



Australian Government

Department of the Environment, Water, Heritage and the Arts

Assessment of the
**Abrolhos Islands & Mid West Trawl Managed
Fishery**

March 2008

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Assistant Secretary
Marine Environment Branch
Department of the Environment, Water, Heritage and the Arts
GPO Box 787
Canberra ACT 2601

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 Abrolhos Islands & Mid West Trawl Managed Fishery

<p>Publicly available information relevant to the fishery</p>	<ul style="list-style-type: none"> • Western Australia (WA) <i>Fish Resources Management Act 1994</i> (FRM Act) • WA <i>Fish Resources Management Regulations 1995</i> (FRM Regulations) • WA <i>Abrolhos Islands & Mid West Trawl Limited Entry Fishery Notice 1993</i> • <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) • Department of Fisheries WA (DFWA), ‘Application to the Australian Government Department of the Environment and Heritage on the Abrolhos Islands and Mid West Trawl Managed Fishery’, June 2004. • Department of Environment and Heritage (DEH) Assessment Report 2005. • DFWA State of the Fisheries Report 2004/05 • DFWA State of the Fisheries Report 2005/06 • DFWA State of The fisheries Report 2006/07 • West Coast Trawl Association code of conduct (the code of conduct)
<p>Area</p>	<p>The waters of the Indian Ocean between 27°51’ south latitude and 29°03’ south latitude on the landward side of the 200m isobath.</p> <p>Within this area the fishery is divided into traditional and non-traditional trawl areas as defined in the code of conduct.</p> <p>The traditional trawl areas represent historic scallop grounds that are known to produce commercial catches of scallop. The co-ordinates for traditional scallop grounds are detailed in the code of conduct.</p> <p>Non-traditional areas, representing the remaining area of the fishery, are subject to exploratory fishing according to the protocol described in the code of conduct.</p>
<p>Fishery status</p>	<p>This fishery has been previously assessed as fully exploited.</p> <p>Previous assessments of this fishery note that the recruitment of scallop to the west coast of Australia is highly variable and not thought to be dependant on the density of spawning biomass. As a result catch rates and annual tonnage vary dramatically from year to year.</p> <p>The length of the season is defined by preseason surveys that estimate a residual stock index or post spawning biomass. In addition the recently introduced high yield principle provides an additional measure to close the fishery should the catch rate of scallops fall below 250kg/day.</p>
<p>Target Species</p>	<p>Western Saucer Scallop (<i>Amusium balloti</i>) & western king prawn (<i>Penaeus latisulcatus</i>).</p> <p>Information on the biology of these species can be found in the 2004 submission located on the Department of the Environment, Water, Heritage and the Arts’ (DEWHA) website.</p>
<p>Byproduct Species</p>	<p>None.</p>
<p>Gear</p>	<p>16 boats are licensed to operate in the fishery however in 2005 an</p>

	<p>additional vessel operated in the fishery under the authority of a ministerial exemption allowing the use of try gear (5m headrope length). In 2006, 14 out of the 16 concession holders operated in the fishery.</p> <p>Permitted gear in the fishery includes twin otter trawl nets with 100mm mesh size for scallops and 45mm (codend) and 61mm (remainder of the net) for prawns.</p> <p>Total units permitted in the fishery is 46 units of headrope (1 unit = 7.32m).</p> <p>Turtle Exclusion Devices (TEDs) have been compulsory in the fishery since 2003.</p>
Season	<p>Scallops begin spawning in August each year and continue through until February/March of the following year. To protect the spawning stock the season for the Abrolhos Islands & Mid West Trawl Managed Fishery (AIMWTMF) generally begins on 1 April each year. In 2006, the season opened on 6 April and closed on 6 June.</p> <p>The length of the season is determined by a preseason survey conducted in October/November each year; however the season generally runs for 3 months.</p> <p>The recently introduced high yield principle is an additional measure that closes the fishery when the catch rate of scallops falls below 250kg (meat weight)/day.</p>
Commercial harvest	<p>205 tonnes (t) whole weight (41t meat weight) of scallop were harvested in 2006. Annual catches in the AIMWTMF are highly variable, being dependant on sporadic recruitment. In 2005, landings of scallop totalled 6,470t following low catches of 144t in 2004.</p> <p>No western king prawns were harvested in 2006.</p>
Value of commercial harvest	\$0.7 million in 2006.
Take by other sectors	In 2005, 1,923 t of scallop was taken by the Shark Bay Scallop Managed Fishery (SBSMF). The SBSMF has management arrangements similar to the AIMWTMF.
Commercial licences issued	The AIMWTMF has 16 operators licensed to fish.
Management arrangements	<p>The fishery is managed under the WA <i>Abrolhos Islands & Mid West Trawl Limited Entry Fishery Notice 1993</i>, the WA FRM Act and the WA FRM Regulations.</p> <p><u>Output controls</u></p> <ul style="list-style-type: none"> • Fishery high yield principle has been introduced where fishery is closed when daily catch rate drops below 250kg/day (meat weight) <p><u>Input controls</u></p> <ul style="list-style-type: none"> • Limited entry (16 licensed operators) • Gear restrictions on trawl net mesh size • Maximum number of headrope entitlements within the fishery (46

	<ul style="list-style-type: none"> • Spawning season closure • Numerous closures around reef areas.
Export	Majority of product exported to Asia. Small quantities are supplied to local gourmet markets.
Bycatch	<p>Limited to small amounts of finfish and small elasmobranchs.</p> <p>Bycatch composition is monitored during preseason surveys however there is no in-season recording of bycatch composition and catch rate.</p> <p>TEDs have been compulsory in the fishery since 2003.</p>
Interaction with Protected Species¹	<p>TEDs have been compulsory in the AIMWTMF since 2003 and since their introduction there have been no recorded captures of turtles in the fishery.</p> <p>Syngnathids are occasionally caught in the AIMWTMF and are generally discarded, presumed to be dead. Results from an observer program for a prawn trawling fishery in WA suggests that very low numbers of syngnathids are caught in the order of one per night across the entire fleet. The number caught by the scallop fleet is likely to be lower than this, given the larger mesh sizes and slower speeds used by the fleet. The preseason surveys are also used as an indication of protected species interactions and there have been no capture of syngnathids or seasnakes in these surveys since 2001.</p> <p>Seasnakes are caught in low numbers in the AIMWTMF but are thought to be returned to the water in a live state.</p> <p>The logbooks completed by licence holders within the AIMWTMF include provisions to report any interactions with protected species, which are then provided to DFWA.</p> <p>Under sections 199, 214, 232 and 256 of the EPBC Act, persons who interact with a protected species must report that interaction within seven days of the incident occurring to DEWHA.</p> <p>A Memorandum of Understanding (MOU) between DFWA and DEWHA for the reporting of fisheries interactions with protected species is currently being negotiated to streamline reporting requirements for interactions with protected species to assist fishers in meeting their requirements under the EPBC Act. As such, the MOU reduces the administrative reporting burden on individual fishers and provides for regular reporting of protected species interactions.</p> <p>Reporting requirements are included as a standing item on the agenda for annual pre-season briefings.</p>
Ecosystem Impacts	Overall the fishery is thought to be low impact and this is reflected in the risk assessment previously done for the fishery (2004). The fishery has few operators and activities occur in a relatively small area over a short season (~ three months).

¹ For the purposes of this report 'protected species' means all species listed under Part 13 of the EPBC Act, including whales and other cetaceans and threatened, marine and migratory species.

Scallops have a high natural variability and therefore trophic impacts are thought to be low. The fishers operate over a small proportion of the licensed area and therefore benthic impacts are low. In addition trawling is restricted to area of high scallop abundance which is predominantly sand benthic habitat.

It does need to be considered however that there are several other fisheries operating in areas adjacent to this fishery using similar gear types and the cumulative impacts of these fisheries could potentially lead to more significant ecosystem impacts.

Table 2: Progress in implementation of recommendations and conditions made in initial assessment of the AIMWTMF

Condition	Progress	Recommended Action
<p>Operation of the fishery will be carried out in accordance with the WA AIMWTMF legislated management regime, made under the Western Australian <i>Abrolhos Islands and Mid West Trawl Limited Entry Fishery Notice 1993</i> in force under the Fish Resources Management Act 1994</p>	<p>This fishery continues to be managed in accordance with the <i>Abrolhos Islands & Mid West Trawl Limited Entry Fishery Notice 1993</i>. An exemption to allow the use of bison boards (not provided for under the management plan) has been in place since 2007. In addition, an exemption has recently been granted to allow one operator to use a modified Turtle exclusion device incorporating mesh panels that are of a smaller mesh size than provided for under the legislated management regime. DFWA supported the use of the TED on the basis that it appears it could be a positive development for reducing bycatch. It is possible that the legislation may be changed in future to allow the use of this gear by all operators.</p>	<p>Met and ongoing.</p>
<p>The Department of Fisheries Western Australia (DFWA) will inform DEH of any intended amendments to the WA AIMWTMF legislated management regime that may affect the sustainability of the target species or negatively impact on byproduct, bycatch, protected species or the ecosystem</p>	<p>There were no significant amendments to the <i>Abrolhos Islands & Mid West Trawl Limited Entry Fishery Notice 1993</i> since the previous assessment.</p>	<p>Met and ongoing.</p>
<p>Reports to be produced and presented to DEH annually, and to include:</p> <ul style="list-style-type: none"> • information sufficient to allow assessment of the progress of DFWA in implementing the recommendations made in the Assessment of the AIMWTMF 2005 and the commitments made in the Final Application to DEH on the 	<p>Annual reporting since the previous assessment has been satisfied through the annual State of the Fisheries Report. It is anticipated that DFWA will be moving to dedicated annual reporting in the future</p>	<p>Met and ongoing.</p>

<p>AIMWTMF;</p> <ul style="list-style-type: none"> • A description of the status of the fishery and catch and effort information; • A statement of the performance of the fishery against objectives, performance indicators and measures once developed; and • Research undertaken or completed relevant to the fishery. 		
Recommendation	Progress	Recommended Action
<p>DFWA to advise DEH of any material change to the AIMWTMF's legislated management regime and/or arrangements that could affect the criteria on which EPBC Act decisions are based, within three months of that change being made.</p>	<p>There have been no major amendments to the legislated management plan for the fishery since its original assessment. However a new management package has been developed and implemented that improves the sustainability of the fishery and enhances the environmental protection for the sensitive marine habitats of this region. Thus the fishery has improved its performance significantly in this area. Since April 2005, the fishery has been operating using a high yield principle to determine in an explicit manner the timing for the cessation of fishing each season. A catch rate cut-off threshold of 250 kilograms (meat weight) of scallops caught per 24-hour period is now in operation. Catch rates below this level result in the fishery closing for the season. Further to the high yield principle the Abrolhos trawl industry (in consultation with the DFWA and the Rock Lobster industry) has identified traditional trawl grounds where the majority of trawling takes place and formed a code of conduct relating to where trawling can occur and also how other activities undertaken within the operation of the fishery</p>	<p>Met and ongoing.</p>

	<p>should operate. These measures provide for enhanced habitat protection of the Abrolhos Islands while allowing continuation of scallop fishing on traditional trawl grounds and the opportunity to sample outside these traditional areas in a precautionary, low-impact manner. The final management change has been the use of a class Exemption until 2009 to allow licensees to operate vessels outside of the prescribed 375 boat unit limit. This is consistent with broader Department policy on the implementation of the 375 boat unit rule and recognises that most Abrolhos Islands trawl fishers also operate in the SBSMF. Given the additional management measures outlined above, this change poses no threat to achieving the environmental objectives required of the fishery.</p>	
<p>The Ecological Sustainable Development (ESD) Report, including all performance measures, responses and information requirements to be incorporated into the legislated management regime and decision making process.</p>	<p>DFWA reports against the performance measures for the fishery in the annual State of the Fisheries Report (Appendices 1-3). DFWA liaises with Industry on an annual basis to determine the fishing arrangements for the coming year. This regular review ensures management arrangements are conducive to maintaining resource sustainability.</p>	Met.
<p>DFWA to ensure, where appropriate, that any relevant indigenous, conservation, commercial fishing and recreational interests in the fishery are considered through consultative mechanisms.</p>	<p>Consultation regarding the management arrangements for the fishery is by DFWA industry meetings. A management meeting for the fishery is held each year to discuss Research, Compliance, Vessel Monitoring System and management issues. Additional meetings are convened throughout the year as required. To ensure that relevant indigenous, conservation and recreational interests are considered, a summary of the issues discussed at the annual management meetings will be forwarded to these groups where appropriate.</p>	Met.

<p>By the end of 2006, DFWA to develop fishery specific objectives, linked to performance indicators and performance measures for the minor target species (western king prawn) and all byproduct species or species groups based on the best available information.</p>	<p>The risk assessment for the minor target species (western king prawn) and byproduct species determined that the risks should be regarded as negligible due to less than one tonne of any group being taken annually. Given this risk level, specific performance indicators and performance measures for these species are therefore not required. No byproduct has been recorded in the Fishery during 2003, 2004 or 2005. In addition, no prawns were recorded as landed in 2005 or 2006.</p>	<p>Ongoing. As a result of the risk assessment previously carried out on the fishery, developing comprehensive performance measures for this species was determined to be unnecessary. As part of the 2008 assessment an alternative recommendation (Recommendation 5 table 4) has been negotiated that will enable DFWA to determine performance indicators and performance measures for minor target species more appropriate for the current level of exploitation.</p>
<p>DFWA to incorporate into the legislated management regime, an objective to minimise protected/listed species interactions, to minimise or maintain at sustainable levels the take of other non-retained species and to minimise impacts on the marine environment.</p>	<p>The fishery fleet operates over a very small portion of the legislated fishing area, focusing on scallop aggregations on relatively bare sand habitat associated with this species. While turtles do occur in the Abrolhos Islands, these species are towards the southern extent of their range and do not breed in the area as water temperatures are too low. Consequently, interaction with turtles is minimal. Few other protected species occur in this area. In addition, bycatch reduction devices (grids) are already fully implemented in the fishery as a condition on licences. All boats are required to have grids fitted in all nets (except try nets). Not only do these grids eliminate the capture of nearly all turtles but they further reduce the capture of other bycatch species, including protected species and other non-retained species.</p>	<p>Met. The inclusion of TEDs into the AIMWTMF has been an effective measure to minimise interaction with marine turtles, Marine mammals as well as other bycatch species. DEWHA remains concerned about potential impacts on other protected species including sea snakes and syngnathids and has incorporated the ongoing monitoring of these interactions into a recommendation in the 2008 assessment (Recommendation 7 table 4).</p>

<p>DFWA, in its Annual State of the Fisheries Report, to report on the performance of the fishery against performance measures that relate to the sustainability of the fishery, once developed.</p>	<p>The main performance measures for the fishery relate to maintenance of breeding stocks for scallops. The Department reports on the performance of the fishery against each of these performance measures in the annual State of the Fisheries Report (Appendices 1-3).</p>	<p>Met.</p>
<p>DFWA to review the performance measure for saucer scallop outlined in the ESD Report to ensure it is measurable and related to the ecological sustainability of the stock.</p>	<p>The DFWA's Research Division has determined that the current performance measures currently being used for the fishery are appropriate. Since the 2005 fishing season, the fishery has been operating under a high yield principle where it is closed once the catch rate cut-off threshold of 250 kilograms (meat weight) of scallops per 24-hour period is reached. In addition areas of small scallops are closed to fishing towards the end of the season to avoid damaging the next season's potential recruits. This ensures that the 1+ individual stock is primarily targeted which allows spawning to occur at least once prior to fishing, providing protection to the stock.</p>	<p>Met.</p>
<p>DFWA to implement a system to improve the identification and recording of elasmobranch species taken as byproduct in the AIMWTMF.</p>	<p>The implementation of grids into the fishery since 2003 has minimised the capture of elasmobranchs, with no elasmobranchs being retained as byproduct in this fishery. Therefore there is no longer a need to undertake this recommendation.</p>	<p>Met. The 2008 submission from DFWA states there has been no elasmobranchs retained as byproduct in 2003, 2004 and 2005. DEWHA is concerned about elasmobranchs caught as bycatch in the AIMWTMF and, to address this, a subsequent recommendation has been negotiated in the 2008 assessment (Recommendation 7 table 4).</p>

<p>DFWA to review the current programs for the collection and analysis of bycatch and protected species data in the AIMWTMF to ensure they are sufficient to identify changes in the composition and quantity of bycatch and protected species.</p>	<p>The major components of bycatch and protected species are recorded during the annual DFWA's Research survey of scallop stocks. Large areas remain untrawled in the fishery, giving protection to any species that may be impacted by trawling and are therefore not at risk from this fishery.</p>	<p>Met and ongoing. As part of the 2008 assessment DFWA will finalise the development of the Bycatch Action Plan (BAP) for this fishery and review the risk levels assigned to all components of the fishery. Following these management initiatives DFWA will, where appropriate, modify the existing bycatch monitoring program to adequately monitor long term trends in bycatch in the AIMWTMF. As a result a subsequent recommendation has been negotiated for the 2008 assessment (Recommendation 6 Table 4).</p>
<p>To ensure that benthic ecosystems are protected, DFWA to, before the end of 2005, clearly define trawl grounds for the AIMWTMF based on historically productive scallop grounds and suitable benthic habitats and in consultation with conservation, recreational fishing and commercial fishing stakeholders. DFWA to define a robust process for any extension of trawling activity outside of this area, including explicit consideration of the ecological effects on bycatch and benthic habitats and consultation with all relevant stakeholder groups.</p>	<p>Prior to the commencement of the 2005 fishing season, the Abrolhos trawl industry (in consultation with the DFWA and the Rock Lobster industry) identified traditional trawl grounds where the majority of trawling takes place (Appendix 4). In addition, a code of conduct (Appendix 5) relating to trawling and other activities within the operation of the fishery was also generated. The industry code of conduct provides for trawling outside of traditional trawl grounds in a precautionary manner with a low impact on the marine environment. The management package which includes the code of conduct provides for enhanced environmental</p>	<p>Met.</p>

	protection for sensitive marine habitats of the Abrolhos Islands while allowing continuation of scallop fishing on traditional trawl grounds and the opportunity to sample outside these traditional areas in a low-impact manner.	
DFWA to implement an education program to ensure that industry has the capacity to make reports on interactions with protected/listed species at an appropriate level of accuracy.	The Research logbooks completed by licence holders within the fishery include provisions to report any interactions with protected species (Appendix 6). Reporting requirements are included as a standing item on the agenda for annual preseason briefings. Fishers' are also given a Protected Marine Species Identification Guide that contains: <ul style="list-style-type: none"> • pictures and a brief description of relevant protected species; and • specific details to include in interaction reports. 	Met.
DFWA to review the specifications of the Bycatch Reduction Devices (BRDs) grids used in the AIMWTMF to ensure they are effective at reducing the incidental catch of turtles and other large bycatch species likely to be encountered in the fishery.	The completed Fisheries Research and Development Corporation (FRDC) Bycatch Reduction Implementation Project has met this recommendation. This observer based program clearly showed that the grids being used in this fishery reduce the capture of turtles by between 95 and 100%.	Met.

Table 3: The Department of the Environment, Water, Heritage and the Arts assessment of the AIMWTMF 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

<p>Division 1 Listed threatened species Section 208A Minister may accredit plans or regimes</p>	<p>DEWHA assessment of the AIMWTMF</p>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p style="padding-left: 40px;">(c) For State Fisheries: a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <p style="padding-left: 80px;">i. made by a State or self-governing Territory; and</p> <p style="padding-left: 80px;">ii. in force under a law of the State or self-governing Territory;</p> <p>if satisfied that:</p> <p style="padding-left: 40px;">(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 style="padding-left: 40px;">(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 AIMWTMF will be managed under the <i>Abrolhos Islands and Mid West Trawl Limited Entry Fishery Notice 1993</i>.</p> <p>The legislated management regime for the AIMWTMF was accredited in March, 2005. The management arrangements for the AIMWTMF have not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time.</p> <p>Currently, evidence suggests that the AIMWTMF only has minimal interactions with listed threatened species. Therefore, DEWHA considers the current operation of the AIMWTMF is not likely to adversely affect the survival or recovery in nature of any threatened species.</p>

Division 2 Migratory species Section 222A Minister may accredit plans or regimes	DEWHA assessment of the AIMWTMF
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <ul style="list-style-type: none"> i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory; <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 AIMWTMF will be managed under the <i>Abrolhos Islands and Mid West Trawl Limited Entry Fishery Notice 1993</i>.</p> <p>The legislated management regime for the AIMWTMF was accredited in March, 2005. The legislated management regime for the AIMWTMF has not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time.</p> <p>Currently, evidence suggests that the AIMWTMF only has minimal interactions with migratory species. Therefore, DEWHA considers the current operation of the AIMWTMF is not likely to adversely affect the survival or recovery in nature of any migratory species.</p>

Division 3 Whales and other cetaceans Section 245 Minister may accredit plans or regimes	DEWHA assessment of the AIMWTMF
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p>	

<p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <ul style="list-style-type: none"> i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory; <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>(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>The AIMWTMF will be managed under the <i>Abrolhos Islands and Mid West Trawl Limited Entry Fishery Notice 1993</i>.</p> <p>The legislated management regime for the AIMWTMF was accredited in March, 2005. The management arrangements for the AIMWTMF have not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time.</p> <p>Currently, evidence suggests that the AIMWTMF only has minimal interactions with cetaceans. Therefore, DEWHA considers the current operation of the AIMWTMF is not likely to adversely affect the survival or recovery in nature of any cetacean.</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 AIMWTMF</p>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <ul style="list-style-type: none"> i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory; 	<p>The AIMWTMF will be managed under the <i>Abrolhos Islands and Mid West Trawl Limited Entry Fishery Notice 1993</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 legislated management regime for the AIMWTMF was accredited in March, 2005. The management arrangements for the AIMWTMF have not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time.</p> <p>DEWHA considers the current operation of the AIMWTMF is not likely to adversely affect the survival or recovery in nature of any listed marine species.</p>
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Section 303AA Conditions relating to accreditation of plans, regimes and policies	DEWHA assessment of AIMWTMF
(1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265.	DEWHA recommends that AIMWTMF be accredited under sections 208A, 222A, 245 and 265.
<p>(2) The Minister may accredit a plan, regime or policy under that section even though he or she considers that the plan, regime or policy should be accredited only:</p> <p>(a) during a particular period; or</p> <p>(b) while certain circumstances exist; or</p> <p>(c) while a certain condition is complied with.</p> <p>In such a case, the instrument of accreditation is to specify the period, circumstances or condition.</p>	No condition has been imposed on AIMWTMF to satisfy section 208A 222A, 245 and 265 under Part 13.
(7) The Minister must, in writing, revoke an accreditation if he or she is satisfied that a condition of the accreditation has been contravened.	

Part 13A

Section 303DC Minister may amend list	DEWHA assessment of the AIMWTMF
<p>(1) Minister may, by instrument published in the Gazette, amend 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>(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 DFWA submission sought comment on the annual reports/submission/ for the AIMWTMF and provided sufficient opportunity for consultation with other persons and organisations.</p> <p>A letter to the Hon Jon Ford MLC advises him 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 AIMWTMF made under section 303DC will be gazetted and made available on the DEWHA website.</p>

Part 16

Section 391 Minister must consider precautionary principle in making decisions	DEWHA assessment of the AIMWTMF
<p>(1) The Minister must take account of the precautionary principle in making a decision under section 303DC and/or section 303FN, to the</p>	<p>The precautionary principle must be considered when making a decision to include specimens on the List of Exempt Native Specimens</p>

extent he or she can do so consistently with the other provisions of this Act.	(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 Convention on International Trade of Endangered Species (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 Department of Fisheries Western Australia for the Abrolhos Islands & Mid West Trawl Managed Fishery

The material submitted by DFWA indicates that the AIMWTMF 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 the small number of operators, short season, restricted area of the fishery and gear restrictions 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 spawning season closures, ongoing stock assessment, catch rate trigger and data collection regimes, DEWHA considers that fishing operations are managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem. Management of the fishery has a history of reacting appropriately to threats to sustainability and DEWHA is confident that DFWA will continue to provide this high quality management.

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 five 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 legislated management regime 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 legislated management regime was accredited under Part 13 of the EPBC Act in March 2005. 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: AIMWTMF Assessment– Summary of Issues and Recommendations March 2008

	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, DEWHA needs to be advised of any changes that are made to the legislated 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>In its 2008 submission, the DFWA advised that there have been no material changes to the legislated management regime for the AIMWTMF; however some minor changes to the management arrangements have been implemented including the introduction of a high yield principle that closes the fishery in the event of low scallop catch rate. Where appropriate, DFWA should keep DEWHA informed of any future changes to the management arrangements for the fishery to ensure the 2008 export decision remains valid.</p>	<p>Recommendation 1: Operation of the AIMWTMF will be carried out in accordance with the <i>Abrolhos Islands and Mid West Trawl Limited Entry Fishery Notice 1993</i> made under the <i>Western Australian Fish Resources Management Act 1994</i>.</p> <p>Recommendation 2: DFWA to advise DEWHA of any intended material change to the AIMWTMF legislated management regime and management arrangements that could 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 include: a description of the fishery; management arrangements in place; research and monitoring outcomes; recent catch data for all sectors of the</p>	<p>Recommendation 3: DFWA to produce and present reports to DEWHA annually as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i>.</p>

	<p>fishery; status of target stock; interactions with protected species; impacts of the fishery on the ecosystem in which it operates; and information outlining progress in implementing recommendations resulting from the previous accreditation of the fishery (for a complete description of annual reporting requirements, see Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i> available from the DEWHA website at http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html).</p> <p>In addition to DFWA's annual <i>State of the Fisheries Report</i>, DFWA will submit an annual report providing updated, real-time responses to management issues and information on the progress against recommendations of the 2008 export approval. These reports will be provided in March each year beginning in March 2009.</p>	
3	<p><u>Comprehensive review of risk levels for all components of the fishery</u></p> <p>In the 2004 DFWA submission for the fishery, objectives, indicators, performance measures and management responses were detailed for major aspects of the fishery, which are reported against in the annual <i>State of the Fisheries Report</i> (using catch and catch rates). These performance measures were developed in 2002 and 2003, and included a risk assessment workshop conducted in August 2002.</p> <p>Given the length of time since the risk assessment and subsequent development of the 2004 submission, DEWHA recommend DFWA identify and review the risk levels for all components of the fishery and provide for appropriate consultation with relevant stakeholders (including recreational, indigenous, conservation and community groups). DFWA should then develop and implement appropriate measures to address and mitigate identified risks and maintain precautionary management principles to ensure the ongoing ecological sustainability of the fishery. Where appropriate, DFWA shall update or develop new objectives, indicators, performance measures, management responses and information requirements.</p> <p>Details and results of the review should be documented and made publicly available, to</p>	<p>Recommendation 4: By August 2009, DFWA to identify and review risk levels for target species, byproduct, bycatch (including protected species) and impacts on the environment for the AIMWTMF. DFWA to implement appropriate measures to ensure identified risks are addressed and minimised.</p>

	clearly articulate and justify management arrangements in place for the fishery. In addition, the review should consider the cumulative impacts on ecosystems of all fisheries in the region to ensure the fishery continues to progress towards ecological sustainability.	
4	<p><u>Performance measures for minor target species</u></p> <p>In the 2005 assessment of the fishery, a recommendation was made by DEWHA for DFWA to develop fishery specific objectives, linked to performance indicators and performance measures for the minor target species (western king prawn) and all byproduct species or species groups.</p> <p>In the risk assessment, DFWA assessed western king prawns and byproduct species as negligible due to low catches of less than 1 tonne per year. No byproduct has been recorded in the fishery from 2003-2005 and no prawns were recorded as landed in 2005 or 2006. While this rate of capture supports an assessment of negligible risk for western king prawns, DEWHA considers that DFWA should have a system in place, such as total acceptable catch range, capable of detecting a shift in targeting behaviour to western king prawns within the fishery, and potential change in risk rating. This system should trigger an appropriately precautionary management response(s) to ensure the sustainability of western king prawn stocks should effort for this species significantly increase.</p>	<p>Recommendation 5: Within 2 years DFWA to develop and implement a performance indicator(s) and performance measure(s) capable of detecting a shift in fishing effort to western king prawn that, when exceeded, triggers an appropriately precautionary management response to ensure stocks remain ecologically sustainable.</p>
5	<p><u>Bycatch Action Plan</u></p> <p>DFWA has indicated they are developing a BAP for the fishery. DEWHA recommends that this document be released for public comment, finalised and made publicly available as part of its implementation for the fishery.</p> <p>DEWHA considers the ongoing implementation of the BAP, including public reporting against its progress, to be a key objective for the fishery to ensure its impacts on bycatch</p>	<p>Recommendation 6: By March 2010, DFWA to finalise, adopt and implement the Bycatch Action Plan for the AIMWTMF, including ongoing review and progress reporting on its implementation.</p>

	(including protected species) and the marine environment are minimised.	
6	<p><u>Long-term trends in bycatch diversity and abundance</u></p> <p>In the 2005 assessment of the fishery, a recommendation was made for DFWA to review the current programs for the collection and analysis of bycatch and protected species data. In the 2008 submission, DFWA states that the preseason scallop surveys identify bycatch composition and that the small area of operation of the fishery provides protection to species that may be impacted by scallop fishing. While DEWHA agrees that the preseason surveys provide valuable information of bycatch composition in the fishery, fishing restricted to key habitats or small areas may not ensure protection for all species including species with low productivity and species that rely on habitats important for fishing.</p> <p>DEWHA notes DFWA's commitment to increasing the current knowledge on bycatch in the fishery, however considers the preseason surveys alone may be inadequate to monitor the long term trends in bycatch. DEWHA recommends DFWA collect information on the impact of the fishery on bycatch levels and species composition to identify long term trends in bycatch diversity, inform the ecological risk levels for bycatch species and assist the development and implementation of the BAP for the fishery.</p> <p>DEWHA acknowledges that the introduction of TEDs into the fishery has provided effective protection for turtles while also reducing the capture of large sharks and rays, and commends DFWA for the amendment to Research logbooks to allow recording of interactions with protected species by fishers.</p> <p>However, DEWHA notes the current lack of species-specific reporting of elasmobranchs taken as bycatch in the fishery, a key issue identified in the National Plan of Action for the Conservation and Management of Sharks.</p> <p>The results from the Fisheries Research and Development Corporation study</p>	<p>Recommendation 7: In conjunction with Recommendations 4 and 6, DFWA to develop and implement a program to identify long-term trends in bycatch diversity and abundance in the AIMWTMF.</p>

	<p><i>Development of biodiversity and habitat monitoring systems for key trawl fisheries in Western Australia</i> suggest an understanding of short and long term bycatch trends will inform future analysis of impacts of trawl fishing on the sand benthic habitats. The study concluded that species richness and abundance indices of the 20 most abundant fish bycatch species may provide a useful measure of habitat health and diversity in several WA trawl fisheries. A suitable long-term bycatch monitoring program in the fishery (with appropriate supporting studies) may also provide an improved understanding of impacts of trawling on sand benthic habitats in the fishery.</p>	
7	<p><u>Compliance risk assessment</u></p> <p>In the 2005 assessment of the fishery DFWA indicated that a compliance risk assessment would be conducted by the end of 2005. DFWA have indicated that this has not yet taken place, but that it is intended to be completed in due course.</p> <p>DEWHA considers that for the management arrangements to ensure the ecologically sustainable management of the fishery, it is important for DFWA to identify medium to high risk compliance and enforcement issues to ensure whether commercial fishers are abiding by the management arrangements. The completion of a compliance risk assessment for the fishery will enable DFWA to better direct available resources to further increase the effectiveness of limited enforcement and compliance activities.</p>	<p>Recommendation 8: By March 2010, DFWA to conduct a compliance risk assessment for the fishery and implement a compliance strategy to address any identified risks.</p>
8	<p><u>Managing exploratory fishing in the AIMWTMF</u></p> <p>In the 2005 assessment of the fishery DEWHA recommended DFWA define a robust process for any extension of trawling activity outside of historically productive scallop grounds including explicit consideration of the ecological effects of trawling on bycatch and benthic habitats and consultation with other stakeholder groups including conservation, recreational fishing and other commercial fishing sectors.</p> <p>DEWHA recognises the extensive work done by DFWA and industry to define the industry code of conduct that describes the protocol for exploratory fishing outside of</p>	<p>Recommendation 9: DFWA to monitor and report on the level of exploratory fishing in non traditional areas of the AIMWTMF. Where fishing effort in non-traditional areas increases, DFWA to ensure the impacts of fishing on bycatch and benthic habitats in these areas is considered in the management of the fishery.</p>

	<p>traditional fishing grounds. DEWHA has concerns about the potential impacts of this exploratory fishing including:</p> <ul style="list-style-type: none"> • the potential for fishing in non traditional areas to move into habitats more sensitive to fishing than the typical sand bottom targeted by scallop trawling; and • the bycatch composition of fishing in non traditional areas to vary significantly from pre-season surveys, the current mechanism for monitoring bycatch. <p>Monitoring and annual reporting on the extent of fishing in non traditional areas will be beneficial to the management of the AIMWTMF. Should an increase in effort in these areas be identified, DFWA need to ensure the management of the fishery considers the ecological impacts on bycatch and benthic habitats in these areas.</p>	
9	<p><u>Investigation of recruitment issues</u></p> <p>Scallop landings have varied dramatically over the last 15 years depending primarily on the strength of recruitment.</p> <p>Previous DFWA State of the Fisheries Reports suggests that recruitment strength oscillates between stocks of the SBSMF and the AIMWTMF. Furthermore, previous submissions by DFWA suggest that the drivers behind Abrolhos scallop recruitment are uncertain but may be driven by environmental factors such as the Leeuwin current. Previously DFWA has stated that one of the main measures for effective management of the fishery is the maintenance of spawning stock which relies heavily on the annual recruitment of scallop. DEWHA feels that management arrangements would benefit from a better understanding of the drivers behind scallop recruitment in Western Australia.</p> <p>The recently released Fisheries Management Paper 222 (FMP) Shark Bay Prawn and Scallop Fisheries-Draft Review Report highlighted three key areas that require further investigation that separately, or in combination, may have contributed to low</p>	<p>Recommendation 10: DFWA to continue to investigate the drivers of scallop recruitment and, where appropriate, develop and implement strategies to ensure the ongoing ecologically sustainable management of the AIMWTMF.</p>

<p>recruitment of scallops in the SBSMF. These are environmental conditions, inadequate spawning stock, and trawling negatively impacting on recruitment.</p> <p>DFWA have advised that they are proposing to undertake a FRDC project that will investigate the effect of trawling on scallop recruitment WA.</p>	
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Acronyms

AIMWTMF	Abrolhos Islands & Mid West Trawl Managed Fishery
BAP	Bycatch Action Plan
BRD	Bycatch Reduction Device
CITES	Convention on International Trade of Endangered Species of Wild Fauna and Flora
DEH	Department of the Environment and Heritage (now DEWHA)
DEWHA	Department of the Environment, Water, Heritage and the Arts
DFWA	Department of Fisheries Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESD	Ecological Sustainable Development
FMP	Fisheries Management Paper
FRDC	Fisheries Research and Development Corporation
FRM Act	<i>Fish Resources Management Act 1994</i>
FRM Regulations	<i>Fish Resources Management Regulations 1995</i>
LENS	List of Exempt Native Specimens
MOU	Memorandum Of Understanding
SBSMF	Shark Bay Scallop Managed Fishery
TED	Turtle Exclusion Device
TAC	Total Allowable Catch
WA	Western Australia