline, minorline or purse seine equipment. Purse seine may not be used to target skipjack tuna, which is caught as part of the skipjack tuna fishery.
Season	There are no formal closed seasons
Commercial harvest	<p>Annual catches since 2004 have averaged 420 t. Estimated catch for the WTBF in the 2007-08 season are:</p> <p>Yellowfin Tuna- 14 t</p> <p>Albacore Tuna- 10 t</p> <p>Bigeye Tuna- 42 t</p> <p>Billfish- 219 t</p> <p>Total: 305t</p>
Value of commercial harvest	Estimated total catch value in the fishery for 2007/08 was AU\$1.67 million. The majority of this was for billfish which had an estimated AU\$1.2 million in value.
Take by other sectors	Catches of tuna in other fisheries are generally low and restricted by small trip limits. The Eastern Tuna and Billfish Fishery operates in waters adjacent to the WTBF but genetic studies have found differences between targeted stock in the Pacific Ocean to the Indian Ocean.
Commercial licences issued	Since 2000 the number of vessels in the fishery has reduced from 45 to fewer than 5 vessels in 2007. In the 2007/08 season there were 4 vessels operating in the fishery. However, there are still 110 permits available in the fishery (including high seas only permits).
Management arrangements	<p>The fishery is managed under the <i>Western Tuna and Billfish Fishery Management Plan 2005</i>, the <i>Fisheries Management (Western Tuna and Billfish Fishery) Regulations 2006</i>, <i>Commonwealth Fisheries Management Act 1991</i>, and the <i>Commonwealth Fisheries Administration Act 1991</i>.</p> <p>Annual fishing permits are currently granted in the fishery; they apply conditions and limit the number of boats operating. Quota based Statutory Fishing Rights (SFR's) will soon be implemented in the</p>

	<p>fishery at which point the annual fishing permits will cease to have effect. The fishery will then be managed through the output controls of an Individual Transferable Quota (ITQ) system and Total Allowable Catches (TACs) on target species.</p> <p><u>Current Management Arrangements in the WTBF</u></p> <ul style="list-style-type: none"> • Gear limited to pelagic longline, minorline or purse seine equipment. Purse seine may not be used to target skipjack tuna. • Reporting obligations include logbooks and independently verified catch disposal records (CDR's) • Monitoring is undertaken by compulsory carriage of observers and the fitting of Integrated Computer Vessel Monitor Systems (ICVMS) which continually reports the vessel's location to AFMA. • Bycatch reduction measures including use of tori lines, weighted lines, thawed baits, ban of the use of wire trace and any offal discharge and bycatch trip limits on sharks • Bait must only be taken for SFR holder's own use for fishing in the WTBF. • West Australian State trip limits on a number of species when fishing in the area of the WTBF. <p>These arrangements will be continued once quota SFRs are allocated in the fishery.</p>
Export	The main export markets are Japan and the United States.
Bycatch	<p>In 2007/08 bycatch species included sharks, rays and finfish, including various rays, hammerhead sharks, Snake Mackerel, Lancet Fish.</p> <p>In 2008 AFMA developed a bycatch and discarding workplan for the Australian Tuna and Billfish Longline Fishery (ATBLF), which includes both the eastern and western sectors and covers a two year period until the 31 October 2010. The objective of the plan is to develop a long term strategy for overall minimisation of bycatch. The focus of the ATBLF Workplan is on developing management responses to high ecological risks and measures to avoid interactions with protected species.</p> <p>Wire trace has been banned to reduce the capture of shark species and operators are restricted to a 20 shark trip limit within the Australian Fishing Zone (AFZ) and 100 shark trip limit on the high seas.</p> <p>There are also Threat Abatement Plan (TAP) requirements to use tori lines, weighted lines, thawed baits and banning offal discharge on all vessels south of 30 degrees to reduce interactions with marine birds</p>
Interaction with Protected Species¹	<p>The WTBF has minor interactions with a number of protected species. In 2008 2 leatherback turtles were caught, with 1 death, 1 loggerhead turtle which was released alive, one unidentified turtle also released</p>

¹ 'Protected species' means all species listed under Part 13 of the EPBC Act, including whales and other cetaceans and threatened, marine and migratory species.

	<p>alive and one toothed whale also released alive.</p> <p>A number of management measures have been implemented in the WTBF to reduce interactions with protected species including:</p> <ul style="list-style-type: none"> • the banning of wire trace in 2005 to reduce interactions with sharks • TAP Requirements to use tori lines, weighted lines, thawed baits and banning offal discharge on all vessels south of 25 degrees to reduce interactions with marine birds • A combination of compliance and educational actions to improve compliance with these requirements. <p>All interactions with protected species must be reported by fishers in their logbooks and are submitted to AFMA. Under a Memorandum of Understanding (MOU), AFMA provides quarterly reports of all interactions to DEWHA.</p>
Ecosystem Impacts	<p>AFMA has undertaken an Ecological Risk Assessment (ERA) of the WTBF. 187 fish species in the WTBF were examined and none were classified as at risk of potential overfishing. No habitats or communities were identified as high risk from the effects of pelagic longline fishing.</p> <p>Due to the limited effort in the WTBF there are no major ecological sustainability concerns for the fishery with the current effort. Once TACs are in place the overall catch level will be controlled. The non-target group at highest risk from the fishery is seabirds, however, this issue is being addressed through the seabird TAP mentioned in the above section on protected species. Broadbill swordfish, the most at risk target species is being addressed in the WTBF harvest strategy. The use of wire trace has also been banned to reduce the capture of shark species and operators are restricted to a 20 shark trip limit within the Australian Fishing Zone (AFZ) and 100 shark trip limit on the high seas.</p> <p>In 2008 AFMA developed a bycatch and discarding workplan for the Australian Tuna and Billfish Longline Fishery (ATBLF), which includes both the eastern and western sectors and covers a two year period until the 31 October 2010. The objective of the plan is to develop a long term strategy for overall minimisation of bycatch.</p>

Table 2: Progress in implementation of recommendations made in initial assessment of the WTBF

Recommendation	Progress	Recommended Action
<p>Recommendation 1 Operation of the fishery is to be carried out in accordance with the Western Tuna and Billfish Fishery Management Plan (as determined) including conducting the reviews identified in the management plan against an overarching objective of ensuring that the fishery achieves ecological sustainability. AFMA to inform DEH of any proposed amendment to the management regime for the Western Tuna and Billfish Fishery, including any significant shift in fishing away from the longline method of fishing, to enable DEH to evaluate any impact on the ecological sustainability of the fishery.</p>	<p>The WTBF continues to be managed under the Western Tuna and Billfish Fishery Management Plan. AFMA has already notified DEWHA that they intend to change the management arrangements from permits to Statutory Fishing Rights (SFRs) in 2010. AFMA has also notified DEWHA that while there has been a decline in longline fishing in recent years that there has been no shift toward other methods.</p>	<p>This recommendation is ongoing, and remains in force in a modified form for a further five years (see Recommendation 1, Table 4). Changes to the management regime, including any shifts in fishing method are to be reported to DEWHA, as outlined in Recommendation 2, Table 4.</p>
<p>Recommendation 2 AFMA to develop a process and timelines for responding to triggering of performance criteria.</p>	<p>AFMA and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) have developed harvest strategies for Yellowfin Tuna, Bigeye Tuna, Albacore Tuna, Broadbill Swordfish and Striped Marlin for joint approaches in the WTBF and ETBF, which set performance criteria and responses for these species. The harvest strategy has not been implemented in the WTBF, due to low catch and effort in the fishery.</p> <p>DEWHA recognises the need for a base level of data in order to run the harvest strategy,</p>	<p>AFMA's harvest strategy for the WTBF fulfils this recommendation, however it has not been implemented in the fishery due to missing parameters to run the harvest strategy model. DEWHA recommends that AFMA develop a catch/effort trigger for implementation and a justification of management arrangements below this trigger (see Recommendation 7, Table 4).</p>

	however harvest strategies should cover the spectrum of activity within a fishery, therefore DEWHA recommends that AFMA determine a trigger for implementing the harvest strategy and a risk based rationalization of management measures below this trigger.	
Recommendation 3 AFMA to establish formal consultative mechanisms and subsequently implement research, management, monitoring and compliance approaches to ensure that there is complementary and appropriate management of species taken in the Western Tuna and Billfish Fishery and overlapping State/ Territory managed fisheries (as either target, by-product or bycatch).	AFMA consults through formal committees such as the Tropical Tuna Management Advisory Committee and Resource Assessment Group. These committees are key consultative mechanisms for the conception, guidance and application of research, management, monitoring and compliance approaches in the WTBF. For the management of species taken in the fishery, AFMA has an established Memorandum of Understanding (MoU) with Western Australia and is involved in the Commonwealth's review of Offshore Constitutional Settlement. Under the MoU, both Commonwealth and WA licence holders are subject to trip limits for some species.	DEWHA considers this recommendation has been met.
Recommendation 4 AFMA to further develop effective consultative mechanisms with Parks – North in DEH, responsible for the management of the Christmas and Cocos (Keeling) Islands, to ensure that the fishing within the Western Tuna and Billfish Fishery is compatible with the management of species of conservation importance reliant on the waters around these islands.	No fishing has occurred around these islands since the last assessment. AFMA has indicated that they will continue to monitor the spatial range of the fishery and consult Parks – North as required.	DEWHA considers that no specific action has been required on this recommendation, and expects that DEWHA and AFMA will continue to work together regarding the management of the Christmas and Cocos (Keeling) Islands.

<p>Recommendation 5 AFMA to ensure that the observer program is implemented, meets domestic and international data and management needs and is capable of providing the required information at a statistically robust level, including:</p> <ul style="list-style-type: none"> • validation of target and by-product catch information for use in research, particularly stock assessments, and management decision making, including catch rates; • collection of data on bycatch, protected species interactions and ecosystem impacts of fishing operations; including wherever possible information on the life status of all bycatch, by-product and protected species discarded; and • collection of information on the impact of emerging technologies on fishing sustainability (e.g. the use of lightsticks, circle hooks, bait types). 	<p>A pilot observer program ran in the WTBF between 2003-2006. The pilot program did not identify the required coverage for an ongoing observer program in the fishery. When pelagic longlining was listed as a Key Threatening Process for seabirds, a Threat Abatement Plan (TAP) was developed for fisheries using this method. The seabird TAP requires a minimum of 5% coverage across 5° latitude bands. This rate has been met every year with an average of 6% coverage between 2003-2008.</p> <p>In addition to the collection of seabird interaction data, observers record catches of target, byproduct, bycatch and interactions with other protected species, as well as onboard fishing practices (such as compliance with TAP requirements).</p>	<p>DEWHA considers this recommendation has been met.</p>
<p>Recommendation 6 AFMA to monitor the impact of technological advancements in the fishery on the ecological sustainability of target species, by-product and bycatch, and incorporate any mitigation measures into management as necessary and take account of the impacts of technological advancements in stock</p>	<p>Fishing practices are monitored by the WTBF observer program. Fishing has continued at a very low level since 2007 and there have been no significant technological advances. DEWHA recommends that AFMA continue to monitor fishing practices and implement appropriate mitigation to address species at high ecological risk in the fishery.</p>	<p>DEWHA considers this recommendation has been met.</p>

assessment and setting the Total Allowable Commercial Catch		
<p>Recommendation 7</p> <p>AFMA to implement the Tuna and Billfish Longline and Minor Line Bycatch Action Plan (Longline Fishery BAP) as required under the Western Tuna and Billfish Management Plan (as determined) as a matter of priority and through the actions set in the BAP or through other approaches (e.g. Directions set under the Fisheries Management Act 1991, regulation or conditions on permits) ensure that the impacts of the fishery on bycatch are minimized and consistent with achieving the objectives of other legislative requirements including:</p> <ul style="list-style-type: none"> all relevant Recovery Plans (such as the <i>Recovery Plan for Grey Nurse Sharks, Carcharias taurus in Australia</i> and the <i>White Shark (Carcharodon carcharias) Recovery Plan</i>, the <i>Recovery Plan for Albatrosses and Giant Petrels</i> and the <i>Recovery Plan for Marine Turtles in Australia</i>); all relevant Threat Abatement Plans (such as <i>Incidental Catch (or By-catch) of Seabirds during Oceanic Longline Fishing Operations</i>) or all relevant National Plans of Action (such as the <i>National Plan of Action for the Conservation and Management of</i> 	<p>AFMA has undergone Ecological Risk Assessments (ERAs) of all its fisheries to identify priorities for specific management measures, especially for byproduct and bycatch species. For the WTBF, AFMA has completed risk assessments, which will feed into an Ecological Risk Management (ERM) Report for the fishery to address species identified at high ecological risk. DEWHA recommends that AFMA complete the ERM Report and provide final copies with the ERAs, by 1 December 2010.</p> <p>AFMA has indicated that a key factor in the risk assessment process is effort in the fishery. The WTBF has remained at very low effort relative to historical participation. DEWHA therefore considers that AFMA should include a catch/effort trigger to re-assess the outcomes of the ERAs should it significantly increase from current levels.</p> <p>DEWHA considers that the catch of sharks in the fishery is high relative to effort in the fishery. AFMA should continue to implement appropriate management responses to address and mitigate risks in the fishery, with a particular focus on shark mortality.</p> <p>In addition to the ERA/ERM reports, AFMA has developed the Australian Tuna and Billfish</p>	<p>DEWHA recommends that AFMA provide final copies of ERA and ERM reports by December 2010. The ERM should contain an appropriate catch/effort trigger for reassessment of risk levels should participation in the fishery significantly change during the period of this exemption (see Recommendation 4, Table 4).</p> <p>AFMA should also continue to ensure management responses address and mitigate risks identified in the ERA/ERM process and that current mitigation is effective, with a focus on shark mortality (see Recommendation 5, Table 4).</p> <p>DEWHA also recommends that the review of the Bycatch and Discarding Workplan for ATBLF be provided to DEWHA, with an outline of AFMA's long term strategic approach to reducing bycatch and discards in the fishery. AFMA should also continue to meet the objectives and requirements of relevant Recovery Plans, Threat Abatement Plans and National Plans of Action (see Recommendation 6, Table 4).</p>

	<p>Longline Fishery (ATBLF) Bycatch and Discarding Workplan to replace the Bycatch Action Plans (BAP) of both fisheries. The Workplan sets out practical measures to mitigate high ecological risk species identified in the ERA process. The implementation of the Workplan has commenced and will continue throughout 2009 and 2010.</p> <p>AFMA has indicated that the ATBLF Workplan is due for review in late 2010. DEWHA is concerned about the lack of a clear process for the review of Workplans, therefore DEWHA request that AFMA provide the results of the review and a statement of the long-term strategic approach to reducing bycatch and discards in the fishery.</p> <p>The WTBF has complied with the requirements of various Plans, including Recovery Plans, Threat Abatement Plans and National Plans of Action. Actions to mitigate shark take include banning of wire traces, trip limits and the requirement to land sharks with fins attached. Under the seabird TAP requirements, operators must use tori lines, weighted lines, thawed baits and banning offal discharge on all vessels south of 30 degrees. Minimum observer coverage of 5% is also required to ensure compliance with the TAP.</p>	
<p>Recommendation 8 AFMA to monitor the compliance of industry with their codes of practice and, where</p>	<p>AFMA monitored the compliance of industry with their code of practice and BAP through the pilot observer program from 2003-2006.</p>	<p>DEWHA considers this recommendation has been met.</p>

necessary and appropriate, introduce regulatory measures to ensure bycatch is minimised.	Compliance was also reviewed through the MAC and is included in the BAP implementation reports on AFMA's website.	
<p>Recommendation 9</p> <p>AFMA to investigate the effectiveness of various measures employed in other longline fisheries (such as circle hooks and mackerel type baits) to reduce the incidental take of protected species, particularly marine turtles, and introduce the requirement to use any that reduce the capture and mortality of protected species.</p>	<p>Phase 1 of a research project entitled 'The Effect of Circle Hooks on Target Catches in Australia's Longline Fisheries' has been completed. Although positive results were found for turtle interactions in the ETBF, circle hooks are unlikely to be a feasible option in the WTBF, as turtle interactions are rare and circle hooks potentially lead to increased catches of some shark species and Striped Marlin.</p> <p>DEWHA commends AFMA for their work on bycatch mitigation. Continuing development of mitigation methods is encouraged for implementation through the ERA/ERM process and the Bycatch and Discarding Workplan.</p>	<p>This recommendation is ongoing. Further direction for mitigation should be directed by the ERA/ERM process (see Recommendation 4 and 5, Table 4) and the AFMA's strategic approach to reducing bycatch and discards (see Recommendation 6, Table 4).</p>

Table 3: The Department of the Environment, Water, Heritage and the Arts (DEWHA) assessment of the Western Tuna and Billfish Fishery (WTBF) against the requirements of the EPBC Act related to decisions made under Parts 13 and 13A

Please Note – the table below is not a complete or exact representation of the EPBC Act. It is intended as a summary of relevant sections and components of the EPBC Act to provide advice on the fishery in relation to decisions under Parts 13 and 13A. A complete version of the EPBC Act can be found on the DEWHA website.

Part 13

Division 1 Listed threatened species Section 208A Minister may accredit plans or regimes	DEWHA assessment of the WTBF
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(a) a plan of management within the meaning of section 17 of the <i>Fisheries Management Act 1991</i>;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed threatened species (other than conservation dependent species) are not killed or injured as a result of the fishing; and</p> <p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the survival or recovery in nature of the species.</p>	<p>The WTBF will be managed under the <i>Western Tuna and Billfish Fishery Management Plan 2005</i> (the Management Plan) in force under the <i>Fisheries Management Act 1991</i>.</p> <p>The Management regime for the WTBF was accredited in October 2005. AFMA advised in the 2009 submission, that there have been no changes to the management arrangements. DEWHA agreed that the current management regime did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time. DEWHA therefore considers that the existing Part 13 accreditation remains valid.</p> <p>Noting in the current arrangements that high risk species will be addressed through the completion of the ERA process, DEWHA considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any listed threatened species.</p>
Division 2 Migratory species Section 222A Minister may accredit plans or regimes	DEWHA assessment of the WTBF

<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(a) a plan of management within the meaning of section 17 of the <i>Fisheries Management Act 1991</i>;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed migratory species are not killed or injured as a result of the fishing; and</p> <p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a listed migratory species or a population of that species.</p>	<p>The WTBF will be managed under the <i>Western Tuna and Billfish Fishery Management Plan 2005</i> (the Management Plan) in force under the <i>Fisheries Management Act 1991</i>.</p> <p>The Management regime for the WTBF was accredited in October 2005. AFMA advised in the 2009 submission, that there have been no changes to the management arrangements. DEWHA agreed that the current management regime did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time. DEWHA therefore considers that the existing Part 13 accreditation remains valid.</p> <p>Noting in the current arrangements that high risk species will be addressed through the completion of the ERA process, DEWHA considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any migratory species.</p>
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<p>Division 3 Whales and other cetaceans Section 245 Minister may accredit plans or regimes</p>	<p>DEWHA assessment of the WTBF</p>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(a) a plan of management within the meaning of section 17 of the <i>Fisheries Management Act 1991</i>;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing; and</p>	<p>The WTBF will be managed under the <i>Western Tuna and Billfish Fishery Management Plan 2005</i> (the Management Plan) in force under the <i>Fisheries Management Act 1991</i>.</p> <p>The Management regime for the WTBF was accredited in October 2005. AFMA advised in the 2009 submission, that there have been no changes to the management arrangements. DEWHA agreed that the current management regime did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time. DEWHA therefore considers that the existing</p>

<p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a species of cetacean or a population of that species.</p>	<p>Part 13 accreditation remains valid.</p> <p>Noting in the current arrangements that high risk species will be addressed through the completion of the ERA process, DEWHA considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any whales and other cetaceans.</p>
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<p>Division 4 Listed marine species Section 265 Minister may accredit plans or regimes</p>	<p>DEWHA assessment of the WTBF</p>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(a) a plan of management within the meaning of section 17 of the <i>Fisheries Management Act 1991</i>;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed marine species are not killed or injured as a result of the fishing; and</p> <p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a listed marine species or a population of that species.</p>	<p>The WTBF will be managed under the <i>Western Tuna and Billfish Fishery Management Plan 2005</i> (the Management Plan) in force under the <i>Fisheries Management Act 1991</i>.</p> <p>The Management regime for the WTBF was accredited in October 2005. AFMA advised in the 2009 submission, that there have been no changes to the management arrangements. DEWHA agreed that the current management regime did not significantly affect the sustainability of the fishery and that a new Part 13 declaration was not required at that time. DEWHA therefore considers that the existing Part 13 accreditation remains valid.</p> <p>Noting in the current arrangements that high risk species will be addressed through the completion of the ERA process, DEWHA considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any listed marine species.</p>

Part 13A

<p>Section 303DC Minister may amend list</p>	<p>DEWHA assessment of the WTBF</p>
<p>(1) Minister may, by instrument in published in the Gazette, amend</p>	

<p>the list referred to in section 303DB (list of exempt native specimens) by:</p> <ul style="list-style-type: none"> (a) including items in the list; (b) deleting items from the list; or (c) imposing a condition or restriction to which the inclusion of a specimen in the list is subject; or (d) varying of revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or (e) correcting an inaccuracy or updating the name of a species. 	
<p>(1A) In deciding whether to amend the list referred to in section 303DB (list of exempt native specimens) to include a specimen derived from a commercial fishery, the Minister must rely primarily on the outcomes of any assessment in relation to the fishery carried out for the purposes of Division 1 or 2 of Part 10.</p>	<p>The WTBF was assessed under Part 10 of the EPBC Act in December, 2004. In conducting this assessment, DEWHA considered that actions taken in the fishery would not have an unacceptable or unsustainable impact on the environment in a Commonwealth marine area over a period of 5 years while AFMA implemented recommendations to improve the management of the fishery. Consequently, the draft <i>Western Tuna and Billfish Fishery Management Plan 2005</i> was accredited under section 33 of the EPBC Act.</p>
<p>(1C) The above does not limit the matters that may be taken into account in deciding whether to amend the list referred to in section 303DB (list of exempt native specimens) to include a specimen derived from a commercial fishery.</p>	<p>It is not possible to list exhaustively the factors that you may take into account in amending the List of Exempt Native Specimens (LENS). The objects of Part 13A, which are set out below this table, provide general guidance in determining factors that might be taken into account. A matter that is relevant to determining whether an amendment to the list is consistent with those objects is likely to be a relevant factor.</p> <p>DEWHA considers that the amendment of the LENS to include product taken in the WTBF would be consistent with the provisions of Part 13A as:</p> <ul style="list-style-type: none"> ▪ the fishery will not harvest any CITES listed species;

	<ul style="list-style-type: none"> ▪ there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way (see Table 1); ▪ the operation of the WTBF is unlikely to be unsustainable and threaten biodiversity within the next 5 years; and ▪ the EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.
<p>(3) Before amending the list referred to in section 303DB (list of exempt native specimens), the Minister:</p> <ul style="list-style-type: none"> (a) must consult such other Minister or Ministers as the Minister considers appropriate; and (b) must consult such other Minister or Ministers of each State and self-governing Territory as the Minister considers appropriate; and (c) may consult such other persons and organisations as the Minister considers appropriate. 	<p>The public comment period on the AFMA submission sought comment on the annual reports/submission/ for the WTBF and provided sufficient opportunity for consultation with other persons and organisations.</p> <p>Letters to the Hon Michael Egan and the Hon Tony Burke advises them of the intention to declare the fishery exempt from the export provisions of the EPBC Act.</p>
<p>(5) A copy of an instrument made under section 303DC is to be made available for inspection on the Internet.</p>	<p>The instrument for the WTBF made under sections 303DC will be gazetted and made available on the DEWHA website.</p>

Section 303FR Public consultation	DEWHA assessment of the WTBF
<p>(1) Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice:</p> <ul style="list-style-type: none"> (a) setting out the proposal to make the declaration; and (b) setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and (c) inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal. 	<p>Under the EPBC Act, a decision to amend the LENS does not require a public consultation period. However, a public notice, which set out the proposal to grant export approval to the WTBF and included the submission for the WTBF, was released for public comment which closed on 23 October with one submission received.</p>

(2) A period specified in the notice must not be shorter than 20 business days after the date on which the notice was published on the Internet.	A public notice, which set out the proposal to grant export approval to the WTBF and included the submission for the WTBF was released for public comment on 18 September and closed on 23 October 2009, a total of 25 business days.
(3) In making a decision about whether to make a declaration under section 303FN, the Minister must consider any comments about the proposal to make the declaration that were given in response to the invitation in the notice.	The public comment received on the submission was included in the brief to the Delegate of the Minister for the Environment, Water, Heritage and the Arts. The DEWHA assessment has considered the public comments received on the submission.

Part 16

Section 391 Minister must consider precautionary principle in making decisions	DEWHA assessment of the WTBF
(1) The Minister must take account of the precautionary principle in making a decision under section 303DC and/or section 303FN, to the extent he or she can do so consistently with the other provisions of this Act.	The precautionary principle has been considered when making a decision to include specimens on the LENS.
(2) The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.	

Objects of Part 13A

- (a) to ensure that Australia complies with its obligations under CITES and the Biodiversity Convention;
- (b) to protect wildlife that may be adversely affected by trade;
- (c) to promote the conservation of biodiversity in Australia and other countries;
- (d) to ensure that any commercial utilisation of Australian native wildlife for the purposes of export is managed in an ecologically sustainable way;
- (e) to promote the humane treatment of wildlife;
- (f) to ensure ethical conduct during any research associated with the utilisation of wildlife; and
- (h) to ensure the precautionary principle is taken into account in making decisions relating to the utilisation of wildlife.

Final recommendations to AFMA for the WTBF

The material submitted by AFMA indicates that the WTBF operates in accordance with the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries*, 2nd edition. DEWHA considers that the fishery is well managed and unlikely to have an unacceptable or unsustainable impact on the environment in the short to mid term. Overall, DEWHA recognises that current catch levels, effort controls and trip limits for byproduct are conservative and suggest that the fishery is being managed in an ecologically sustainable way.

In making its assessment, DEWHA considers that the range of management measures are sufficient to ensure that the fishery is conducted in a manner that does not lead to over-fishing and that stocks are not currently overfished. Taking into account the Ecological Risk Assessment outcomes, bycatch mitigation measures and industry code of practice, DEWHA considers that fishing operations are managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

DEWHA is satisfied that the fishery will not be detrimental to the survival or conservation status of the taxon to which it relates in the short term. Similarly, it is not likely to threaten any relevant ecosystem in the short term. To contain and minimise the risks in the longer term the recommendations listed below have been made. DEWHA believes that product taken in the fishery should be exempt from the export controls of Part 13A of the EPBC Act, with that exemption to be reviewed in 5 years.

DEWHA considers that the operation of the fishery does not, or is not likely to, adversely affect the survival in nature of a listed threatened species or population of that species, or the conservation status of a listed migratory species, cetacean or listed marine species or a population of any of those species. DEWHA also considers that under the management plan operators are required to take all reasonable steps to avoid the killing or injuring of protected species, and the level of interaction under current fishing operations is low.

For these reasons, the management plan was accredited under Part 13 of the EPBC Act in October 2004. Since there have been no changes to the management arrangements since the initial assessment of the fishery, DEWHA considers that the existing Part 13 accreditation remains valid.

Recommendations are provided below with a brief explanation of the related issue/intent. Unless a specific time frame is provided in the recommendation each recommendation must be addressed within the life of the declaration (5 years).

Table 4: Western Tuna and Billfish Assessment– Summary of Issues and Recommendations

	Issue	Recommendation
1	<p><u>General Management</u></p> <p>Export decisions relate to the arrangements in force at the time of the decision. In order to ensure that these decisions remain valid and export approval continues uninterrupted, the Department of the Environment, Water, Heritage and the Arts (DEWHA) needs to be advised of any changes that are made to the management regime and make an assessment that the new arrangements are equivalent or better, in terms of ecological sustainability, than those in place at the time of the original decision. This includes operational and legislated amendments that may affect sustainability of the target species or negatively impact on by-product, bycatch, protected species or the ecosystem.</p> <p>DEWHA notes that AFMA intends to implement a quota system to replace the current input control arrangements, which has been delayed due to an appeals process. The current arrangements are an interim regime while Statutory Fishing Rights are granted to licence holders. AFMA expect that the output control system will come into force in early to mid 2010. DEWHA views this as a significant change in management arrangements and therefore expects to be notified when the transitional arrangements under the management plan cease to be in effect and the permanent arrangements are implemented.</p>	<p>Recommendation 1: Operation of the Western Tuna and Billfish Fishery (WTBF) will be carried out in accordance with the <i>Western Tuna and Billfish Fishery Management Plan 2005</i> in force under the Commonwealth <i>Fisheries Management Act 1991</i>.</p> <p>Recommendation 2: AFMA to inform DEWHA of any intended amendments to the Western Tuna and Billfish Fishery management arrangements that may affect the assessment of the fishery against the criteria on which EPBC Act decisions are based.</p>
2	<p><u>Annual reporting</u></p> <p>It is important that reports be produced and presented to DEWHA annually in order for the performance of the fishery and progress in implementing the recommendations in this report and other managerial commitments to be monitored and assessed throughout the life of the declaration.</p> <p>Annual reports should follow Appendix B to the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i> (the Guidelines) and include a description of the fishery, management arrangements in place, research and monitoring outcomes, recent catch data for all sectors of the fishery, status of target stock, interactions with protected species, impacts of the fishery on the ecosystem in which it operates and progress in implementing DEWHA recommendations. Electronic copies of the Guidelines are available from the DEWHA website</p>	<p>Recommendation 3: AFMA to produce and present reports to DEWHA annually as per Appendix B to the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i>.</p>

	at http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html	
3	<p>Ecological Risk Assessment (ERA)/Ecological Risk Management (ERM) A key component of AFMA's move toward Ecologically Sustainable Development framework has been the undertaking of Ecological Risk Assessments for all AFMA managed fisheries. An outline of the ERA/ERM process is available on AFMA's website: http://www.afma.gov.au/environment/eco_based/eras/default.htm</p> <p>Seven species were identified as high risk in the WTBF following the Residual Risk Assessment, including three shark species and four whale species. Sharks at high risk include two byproduct species, Dusky Shark (<i>Carcharhinus obscurus</i>) and Porbeagle Shark (<i>Lamna nasus</i>), and the protected White Shark (<i>Carcharodon carcharias</i>). Whales identified as high risk were Long-finned Pilot Whale, Andrew's Beaked Whale, Ginko Beaked Whale and True's Beaked Whale.</p> <p>Level 3 (SAFE) assessment of the WTBF identified no species at high risk due to low effort in the fishery. Should catch and/or effort significantly increase, AFMA should review the risk outcomes to ensure high risk species are adequately addressed in the management of the fishery. DEWHA considers that the ERM report should include a trigger to reassess the SAFE assessment outcomes at an appropriate catch/effort level.</p> <p>AFMA have developed and implemented a combined Bycatch and Discarding Workplan for both the ETBF and WTBF (Australian Tuna and Billfish Longline Fisheries (ATBLF) Bycatch and Discarding Workplan) to address the high risk species identified in the ERA process. Workplans are reviewed every two years. DEWHA is aware that through the (ATBLF) Bycatch and Discarding Workplan AFMA has committed to working to reduce bycatch and discard of high risk shark species. However, the Workplan is due to expire on 31 October 2010, and DEWHA is also concerned more broadly about the overall mortality of sharks in the fishery, not just limited to those identified at high risk. DEWHA is also concerned that there is not a clear process for the review and update of the Workplan following this date. DEWHA recommends that AFMA outline the long term strategic approach to reduce bycatch and discards in the fishery, including a strategy to monitor bycatch and discarding trends in relation to spatial</p>	<p>Recommendation 4: AFMA to provide final copies of the Ecological Risk Assessment (ERA) and Ecological Risk Management (ERM) reports for the WTBF by 1 December 2010, including a catch or effort level trigger within the ERM, above which the ERA is reassessed.</p> <p>Recommendation 5: AFMA to continue to implement appropriate management responses to address and mitigate risks and impacts identified in the ERA and review the effectiveness of management responses at appropriate intervals, with a particular focus on chondrichthyan mortality.</p> <p>Recommendation 6: AFMA to:</p> <ol style="list-style-type: none"> provide the results of the formal two-year review of the Bycatch and Discarding Workplan to DEWHA by 1 April 2011; by 1 December 2010, outline a new Workplan to reduce bycatch and discards in the WTBF.

<p>distribution and relative fishing effort, in order to detect impacts on shark populations.</p> <p>DEWHA is also concerned that new issues may arise if participation and/or catch in the fishery increases, for example an increase of byproduct and bycatch interactions and discarding of quota species. In the two-year review of the Workplan, AFMA should take such issues into consideration. Potential effort increases should also be taken into consideration in the long term strategic approach for the fishery, especially with regard to bycatch and discards to ensure environmental objectives for the fishery are met.</p> <p>DEWHA is particularly concerned about the high rate of shark catch in the WTBF relative to effort, particularly for Blue Shark (byproduct and discarded), Crocodile Shark (bycatch) and Shortfin Mako (byproduct and discarded). AFMA was advised by letter in November 2009 that Porbeagle (byproduct) and Shortfin Mako will be listed migratory species under the EPBC Act at the end of January 2010. Once listed as migratory under the EPBC Act, Part 13 of the Act will prohibit the killing, injuring or taking any of the three shark species in a Commonwealth area, unless an exemption applies. Commercial fishers will be able to continue current operations involving the retention of byproduct where they are acting in accordance with management arrangements accredited under Part 13 of the Act. DEWHA notes that AFMA have placed a call for research proposals on handling practices to reduce post-capture shark mortalities across AFMA fisheries. Such research is particularly important in the WTBF to ensure that current management arrangements are appropriate for controlling shark mortality.</p> <p>In addition to addressing high risk species identified in the ERA process, the WTBF is required to comply with relevant Recovery Plans, Threat Abatement Plans and National Plans of Action. For the WTBF this includes the <i>Recovery Plan for Grey Nurse Sharks, Carcharias taurus in Australia</i>, the <i>White Shark (Carcharodon carcharias) Recovery Plan</i>, the <i>Recovery Plan for Albatrosses and Giant Petrels</i> and the <i>Recovery Plan for Marine Turtles in Australia</i>, the Threat Abatement Plan for <i>Incidental Catch (or By-catch) of Seabirds during Oceanic Longline Fishing Operations</i> and the <i>National Plan of Action for the Conservation and Management of Sharks</i>. AFMA has ensured that the WTBF has complied with all measures set out in these plans, including >5% observer coverage by 5° latitude bands, banning of wire traces and</p>	
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	landing requirements for sharks. AFMA has also commissioned research on circle hooks to investigate their efficacy for bycatch management. DEWHA commends AFMA on implementing these measures and encourages the continued compliance with these plans.	
4	<p><u>Strategic Management Framework</u></p> <p>Effort in the WTBF has declined significantly since 2002/03, falling from 45 active vessels to less than five in 2007/08, due to economic conditions such as fuel prices and exchange rates. Under the Indian Ocean Tuna Commission (IOTC), Australia claims entitlement to 5% of the region's Total Allowable Commercial Catch, which is well above current catch levels. Considering that stock levels of Yellowfin Tuna and Broadbill Swordfish are currently subject to overfishing, a return to historical levels of fishing by licence holders may exacerbate sustainability issues with these stocks in the Indian Ocean.</p> <p>DEWHA considers that the harvest strategy, once implemented, and the Bycatch and Discarding Workplan will assist in detecting and implementing appropriate measures to address any issues that may arise for target, bycatch and discarding if participation and/or catch in the fishery increases. DEWHA also expects the potential impact on byproduct to also be addressed if participation and/or catch in the fishery increases.</p> <p>There is currently no harvest strategy implemented for the WTBF, which AFMA advises is due to the current low level of effort. The intention of the Commonwealth Fisheries Harvest Strategy Policy (HSP) and Ministerial Direction is that in the absence of catch levels for primary species being agreed to at the IOTC or a whole of government position developed on Australia's national allocation, a fishery-specific harvest strategy be developed and implemented. Harvest strategies are expected to be able to accommodate varying levels of catch or effort in the fishery, that is, from low level fishing effort to full exploitation of the target stocks. An extension granted of the 2005 Ministerial Direction also required all Commonwealth-managed fisheries to have harvest strategies implemented by 1 July 2008. DEWHA is seeking confirmation on how AFMA is complying with the HSP and the Ministerial Direction with regard to the WTBF harvest strategy.</p> <p>DEWHA accepts that the current harvest strategy would operate effectively if effort or catch levels increased within the fishery. However, DEWHA expects to see an articulation within the</p>	<p>Recommendation 7: By 1 December 2010, AFMA to revise and implement the WTBF harvest strategy, to include:</p> <ul style="list-style-type: none"> a. an appropriate catch or effort level trigger, above which the current WTBF harvest strategy decision rules are applied; and b. a risk-based justification of the management approach in force before this trigger is reached. <p>AFMA should provide the results of the harvest strategy to the Department of Agriculture, Fisheries and Forestry (DAFF) so they can be used for the development of the whole of government approach in any negotiations of Australia's national allocation at the IOTC.</p>

	<p>harvest strategy of the risk assessment process to be applied while the fishery has low catch or effort levels. DEWHA also considers that a trigger level should be agreed to that will cause the harvest strategy as it is currently to be implemented and a justification as to why this trigger is suitable for this fishery.</p> <p>Noting that harvest strategies are in place for other Commonwealth-managed fisheries with similarly low effort and that the IOTC does not have a management strategy in place, DEWHA considers that the existing harvest strategy that was developed for the fishery may be amended to be able to manage target stocks irrespective of varying catch or effort levels in the fishery. DEWHA recommends that AFMA include a trigger effort or catch level at which the WTBF Harvest Strategy is to be implemented. Considering that, AFMA should also include a risk assessment of management arrangements to ensure that they achieve the goals of the Harvest Strategy when effort or catch is below the trigger level. The harvest strategy could perhaps be constructed as a tiered approach.</p> <p>The results of the harvest strategy will feed into the whole of government approach in any negotiations of Australia's national allocation at the IOTC.</p>	
5	<p><u>International Obligations</u></p> <p>The IOTC is the regional fishery management forum for managing and conserving the highly migratory fish stocks on which the WTBF relies. DEWHA notes the progress Australia has made to facilitate improvements to the effectiveness of the IOTC. Further work is required to address impediments to the effective functioning of the IOTC and to pursue the future sustainability of the fisheries, and ecosystems and bycatch.</p> <p>DEWHA considers that it will be important for Australia to continue to take an active role in the IOTC in working towards these objectives. DEWHA considers that the continuing decline of yellowfin tuna and broadbill swordfish, as indicated in stock assessments adopted by the relevant IOTC Working Parties in 2009, and the high the level of fishing of juvenile big eye tuna associated with floating objects by purse seine fleets, are current areas of particular concern.</p>	<p>Recommendation 8: DAFF, in consultation with relevant agencies, to:</p> <ol style="list-style-type: none"> continue to engage in the IOTC with the aim of improving the effectiveness of the organisation in managing and conserving target, byproduct and bycatch species in the WTBF, in the pursuit of EBFM. consider the WTBF Harvest Strategy in developing the whole of government position for negotiations related to the WTBF in the IOTC, and to advocate the Commonwealth Fisheries Harvest Strategy Policy as an example of best practice in setting sustainable catch levels.

	<p>DEWHA's recommendations and priorities for engagement in the IOTC include the following:</p> <ul style="list-style-type: none"> • pursuing the establishment of management strategies and catch limits for target and byproduct species in line with the advice from the IOTC's Scientific Committee and taking into account <i>Australia's Commonwealth Fisheries Harvest Strategy Policy</i>; • promoting accurate recording of information on target species as well as byproduct and bycatch species (particularly seabirds, sharks and marine turtles); and • pursuing the adoption of strengthened measures to protect byproduct and bycatch species from unsustainable fishing pressures. 	
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References

Acronyms

AFMA	Australian Fisheries Management Authority
ATBF	Australian Tuna and Billfish Fishery
CDR	Cath Disposal Record
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DEH	Department of Environment and Heritage
DEWHA	Department of Environment Water Heritage and the Arts
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ERA	Ecological Risk Assessment
ICVMS	Integrated Computer Vessel Monitoring System
IOTC	Indian Ocean Tuna Commission
ITQ	Individual Transferable Quota
MOU	Memorandum of Understanding
SFR	Statutory Fishing Right
t	Tonne(s)
TAC	Total Allowable Catch
TAP	Threat Abatement Plan
WTBF	Western Tuna and Billfish Fishery