



**Australian Government**

---

**Department of Sustainability, Environment, Water, Population and Communities**

Part 13 Assessment of the  
**COMMONWEALTH SMALL PELAGIC FISHERY**

**August 2012**

© Commonwealth of Australia 2012

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the Commonwealth, available from the Department of the Environment, Water, Heritage and the Arts. Requests and inquiries concerning reproduction and rights should be addressed to:

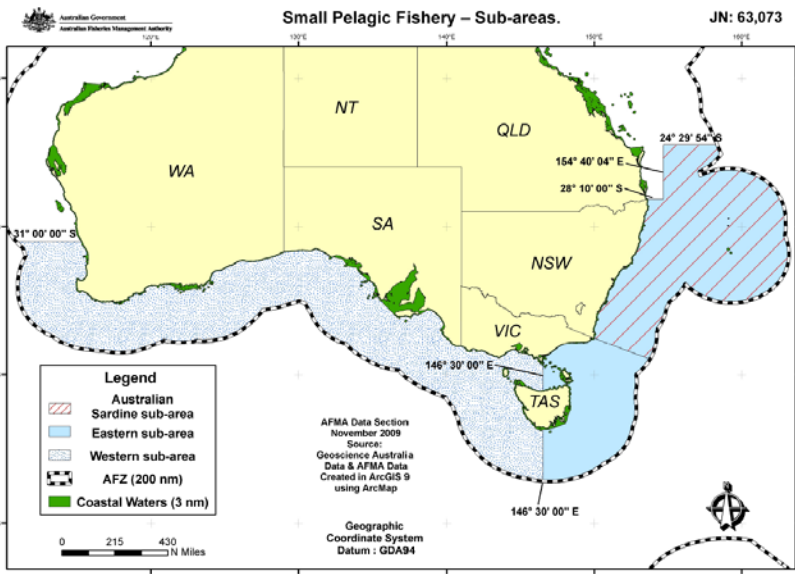
Assistant Secretary  
Marine Biodiversity and Biosecurity Branch  
Department of Sustainability, Environment, Water, Population and Communities  
GPO Box 787  
Canberra ACT 2601

#### **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.

While reasonable efforts have been made to ensure that the contents of this report are factually correct, the Australian Government does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this report. You should not rely solely on the information presented in the report when making a commercial or other decision.

**Table 1: Summary of the Commonwealth Small Pelagic Fishery**

<p><b>Publicly available information relevant to the fishery</b></p>	<ul style="list-style-type: none"> <li>• <i>Fisheries Management Act 1991 (Commonwealth)</i></li> <li>• <i>Fisheries Administration Act 1991(Commonwealth)</i></li> <li>• AFMA Assessment Report Small Pelagic Fishery 2003</li> <li>• Dept of Environment and Heritage Assessment of the Small Pelagic Fishery 2004</li> <li>• Department of the Environment and Heritage Assessment of the Small Pelagic Fishery 2006</li> <li>• AFMA Annual Status Report Small Pelagic Fishery Wildlife Trade Operation 2006</li> <li>• AFMA Annual Status Report Small Pelagic Fishery Wildlife Trade Operation 2007</li> <li>• <i>Dolphin and Seal interactions with mid-water trawling in the Commonwealth Small Pelagic Fishery, including an assessment of bycatch mitigation (Lyle and Willcox 2008)</i></li> <li>• Australian Fisheries Management Authority (AFMA) Strategic Assessment Report Small Pelagic Fishery March 2009</li> <li>• AFMA Status Report Small Pelagic Fishery Wildlife Trade Operation May 2009</li> <li>• AFMA Annual Status Report Small Pelagic Fishery Wildlife Trade Operation January 2009</li> <li>• <i>Small Pelagic Fishery Management Plan 2009</i></li> <li>• Department of the Environment, Water, Heritage and the Arts 2009 assessment report</li> <li>• ABARES Fishery Status Report 2010</li> <li>• Ecological Risk Management report for the mid-water trawl sector of the small pelagic fishery (AFMA March 2010)</li> <li>• Small Pelagic Fishery: Bycatch and Discarding Workplan 2011-2013</li> <li>• <i>The Commonwealth Small Pelagic Fishery: General background to the scientific issues (Buxton et al 2012)</i></li> </ul>
<p><b>Area</b></p>	 <p>The Small Pelagic Fishery operates in waters from Queensland to Lancelin, Western Australia and around Tasmania, and is divided into two management zones (east and west)</p>

<b>ABARES Fishery status</b>	Currently no Small Pelagic Fishery stocks have been identified as overfished. However, the <i>2010 ABARES Fishery Status Report</i> lists the status of western Redbait stocks as uncertain.
<b>Target Species</b>	<p>The species targeted in the fishery include:</p> <p>Jack Mackerels <i>Trachurus declivis</i>, <i>T. murphyi</i> and <i>T. symmetricus</i>;</p> <p>Australian Sardines <i>Sardinops sagax</i>;</p> <p>Blue Mackerel <i>Scomber australasicus</i>; and</p> <p>Redbait <i>Emmelichthys nitidus</i>.</p> <p>Information on the biology of these species can be found in the <i>2010 ABARES Fishery Status Report</i>.</p>
<b>Byproduct Species</b>	Barracouta ( <i>thyrsites atun</i> ), rubyfish ( <i>Plagiogeneion</i> spp), Skipjack Tuna ( <i>Katsuwonus pelamis</i> ), spotted warehou ( <i>Seriolella punctata</i> ) and Yellowtail Scad ( <i>Trachurus novaezelandiae</i> ).
<b>Gear</b>	Fishing in the Small Pelagic Fishery is currently limited to the methods of Purse Seine and Mid-Water Trawl only.
<b>Season</b>	There are no formal seasonal closures in the Small Pelagic Fishery.
<b>Commercial harvest tonnage</b>	Harvest levels vary widely between years: from 12,133 tonnes in 2005-06 (including 8,427 tonnes of redbait and jack mackerel taken by mid-water trawl and 3,706 tonnes of blue mackerel and Australian sardine by purse seine) to 184.5 tonnes in 2011-12 (mostly blue mackerel taken by purse seine).
<b>Value of commercial harvest</b>	Due to the small number of active operators in the Small Pelagic Fishery, this information is not publicly available.
<b>Take by other sectors</b>	<p>Species targeted in the Small Pelagic Fishery are taken by several other Commonwealth and state-managed fisheries, mainly the trawl sectors of the Southern and Eastern Scalefish and Shark Fishery, the Eastern Tuna and Billfish Fishery, the Western Tuna and Billfish Fishery, the New South Wales Ocean Haul Fishery and state-managed sardine fisheries.</p> <p>Estimates of recreational removals and Indigenous take from Small Pelagic Fishery stocks are not as reliable as commercial estimates, although there are certain programs in place to collect data from the recreational sector in New South Wales.</p> <p>Consistent with obligations under the management plan for the fishery and the Australian Government's Harvest Strategy policy, total fishing mortality on stocks are taken into account when determining sustainable catch limits for the fishery (that is, recreational fishing catch estimates, and catch taken in other jurisdictions, are deducted from the Total Allowable Catches set for the Small Pelagic Fishery).</p>
<b>Number of fishers</b>	There are 31 quota holders in the fishery. Since 2003, at most 12 and as few as 3 vessels have caught fish in any one year.

<b>Management arrangements</b>	<p>The fishery is currently managed under the <i>Small Pelagic Fishery Management Plan 2009</i> under the <i>Fisheries Management Act 1991</i>. Under the Management Plan and its associated regulations, directions and conditions, management arrangements include:</p> <ul style="list-style-type: none"> <li>• limited entry (must hold quota to legally fish);</li> <li>• 2 management zones;</li> <li>• annual Total Allowable Catch (TAC) levels for each of the target species in each zone, set in accordance with the Australian government harvest strategy policy;</li> <li>• individual transferable quota Statutory Fishing Rights allocated for each species in each zone to eligible persons;</li> <li>• mesh size restrictions for mid-water trawl gear used;</li> <li>• seal excluder devices fitted to mid-water trawl gear used;</li> <li>• by-catch action plan developed and regularly reviewed;</li> <li>• an AFMA approved seabird management plan for each trawl vessel in the fishery;</li> <li>• an operational vessel (satellite) monitoring system;</li> <li>• provision for observer coverage; and</li> <li>• mandatory reporting of interactions with protected species.</li> </ul> <p>Under the Management Plan, the fishery has adopted a stock-based approach, with Eastern and Western management zones defined based on research into the stock structure of Small Pelagic Fishery species. Separate stock assessments are undertaken to determine TACs for each zone.</p>
<b>Export</b>	<p>The main markets for Small Pelagic Fishery products are domestic, predominantly for Southern Bluefin Tuna ranching operations, though includes fishmeal, bait and livestock feed. Reportedly, there is development of an export market for human consumption.</p>
<b>By-catch</b>	<p>Current levels of bycatch in the Small Pelagic Fishery are minimal. Bycatch species are generally pelagic species including Barracouta and Spotted Warehou.</p> <p>The Small Pelagic Fishery is currently subject to a Bycatch and Discarding Workplan, which aims to reduce and maintain bycatch at a minimum.</p>
<b>Interaction with Protected Species<sup>1</sup></b>	<p>The Small Pelagic Fishery interacts with 3 main taxa: seals, dolphins and seabirds. The most prevalent interactions are with seals in the mid-water trawl off the coast of Tasmania.</p> <p><u>Seals and Dolphins</u></p> <p>In the 2004/05 season 25 dolphin captures by mid-water trawlers were recorded. After research into improving seal exclusion devices the number of dolphins and seals being caught reduced. Since 2005 no dolphin interactions and 10 seal interactions have been recorded in logbooks.</p> <p><u>Seabirds</u></p> <p>There have been no recent interactions recorded in logbooks or by observers. However, previous observer coverage has detected low levels of</p>

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

	bird interactions with both trawl and purse seine nets.
<b>Ecosystem Impacts</b>	<p>The target species in the Small Pelagic Fishery are recognised by AFMA as key prey species in the pelagic food web. Research into the role of the target species in the Small Pelagic Fishery has fed into the Harvest Strategy, which limits the maximum harvest rate at 20% of the spawning biomass (2012-13 TACs have been set below 10% of the estimated spawning biomass for each species).</p> <p>The current Bycatch and Discarding Workplan addresses the issue of reducing bycatch to a minimum, including protected species interactions. The Bycatch Action Plan also supports the formation of Codes of Practice. The purse seine sector has a voluntary code of practice covering bycatch issues.</p> <p>A Level 2 Ecological Risk Assessment (ERA), including a residual risk analysis has been completed for the Small Pelagic Fishery. A Rapid Level 3 ERA has also been finalised. These risk assessments are used to identify high risk and protected species in the Ecological Risk Management process for the fishery.</p>
<b>Impacts on CITES listed</b>	No specimens listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are permitted to be harvested in the fishery. Therefore no assessment of the Small Pelagic Fishery's impact on specimens listed under CITES has been conducted.

**Table 2 The Department of Sustainability, Environment, Water, Population and Communities' assessment of the Small Pelagic Fishery against the requirements of the EPBC Act related to decisions made under Parts 13**

**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 Part 13. A complete version of the EPBC Act can be found on the department's website.

**Part 13 - Division 1 Listed threatened species**

Section 208A Minister may accredit plans or regimes	The department's assessment of the Small Pelagic Fishery
<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 the Minister is <b>satisfied</b> 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</p>	<p>The Small Pelagic Fishery is managed under the <i>Small Pelagic Fishery Management Plan 2009</i>, in force under the <i>Fisheries Management Act 1991</i>.</p> <p>Since the previous Part 13 accreditation in 2007, significant improvements have been made to the management regime of the fishery (as described in Table 1 of this report) including introduction of a stock based management approach, individual transferable quota Statutory Fishing Rights for each species, requirement to use bycatch excluder devices and increased observer coverage.</p> <p>There have not been any reported interactions with listed threatened species in this fishery. However, the area of the fishery does overlap with the foraging area of Australian sea lions and some listed seabirds. While the likelihood of encounters with Australian sea lions and threatened seabirds may be low, the department considers that further gear restrictions, spatial closures, independent monitoring and reporting is essential to ensure that management arrangements continue to meet the requirements of Part 13 that all reasonable steps are being taken to prevent the killing or injuring of threatened species (see Part 13 Conditions, Table 3).</p> <p>Currently, evidence suggests that the fishery has no or minimal interactions with listed threatened species (including Australian sea</p>

or recovery in nature of the species.	lions). Therefore, the department considers the current operation of the fishery is not likely to adversely affect the survival or recovery in nature of any listed threatened species.
---------------------------------------	---

### Part 13 - Division 2 Migratory species

Section 222A Minister may accredit plans or regimes	The department's assessment of the Small Pelagic Fishery
<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 the Minister is <b>satisfied</b> 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 Small Pelagic Fishery is managed under the <i>Small Pelagic Fishery Management Plan 2009</i>, in force under the <i>Fisheries Management Act 1991</i>.</p> <p>Since the previous Part 13 accreditation in 2007, significant improvements have been made to the management regime of the fishery as described in Table 1 of this report.</p> <p>Although there have been only few reported interactions with listed migratory species in this fishery, the fishery does overlap the foraging area of listed migratory birds. While the likelihood of encounters with listed migratory species in this fishery may be low, the department considers that further gear restrictions, independent monitoring and reporting is essential to ensure that management arrangements continue to meet the requirements of Part 13 that all reasonable steps are being taken to prevent the killing or injuring of listed migratory species (see Part 13 Conditions, Table 3).</p> <p>Currently, evidence suggests that the fishery has no or minimal interactions with listed migratory species. Therefore, the department considers the current operation of the fishery is not likely to adversely affect the conservation status of a listed migratory species or a population of that species.</p>



## Part 13 - Division 3 Whales and other cetaceans

Section 245 Minister may accredit plans or regimes	The department's assessment of the Small Pelagic Fishery
<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 the Minister is <b>satisfied</b> 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 Small Pelagic Fishery is managed under the <i>Small Pelagic Fishery Management Plan 2009</i>, in force under the <i>Fisheries Management Act 1991</i>.</p> <p>Since the previous Part 13 accreditation in 2007, significant improvements have been made to the management regime of the fishery as described in Table 1 of this report.</p> <p>Although there have been only a few reported interactions with whales and other cetaceans in this fishery, the fishery does overlap the foraging area of some whales and other cetaceans, particularly dolphins. While the likelihood of encounters with cetaceans in this fishery may be low, the department considers that further gear restrictions, independent monitoring and reporting is essential to ensure that management arrangements continue to meet the requirements of Part 13 that all reasonable steps are being taken to prevent the killing or injuring of whales and other cetaceans (see Part 13 Conditions, Table 3).</p> <p>Currently, evidence suggests that the fishery has no or minimal interactions with whales and other cetaceans. Therefore, the department considers the current operation of the fishery is not likely to adversely affect the conservation status of a species of cetacean or a population of that species.</p>

## Part 13 - Division 4 Listed marine species

Section 265 Minister may accredit plans or regimes	The department's assessment of the Small Pelagic Fishery
<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 the Minister is <b>satisfied</b> 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 Small Pelagic Fishery is managed under the <i>Small Pelagic Fishery Management Plan 2009</i>, in force under the <i>Fisheries Management Act 1991</i></p> <p>Since the previous Part 13 accreditation in 2007, significant improvements have been made to the management regime of the fishery as described in Table 1 of this report.</p> <p>Although there have been only few reported interactions with listed marine species in this fishery, the fishery does overlap the foraging area of some listed marine species. While the likelihood of encounters with listed marine species in this fishery may be low, the department considers that further gear restrictions, independent monitoring, reporting and research is essential to ensure that management arrangements continue to meet the requirements of Part 13 that all reasonable steps are being taken to prevent the killing or injuring of listed marine species (see Part 13 Conditions, Table 3).</p> <p>Currently, evidence suggests that the fishery has no or minimal interactions with listed marine species. Therefore, the department considers the current operation of the fishery is not likely to adversely affect the conservation status of a listed marine species or a population of that species.</p>

**Part 13 - Division 8 Miscellaneous**

<b>Section 303AA Conditions relating to accreditation of plans, regimes and policies</b>	<b>The department's assessment of the Small Pelagic Fishery</b>
(1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265.	The department recommends that the Small Pelagic Fishery be accredited under sections 208A, 222A, 245 and 265.
(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: (a) during a particular period; or (b) while certain circumstances exist; or (c) while a certain condition is complied with.  In such a case, the instrument of accreditation is to specify the period, circumstances or condition.	The department recommends that conditions be imposed on the Small Pelagic Fishery under Part 13 (see Table 3).
(7) The Minister must, in writing, revoke an accreditation if he or she is satisfied that a condition of the accreditation has been contravened.	

**Table 3: Small Pelagic Fishery Assessment – Summary of Issues and Conditions September, 2012**

	Issue	Condition
1	<p><u>Gear restrictions</u></p> <p>The department's 2009 assessment noted that the fishery's protected species interactions included three main taxa: seals, dolphins and seabirds with the most prevalent interactions being with seals and dolphins in the mid-water trawl sector off the coast of Tasmania.</p> <p>An ecological risk management report developed by AFMA in 2009-10 identified that 218 threatened, endangered or protected species were potentially present within the total area of the fishery (3 sharks/rays, 78 seabird species, 49 marine mammals, 10 marine reptiles and 78 species of bony fish).</p> <p>Following the application of the level 2 residual risk guidelines methodology, 8 species remained at high risk. These included the Australian fur seal, and several dolphin species. In response, AFMA have imposed a requirement for bycatch excluder devices and a higher level of observer coverage.</p> <p>The department considers it important that demonstrably effective bycatch mitigation devices be used in the fishery to avoid interactions with protected species, particularly those that are known to have interacted with the fishery in the past such as dolphins, seals and seabirds.</p> <p>The potential introduction of a large mid-water trawl freezer vessel with different gear configuration, the ability to tow at greater speeds and capability to stay on a school for a greatly extended period introduces new uncertainties and potentially increases or introduces new risks.</p>	<p><b>Condition 1</b></p> <p>Large Scale Mid-Water Trawl Operations must:</p> <ul style="list-style-type: none"> <li>a. prior to fishing, have in place demonstrably effective and scientifically proven mitigation approaches and devices to the satisfaction of the Australian Fisheries Management Authority (<b>AFMA</b>), to minimise interactions with dolphins, seals, and seabirds, including gear handling and net setting rules. These mitigation devices must, as a minimum, include best practice seal excluder devices with top opening escape hatches or equivalent mechanisms.</li> <li>b. in the event of one or more dolphin mortalities as a result of the mid-water trawl fishing activities: <ul style="list-style-type: none"> <li>i. suspend fishing;</li> <li>ii. consult with any AFMA observer onboard and review the effectiveness of mitigation measures; and</li> <li>iii. not recommence fishing within 50 nautical miles of the mortality event.</li> </ul> </li> <li>c. prior to fishing, have a seabird management plan in place that has been approved by AFMA</li> </ul>

		<p>in consultation with the Department of Sustainability, Environment, Water, Population and Communities (the <b>Department</b>). The seabird management plan must:</p> <ul style="list-style-type: none"> <li>i. contain appropriate physical mitigation measures and requirements to manage offal discharge; and</li> <li>ii. be complied with by the vessel operator and crew during all mid-water trawl fishing activities.</li> </ul> <p>d. prior to fishing, have a seal management plan in place that has been approved by AFMA in consultation with the Department. The seal management plan must:</p> <ul style="list-style-type: none"> <li>i. contain gear handling and net setting rules to minimise the level of seal mortalities;</li> <li>ii. be complied with by the vessel operator and crew during all mid-water trawl fishing activities;</li> <li>iii. in the event of three seal mortalities in any one fishing shot, require the operator to consult with any AFMA observer onboard and review the effectiveness of mitigation measures before recommencing fishing; and</li> <li>iv. in the event of:</li> </ul>
--	--	---

		<p>A. three or more seal mortalities in each of three consecutive shots; or</p> <p>B. more than 10 seal mortalities within a 24 hour period of fishing; or</p> <p>C. more than 10 seal mortalities in one shot,</p> <p>require the operator to:</p> <p>D. suspend fishing;</p> <p>E. consult with any AFMA observer onboard and review the effectiveness of mitigation measures; and</p> <p>F. not recommence fishing within 50 nautical miles of the mortality event.</p>
2	<p><u>Closures to Protect Australian Sea lions</u></p> <p>Historically, mid-water trawling effort has been concentrated in the eastern part of the fishery, and there have been no reported interactions with Australian sea lions. Were mid-water trawling to be conducted on the shelf in the western part of the fishery, there would be potential for interactions with Australian sea lion colonies. This represents a (currently) unquantified risk, for which future research could be directed.</p> <p>The department considers it essential that areas of the fishery on the continental shelf in the vicinity of Australian sea lion colonies be closed to novel mid-water trawl fishing operations that have not previously operated in the fishery until such time as an appropriate risk assessment has been conducted. Essentially this would close the shelf area of the fishery between Kangaroo Island, SA and the</p>	<p>e. not fish in areas of the Fishery on the continental shelf which are in the Australian sea lion closure area. The area of the Australian sea lion closure is the part of the exclusive economic zone adjacent to the coast of Australia bounded by a notional line beginning at the intersection of the meridian of longitude 129° 00' E and the coast of Southern Australia, and running progressively:</p> <p>i. south along that meridian to the intersection with the 150 metre depth</p>

	Abrolhos Islands, WA.	<p>contour of the continental shelf;</p> <p>ii. generally easterly along the 150 metre depth contour to the point of intersection with the meridian of longitude 140° 05' E;</p> <p>iii. north along that meridian to the intersection with the coastline of South Australia; and</p> <p>iv. generally westerly along the coastline to the point where the line began,</p> <p>not including coastal waters of, or waters within the limits of, a State.</p>
3	<p><u>Observer coverage</u></p> <p>The department's 2009 assessment noted that a 13 month underwater camera research trial in the fishery in 2005-06 (Lyle and Willcox 2008) found that:</p> <ul style="list-style-type: none"> <li>• seals entered the body of the trawl in over half of all monitored fishing events (up to 70 per cent in Autumn/Winter), with an average of 9 seals being observed in the net on each event;</li> <li>• during the study 151 seals were sighted inside the net in the vicinity of the seal excluder device. The study estimated that there were 55 fishery induced seal mortalities, with the survival of 20 seals considered uncertain; and</li> <li>• all seal mortalities eventually fell out of the escape hatch of the net prior to the net being brought onboard the vessel, suggesting that fishers were unlikely to see the interactions with seals.</li> </ul> <p>The department also notes that the fishery, particularly the mid-water trawl</p>	<p>f. ensure there is an onboard observer at all times with 24 hour monitoring of mid-water trawl fishing activities and there is an underwater camera record of the operation of any bycatch excluder device at all times, and reviewed by an observer each day. The requirements under this Condition 1.f. will apply to 1 November 2013 with monitoring arrangements to apply after this date to be determined following a review by AFMA and the Department.</p>

	<p>component, has had a history of interactions with dolphins and seabirds. The 2009 assessment noted that independent observer coverage had detected low levels of bird interactions with trawl nets, including the deaths of seven EPBC Act listed migratory seabirds in 2006 (four short-tailed shearwaters and three flesh-footed shearwaters).</p> <p>The <i>National recovery plan for threatened albatrosses and giant petrels 2011-2016</i> developed in 2011 identified that the most pervasive threat to albatross and giant petrel survival was the '<i>accidental mortality and injury arising from interactions with human fishing activities</i>.' The recovery plan also notes the foraging area of a number of endangered albatross species overlap the fishery, particularly those species based on the Mewstone, Pedra Branca and Albatross Islands. The recovery plan notes that trawl fishing operations particularly threaten endangered seabirds.</p> <p>On this basis the department considers it important for any novel mid-water trawl fishing activity with the potential to increase the risk of interaction with protected species (including mortalities) to be monitored both above and below the surface to more accurately determine its level of interaction with bycatch species (including mortalities). This increased observer coverage would also assist in monitoring rare and unpredictable events such as any interaction with species such as dolphins.</p>	
4	<p><u>Reporting of interactions</u></p> <p>It is important to note that the fishery has been operating markedly below capacity in recent years, and particularly in the period immediately preceding the department's 2009 assessment. This, combined with the low (&lt;2% 2010 <i>ABARES Fishery Status Report</i>) observer coverage, resulted in there being an incomplete picture of the fishery's protected species interaction levels.</p> <p>Also of note is that there were no large mid water trawl freezer vessels operating</p>	<p>g. when fishing, report daily to AFMA on the level of protected species interactions, including mortalities.</p> <p>In order to manage potential impacts on protected species in the Small Pelagic Fishery, by mid-water trawl operators with a large scale, onboard</p>



<p>in the fishery when the department conducted its assessment in 2009 or when AFMA completed its last ecological risk assessment for the fishery in 2009-10.</p> <p>Understanding and reporting the protected species interactions for this fishery is therefore considered critical, particularly in light of the possible introduction of the <i>FV Margiris</i>.</p> <p>The department also expects AFMA to utilise the expertise of relevant experts and stakeholders to evaluate the levels of interaction, and consider further management approaches, as appropriate. This could be done through the Marine Mammal Working Group established by AFMA, or through a similar group.</p>	<p>processing facility on their vessel and the capacity to remain fishing at sea for an extended period, AFMA is to:</p> <p>In respect of Large Scale Mid-Water Trawl Operations, AFMA is to:</p> <ol style="list-style-type: none"> <li>if protected species interactions occur, report the interaction(s) to the Department within 24 hours of AFMA receiving the report from the vessel.</li> <li>make publicly available on a monthly basis summary reports of protected species interactions, including mortalities, within the first three months of this instrument being made, and on a quarterly basis thereafter.</li> <li>consider further management responses to mitigate protected species interactions as appropriate.</li> <li>in consultation with relevant scientific experts, the Marine Mammal Working Group or other fora as appropriate and community and non-government organisations, review on a quarterly basis the observed interactions with protected species by Large Scale Mid-Water Trawl Operators in the Fishery, and the appropriateness of the management response.</li> </ol>
---	--

5	<p><u>Further research</u></p> <p>The department notes that the target species in the fishery (Jack/Blue mackerel and red bait) continue to be key prey species in the pelagic food web and that research into the role of the target species in the fishery fed into the interim Harvest Strategy, which limited the maximum harvest rate at 20% of the spawning biomass. For species where stock assessments were not performed, catch-and-effort data and catch age structure are used to determine a precautionary recommended biological catch.</p> <p>It is possible that the introduction of a large mid water trawl freezer vessel under AFMA's current Management Plan may increase the risk of localised depletion (and potential flow on effects for the broader ecosystem) as such vessels can take a larger proportion of individual schools of small pelagic fish than has previously been possible. The department notes that AFMA has sought to offset this risk by setting more precautionary total allowable catch limits (&lt;10% of the estimated spawning biomass for each species), but that under the existing Commonwealth Harvest Strategy Policy there is potential for harvest rates to increase in the future.</p> <p>The department notes that AFMA has the ability to set Total Allowable Catches for a part of each sub-area (zone) in the fishery under subsection 17(2) of the <i>Small Pelagic Fishery Management Plan 2009</i>.</p> <p>In the absence of target species catches being determined for any part of a sub-area of the fishery, and the potential for harvest rates to be increased markedly from current levels, the department considers it important that research be undertaken on the likely risk of vessels such as the <i>FV Margiris</i> disrupting the feeding behaviour of dependant predatory species, particularly those listed under the EPBC Act.</p>	<p>e. drawing on the outcomes of existing or new research as appropriate and in consultation with the Department and relevant experts, assess and take into account any risk of more concentrated fishing activity disrupting the feeding behaviour of dependant predatory species, particularly protected species.</p>
---	--	---

## Acronyms

AFMA	Australian Fisheries Management Authority
BAP	Bycatch Action Plan
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoP	Code of Practice
DEWHA	Department of the Environment, Water, Heritage and the Arts
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPBC Regulations	<i>Environment Protection and Biodiversity Conservation Regulations 2000</i>
ERA	Ecological Risk Assessment
ERM	Ecological Risk Management
IMFP	Informally Managed Fisheries Permits
SFR	Statutory Fishing Rights
SPF	Small Pelagic Fishery
t	Tonnes
TAC	Total Allowable Catch
TCL	Trigger Catch Limit