



**Australian Government**

---

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

Assessment of the  
**Queensland Spanner Crab Fishery**

**January 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 Sustainability, Environment, Water, Population and Communities. Requests and inquiries concerning reproduction and rights should be addressed to:

Assistant Secretary  
Marine Biodiversity Policy 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 Sustainability, Environment, Water, Population and Communities of a commercial fishery against the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2<sup>nd</sup> Edition*. It forms part of the advice provided to the Minister for Sustainability, Environment, Water, Population and Communities on the fishery in relation to decisions under Part 13 and Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999*. The views expressed do not necessarily reflect those of the Minister for Sustainability, Environment, Water, Population and Communities 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.

## Contents

### **Table 1: Summary of the Queensland Spanner Crab Fishery .....1**

Table 1 contains a brief overview of the operation of the fishery including: the gear used, species targeted, byproduct species, bycatch species, annual catch, management regime and ecosystem impacts.

### **Table 2: Progress in implementation of recommendations made in the 2007 assessment of the Queensland Spanner Crab Fishery .....7**

Table 2 contains an update on the progress that has been made by the fishery's management agency in implementing the recommendations made in the 2007 assessment.

### **Table 3: The Department of Sustainability, Environment, Water, Population and Communities' assessment of the Queensland Spanner Crab Fishery against the requirements of the EPBC Act related to decisions made under Part 13 and Part 13A.....10**

Table 3 contains the department's assessment of the Queensland Spanner Crab Fishery management arrangements against all the relevant parts of the *Environment Protection and Biodiversity Conservation Act 1999* that the delegate must consider before making a decision.

### **The Department of Sustainability, Environment, Water, Population and Communities' recommendations to Fisheries Queensland for the Queensland Spanner Crab Fishery .....19**

This section contains the department's assessment of the Queensland Spanner Crab Fishery performance against the Australian Government's *Guidelines for the Ecologically Sustainable Management of Fisheries - 2<sup>nd</sup> Edition* and outlines the reasons the department recommends that product derived from the fishery be included in the list of exempt native specimens.

### **Table 4: Queensland Spanner Crab Fishery Assessment - Summary of Issues and Recommendations - January 2012 .....20**

Table 4 contains a description of the issues identified by the department with the current management regime for the Queensland Spanner Crab Fishery and outlines the proposed recommendations that would form part of the delegate's decision to include product from the fishery in the list of exempt native specimens.

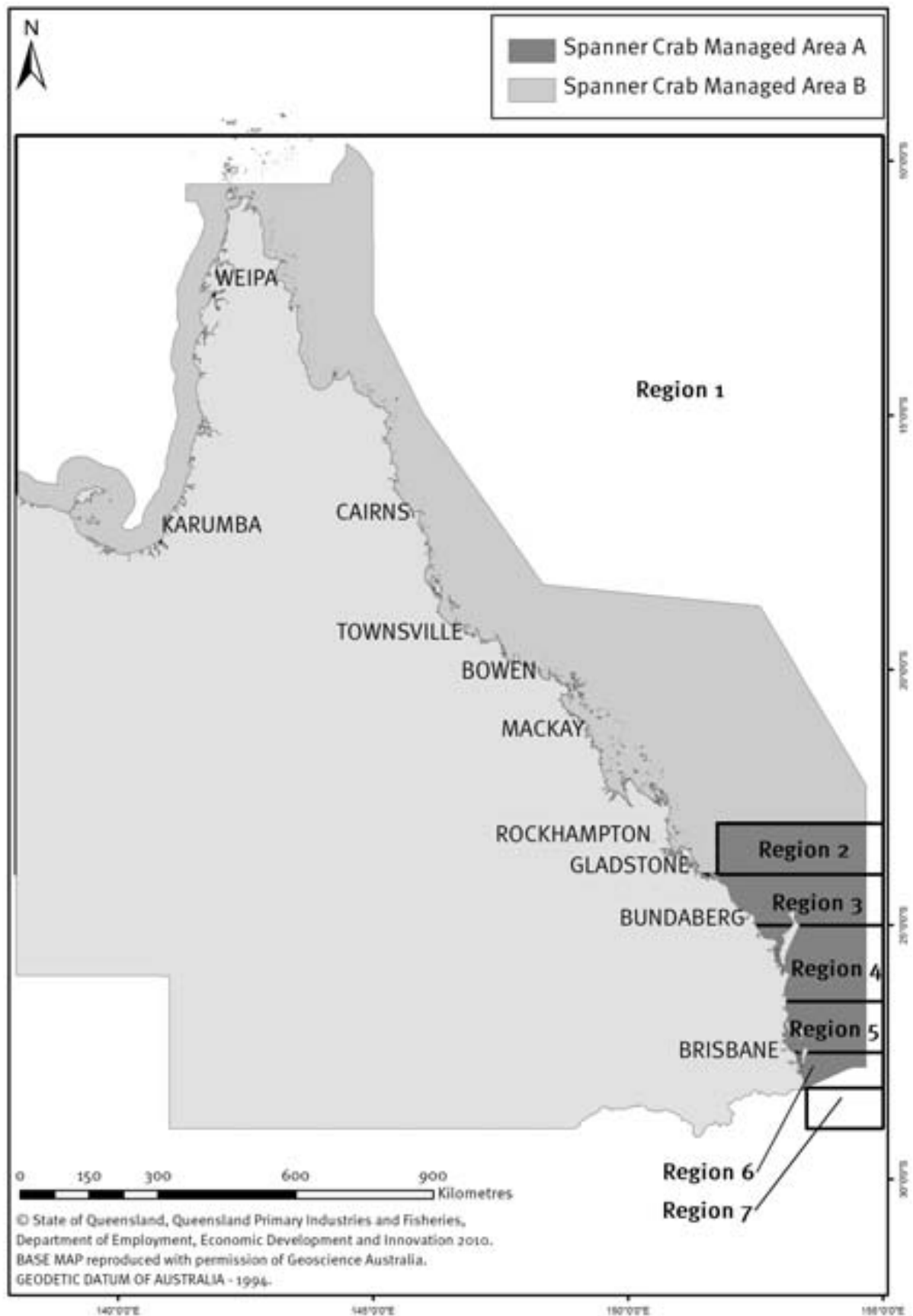
### **Acronyms .....21**



**Table 1: Summary of the Queensland Spanner Crab Fishery**

<b>Fishery description</b>	<p>The Queensland Spanner Crab Fishery is a single target species fishery harvesting spanner crabs using crab pots (also known as dillies).</p> <p>The fishery is managed through two management areas to which access is limited based on licence type. Commercial harvest licences endorsed with a 'C2' symbol allows access to Managed Area A (New South Wales border to Yeppoon) and a 'C3' fishery symbol provides access to Managed Area B (Yeppoon to the Northern Territory border). Almost all the take occurs in Managed Area A, which is managed through a total allowable catch and individual transfer quota system. Managed Area B is regulated by effort limits. Recreational fishers throughout Queensland are subject to spanner crab possession limits.</p>
<b>Publicly available information relevant to the fishery</b>	<ul style="list-style-type: none"> <li>• Queensland <i>Fisheries Act 1994</i></li> <li>• Queensland <i>Fisheries Regulation 2008</i></li> <li>• Queensland <i>Marine Parks Act 2004</i></li> <li>• <i>Great Barrier Reef Marine Park Act 1975</i></li> <li>• <i>Great Barrier Reef Marine Park Regulations 1983</i></li> <li>• Queensland Spanner Crab Fishery 2011, Progress against SEWPaC<sup>1</sup> recommendations</li> <li>• Queensland Spanner Crab Fishery 2010, Progress against SEWPaC recommendations</li> <li>• Queensland Spanner Crab Fishery 2009, Progress against SEWPaC recommendations</li> <li>• Annual Status Report 2011, Queensland Spanner Crab Fishery</li> <li>• Annual Status Report 2010, Queensland Spanner Crab Fishery</li> <li>• Annual Status Report 2009, Queensland Spanner Crab Fishery</li> <li>• Annual Status Report 2008, Queensland Spanner Crab Fishery</li> <li>• Annual Status Report 2007, Queensland Spanner Crab Fishery</li> </ul>
<b>Area</b>	<p>The area of operation of the Queensland Spanner Crab Fishery includes Queensland and Commonwealth waters off Queensland from the New South Wales border to the Northern Territory border (Figure 1, page 2).</p> <p>The commercial fishery is divided into two areas – Managed Area A (New South Wales border to Yeppoon) and Managed Area B (Northern Territory border to Yeppoon).</p> <p>Fisheries Queensland reports that the majority of fishing effort is concentrated in coastal waters of Management Area A (99.9% of catch in 2010).</p> <p>Under an Offshore Constitutional Settlement agreement between the Australian Government and the Queensland Government, the fishery is managed by Fisheries Queensland under Queensland legislation.</p>

<sup>1</sup> Department of Sustainability, Environment, Water, Populations and Communities (SEWPaC)



**Figure 1:** Map showing the two management areas of the Queensland Spanner Crab Fishery (Source: Fisheries Queensland).

<b>Target Species</b>	<p>Spanner crabs (<i>Ranina ranina</i>) have a widespread distribution in tropical marine waters. In Australia, spanner crabs are mostly found along the east coast from Yeppoon, Queensland to Nowra, New South Wales with a small population in southern Western Australia. Spanner crabs prefer sandy environments to depths of more than 100 metres, but may also be found in sheltered bays and surf zones.</p> <p>Spanner crabs are slow growing, taking an average of 6.5 years for females to reach maturity and 4.3 years for males. Slow growth suggests that this species would be slow to recover from over-exploitation.<sup>2</sup></p>
<b>Fishery status</b>	Fisheries Queensland reports in the <i>Stock Status of Queensland's Fisheries Resources 2011</i> that the Queensland spanner crab stock is not fully utilised. Current commercial catch levels are less than historically sustained levels.
<b>Byproduct Species</b>	Fisheries Queensland advises the department that there are no byproduct species retained in this fishery.
<b>Gear</b>	<p>Crab pots (also known as dillies) must have a frame with an area of no more than 1 metre square. The dilly's net should consist of only one layer of mesh that may be square or rectangular, but must be at least 25 millimetres. The net may not drop more than 10 centimetres below the frame. Inverted dillies (witches' hats) have been prohibited from use since April 2010 to reduce the risk of protected species interactions.</p> <p>Recreational fishers are permitted a maximum of four dillies, collapsible traps or crab pots.</p>
<b>Season</b>	The fishery operates from 20 December to 20 November. A spawning season closure applies to all fishers from midnight on 20 November to midnight on 20 December each year.
<b>Commercial harvest (2010)</b>	Fisheries Queensland reports that 1125 tonnes (t) of spanner crab was harvested in the commercial fishery in 2010. This represents 59 per cent of the total allowable catch (1923 t) for 2010. Data presented by Fisheries Queensland shows that from 2007 to 2010 total catch has remained relatively stable.
<b>Value of commercial harvest (2010)</b>	\$4.6 million

<sup>2</sup> Kirkwood JM, Brown IW, Gaddes SW, Hoyle S (2005) Juvenile length-at-age data reveal that spanner crabs (*Ranina ranina*) grow slowly. *Marine Biology* 147(2): 331-339.

<b>Take by other sectors</b>	<p><u>Other fisheries</u></p> <ul style="list-style-type: none"> <li>Fisheries Queensland reports that no other commercial Queensland fisheries are permitted to retain spanner crabs, and that spanner crabs do not contribute a significant proportion of bycatch in other fisheries.</li> </ul> <p><u>Recreational take</u></p> <ul style="list-style-type: none"> <li>Fisheries Queensland advised the department that approximately 2.5 t of spanner crab were taken by the recreational sector in 2005<sup>3</sup>. Recreational fishers are subject to a possession limit of 20 spanner crabs per trip.</li> </ul> <p><u>Charter and Indigenous harvest</u></p> <ul style="list-style-type: none"> <li>Fisheries Queensland reports that charter harvest was estimated to be 4.6 t for 2010, and that Indigenous harvest is considered to be negligible.</li> </ul>
<b>Commercial licences issued</b>	<p>The fishery is open to holders of a Commercial Harvest Fishery Licence endorsed with a 'C2' or 'C3' fishery symbol. In 2010, 232 licences were endorsed to operate in Management Area A (C2) and 346 licences were endorsed to operate in Management Area B (C3).</p> <p>A total of 62 licences (C2 and C3 combined) accessed the fishery during 2010.</p>
<b>Management arrangements</b>	<p>The fishery is managed by Fisheries Queensland under the <i>Queensland Fisheries Act 1994</i> and the <i>Queensland Fisheries Regulation 2008</i>.</p> <p>Management arrangements currently in place include:</p> <p><u>Output controls:</u></p> <ul style="list-style-type: none"> <li>Managed Area A is managed through an individual transferable quota system. An annual total allowable catch is set every two years;</li> <li>Managed Area B has a boat trip limit of 16 baskets<sup>4</sup>;</li> <li>there is a minimum size limit throughout the fishery - carapace length of 10 centimetres; and</li> <li>there is a prohibition on the take of egg bearing female spanner crabs throughout the fishery; and</li> </ul> <p><u>Input controls:</u></p> <ul style="list-style-type: none"> <li>spawning season closure (see Season above); and</li> <li>gear restrictions - the permitted number of dillies and trot line configuration is specified for each managed area: <ul style="list-style-type: none"> <li>in Managed Area A; a possession limit of 45 dillies with a maximum of 15 dillies per trot line applies. Commercial fishers operating in Managed Area A have the opportunity to apply for a General Fisheries Permit entitling the holder to use more than 45 dillies.</li> <li>in Managed Area B, a possession limit of 30 dillies with a maximum of 10 dillies per trot line applies.</li> </ul> </li> </ul>

<sup>3</sup> McInnes (2008) Experimental results from the fourth Queensland recreational fishing diary program (2005) Department of Primary Industries and Fisheries, Brisbane, Australia.

<sup>4</sup> Containers used to hold spanner crabs are commonly called 'baskets'. A 'basket' is an empty container that has internal dimensions of 571mm x 381mm x 305mm and has a capacity of approximately 66L.



<b>Export</b>	The majority of product is exported live to Asia.
<b>Bycatch</b>	According to Fisheries Queensland's long term monitoring program, bycatch rates in the Queensland spanner crab fishery are very low. Interactions include crabs, invertebrates and fish <sup>5</sup> . An ecological risk assessment undertaken by Fisheries Queensland in 2009 found the impacts of the Queensland Spanner Crab Fishery on bycatch to be negligible to minor <sup>6</sup> . Fishing gear was considered to be highly selective, and bycatch organisms were generally released alive with high survival expectancy.
<b>Interaction with Protected Species<sup>7</sup></b>	Due to the selective nature of the gear used in the Queensland Spanner Crab Fishery, the risk of interaction with protected species is likely to be low.
<b>Ecosystem Impacts</b>	<p>The outcomes of an ecological risk assessment undertaken by Fisheries Queensland (2009) indicated that impacts of the Queensland Spanner Crab Fishery on the physical environment are considered to be negligible to minor<sup>8</sup>. Dillies are deployed over sandy substrate and were considered to have negligible impact on the physical environment.</p> <p>The ecological risk assessment also found that the fishery posed a moderate risk to spanner crab stocks. At current fishing levels the fishery was considered by Fisheries Queensland to be not fully exploited. Fisheries Queensland anticipates that the annual re-assessment of total allowable catch will prevent fishing pressure from adversely impacting the long term recruitment of spanner crabs. Given Fisheries Queensland's process for setting total allowable catch, the department considers that the operation of the Queensland Spanner Crab Fishery is not likely to adversely affect the ecosystem role of spanner crabs in the environment.</p>

<sup>5</sup> McGilvray J, Brown I, Jebreen E, Smallwood D (2006) Fisheries Long Term Monitoring Program – Summary of spanner crab (*Ranina ranina*) survey results: 2000-2005. Department of Primary Industries and Fisheries, Queensland QI06095, Brisbane, Australia.

<sup>6</sup> Hill and Garland (2009) Ecological risk assessment of Queensland's blue swimmer, spanner and mud crab fisheries. Queensland Primary Industries and Fisheries, Brisbane, Queensland.

<sup>7</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.

<sup>8</sup> Hill and Garland (2009) Ecological risk assessment of Queensland's blue swimmer, spanner and mud crab fisheries. Queensland Primary Industries and Fisheries, Brisbane, Queensland.

<p><b>Impacts on World Heritage property and the Great Barrier Reef Marine Park</b></p>	<p>The assessment considered the possible impacts of fishery operations on the Great Barrier Reef Marine Park (GBRMP) and on the World Heritage values of the Great Barrier Reef World Heritage Area (GBRWhA).</p> <p>The fishery operates partially within the GBRMP. The GBRMP is subject to spatial zoning arrangements that are designed to protect the biodiversity and health of the marine park.</p> <p>Due to the benign harvesting method used in the fishery (dillies), spatial closures within the GBRMP, gear limits, total allowable catch limits, size restrictions, as well as the relatively low effort in this part of the fishery, significant impacts on the GBRMP or the World Heritage values of the GBRWhA are considered unlikely.</p> <p>On this basis the department considers that an action taken by an individual fisher, acting in accordance with the Queensland <i>Fisheries Regulation 2008</i> and the Queensland <i>Fisheries Act 1994</i>, would not be expected to have a significant impact on the GBRMP or on the World Heritage values of the GBRWhA.</p>
<p><b>Wetlands of International Importance</b></p>	<p>The assessment considered the possible impacts of the fishery's operation on the ecological character of the Moreton Bay, Great Sandy Strait, Shoalwater and Corio Bays and Bowling Green Bay Ramsar sites.</p> <p>While the area of the fishery encompasses these sites, area closures prevent commercial crab fishing throughout much of the four Ramsar sites. In addition, Fisheries Queensland has advised the department that the Queensland Spanner Crab Fishery generally operates offshore in sandy environments.</p> <p>Given the nature of operation of the fishery, gear specificity and annual total allowable catch, the department is satisfied that impacts on the ecological character of the Moreton Bay, Great Sandy Strait, Shoalwater and Corio Bays and Bowling Green Bay Ramsar sites are unlikely.</p> <p>On this basis the department considers that an action taken by an individual fisher, acting in accordance with the Queensland Spanner Crab Fishery management regime in force under the Queensland <i>Fisheries Regulation 2008</i> and the Queensland <i>Fisheries Act 1994</i>, would not be expected to have a significant impact on the ecological character of a Wetland of International Importance.</p>

**Table 2: Progress in implementation of recommendations made in the 2007 assessment of the Queensland Spanner Crab Fishery.**

Recommendation	Progress	Recommended Action
<p>1. DPI&amp;F to inform DEH of any intended amendments to the management arrangements that may affect sustainability of the target species or negatively impact on byproduct, bycatch, protected species or the ecosystem.</p>	<p>In 2008 Fishery Queensland advised the then Department of Environment, Water, Heritage and the Arts of the new scientific method for calculating total allowable catch in Managed Area A.</p> <p>In March 2010, Fisheries Queensland advised the Department of Sustainability, Environment, Water, Population and Communities that the Queensland <i>Fisheries (Spanner Crab) Management Plan 1999</i> had been repealed in March 2010. All relevant legislation pertaining to the operation of the fishery moved into the Queensland <i>Fisheries Regulation 2008</i>.</p>	<p>The Department of Sustainability, Environment, Water, Population and Communities considers that this recommendation is ongoing (see <b>Recommendation 2, Table 4</b>).</p>
<p>2. DPI&amp;F to ensure that management arrangements for the shared spanner crab stock with NSW take account of the results of the collaborative monitoring project, once available.</p>	<p>Fisheries Queensland reports that the long term monitoring project undertaken in conjunction with the New South Wales Department of Primary Industries is ongoing and that stock assessment data and independent survey data from both states are considered in the determination of total allowable catch for the Queensland Spanner Crab Fishery.</p>	<p>The department considers that this recommendation has been met.</p>

Recommendation	Progress	Recommended Action
<p>3. By the end of 2007 DPI&amp;F to develop a compliance strategy for the Spanner Crab Fishery addressing high risks identified in the compliance risk assessment, particularly those relating to data reliability.</p>	<p>Fisheries Queensland advised the department that a compliance risk assessment was conducted for the Queensland Spanner Crab Fishery in March 2006 and that the highest priority risks for enforcement and compliance identified included misreporting of catch data and providing inaccurate information.</p> <p>In response to the compliance risk assessment, the Queensland Boating and Fisheries Patrol developed a strategic operational plan in 2006 to address the identified risks.</p> <p>Fisheries Queensland reports that in the 2009 review of the compliance risk assessment and strategic operation plan, data reliability issues were found to be a negligible risk for the fishery. Fisheries Queensland has advised that they will continue to monitor data related issues in future compliance risk assessments.</p>	<p>The department considers that this recommendation has been met.</p>
<p>4. By the end of 2008, DPI&amp;F to develop an improved method of estimating abundance of the spanner crab stock that takes into account relevant information on the biological characteristics of spanner crabs, changing fisher behaviour and increased effort in the fishery.</p>	<p>Fisheries Queensland undertook a review of the uncertainty surrounding stock assessment of the Queensland Spanner Crab Fishery in 2009. This review resulted in the development of a new process for setting total allowable catch limits for the Queensland spanner crab harvest that takes into account independent survey data, species specific biological information, as well as logbook catch and effort statistics from the combined New South Wales / Queensland spanner crab stock<sup>9,10</sup>.</p>	<p>The department considers that this recommendation has been met.</p>

<sup>9</sup> Dichmont, C and Brown, I (2010) A case study in successful management of a data-poor fishery using simple decision rules: the Queensland Spanner Crab Fishery. *Marine and Coastal Fisheries: Dynamics, Management and Ecosystem Science*. 2: 1-13.

<sup>10</sup> O'Neil MF, Campbell AB, Brown IW & Johnston R (In Press) Using catch rate data for simple cost effective quota setting in the spanner crab (*Ranina ranina*) fishery, Australia. *ICES Journal Marine Science*. 67:1538-1552.

Recommendation	Progress	Recommended Action
<p>5. DPI&amp;F to undertake an assessment of the impact of operations under GFPs that takes into account the impact of the operations on the target species and broader ecosystem and cumulative impacts of the permits issued, and incorporate this as part of the next review of the Spanner Crab Management Plan.</p>	<p>General fisheries permits allow individual fishers in the Queensland Spanner Crab Fishery to use more than the 45 dillies stipulated in the Queensland <i>Fisheries Regulation 2008</i>.</p> <p>Fisheries Queensland informed the department that the impact of general fisheries permits was assessed by Fisheries Queensland in 2009 as part of the reassessment of the way in which total allowable catch is calculated. Fisheries Queensland concluded that the new method for determining total allowable catch adequately takes into account the use of additional gear because general fisheries permits did not increase individual or total harvest (capped by individual transferable quota and total allowable catch limits) and therefore did not provide additional pressure on the stock.</p> <p>The use of excess gear was also considered in terms of its impact on the environment and Fisheries Queensland deemed there to be no additional negative impacts on the environment.</p>	<p>The department considers that this recommendation has been met.</p>

**Table 3: The Department of Sustainability, Environment, Water, Population and Communities’ assessment of the Queensland Spanner Crab Fishery against the requirements of the EPBC Act related to decisions made under Parts 13 and 13A.**

**Please Note** – 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 and Part 13A. A complete version of the EPBC Act can be found at <http://www.comlaw.gov.au/>.

**Part 13**

<b>Division 1 Listed threatened species</b> <b>Section 208A Minister may accredit plans or regimes</b>	<b>The department’s assessment of the Queensland Spanner Crab Fishery</b>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p style="padding-left: 40px;">(c) 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 <b>satisfied</b> 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 Queensland Spanner Crab Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the Queensland Spanner Crab Fishery was most recently accredited under Part 13 of the EPBC Act in January 2007 and reaccredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the Queensland <i>Fisheries Regulation 2008</i>. In January 2011 the Part 13 instrument was remade following the repeal of the Queensland <i>Fisheries (Spanner Crab) Management Plan 1999</i>. The department considers that the management regime for the Queensland Spanner Crab Fishery continues to require fishers to take all reasonable steps to ensure that listed threatened species are not killed or injured as a result of the fishing.</p> <p>Due to the selective gear used (dillies), the risk of interactions with threatened species is likely to be low. In addition, the ecological risk assessment undertaken by Fisheries Queensland in 2009 indicated that the operations of the Queensland Spanner Crab Fishery pose negligible to minor risks to threatened species with which the fishery may interact. Therefore, the department considers the current operation of the Queensland Spanner Crab Fishery is not likely to adversely affect the</p>

	survival or recovery in nature of any listed threatened species.
--	--

**Part 13** (*cont.*)

<b>Division 2 Migratory species</b> <b>Section 222A Minister may accredit plans or regimes</b>	<b>The department's assessment of the Queensland Spanner Crab Fishery</b>
<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> <ol style="list-style-type: none"> <li>i. made by a State or self-governing Territory; and</li> <li>ii. in force under a law of the State or self-governing Territory;</li> </ol> <p>if <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 Queensland Spanner Crab Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the Queensland Spanner Crab Fishery was most recently accredited under Part 13 of the EPBC Act in January 2007 and reaccredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the Queensland <i>Fisheries Regulation 2008</i>. In January 2011 the Part 13 instrument was remade following the repeal of the Queensland <i>Fisheries (Spanner Crab) Management Plan 1999</i>. The department considers that the management regime for the Queensland Spanner Crab Fishery continues to require fishers to take all reasonable steps to ensure that listed migratory species are not killed or injured as a result of the fishing.</p> <p>Due to the selective gear used (dillies), the risk of interactions with listed migratory species is likely to be low. In addition, the ecological risk assessment undertaken by Fisheries Queensland in 2009 indicated that the operations of the Queensland Spanner Crab Fishery pose negligible to minor risks to listed migratory species with which the fishery may interact. Therefore, the department considers the current operation of the Queensland Spanner Crab Fishery is not likely to adversely affect the conservation status of any listed migratory species or a population of that species.</p>

**Part 13** (*cont.*)

<b>Division 3 Whales and other cetaceans</b> <b>Section 245 Minister may accredit plans or regimes</b>	<b>The department's assessment of the Queensland Spanner Crab Fishery</b>
<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> <p>i. made by a State or self-governing Territory; and</p> <p>ii. in force under a law of the State or self-governing Territory;</p> <p>if <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 Queensland Spanner Crab Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the Queensland Spanner Crab Fishery was most recently accredited under Part 13 of the EPBC Act in January 2007 and reaccredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the Queensland <i>Fisheries Regulation 2008</i>. In January 2011 the Part 13 instrument was remade following the repeal of the Queensland <i>Fisheries (Spanner Crab) Management Plan 1999</i>. The department considers that the management regime for the Queensland Spanner Crab Fishery continues to require fishers to take all reasonable steps to ensure that whales and other cetaceans are not killed or injured as a result of the fishing.</p> <p>Due to the selective gear used (dillies), the risk of interactions with any whales and other species of cetacean is likely to be low. In addition, the ecological risk assessment undertaken by Fisheries Queensland in 2009 indicated that the operations of the Queensland Spanner Crab Fishery pose negligible to minor risks to whales and other cetaceans with which the fishery may interact. Therefore, the department considers the current operation of the Queensland Spanner Crab Fishery is not likely to adversely affect the conservation status of any species of cetacean or a population of that species.</p>



**Part 13** (*cont.*)

<b>Division 4 Listed marine species</b> <b>Section 265 Minister may accredit plans or regimes</b>	<b>The department's assessment of the Queensland Spanner Crab Fishery</b>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p class="list-item-l1">(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <p class="list-item-l2">i. made by a State or self-governing Territory; and</p> <p class="list-item-l2">ii. in force under a law of the State or self-governing Territory;</p> <p>if <b>satisfied</b> that:</p> <p class="list-item-l1">(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 class="list-item-l1">(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 Queensland Spanner Crab Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the Queensland Spanner Crab Fishery was most recently accredited under Part 13 of the EPBC Act in January 2007 and recredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the Queensland <i>Fisheries Regulation 2008</i>. In January 2011 the Part 13 instrument was remade following the repeal of the Queensland <i>Fisheries (Spanner Crab) Management Plan 1999</i>. The department considers that the management regime for the Queensland Spanner Crab Fishery continues to require fishers to take all reasonable steps to avoid interactions with listed marine species.</p> <p>Due to the selective gear used (dillies), the risk of interactions with a listed marine species is likely to be low. In addition, the ecological risk assessment undertaken by Fisheries Queensland in 2009 indicated that the operations of the Queensland Spanner Crab Fishery pose negligible to minor risks to listed marine species with which the fishery may interact. Therefore, the department considers the current operation of the Queensland Spanner Crab Fishery is not likely to adversely affect the conservation status of a listed marine species or a population of that species.</p>

**Part 13** (*cont.*)

<b>Section 303AA Recommendations relating to accreditation of plans, regimes and policies</b>	<b>The department's assessment of Queensland Spanner Crab 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 management regime for the Queensland Spanner Crab 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: <ul style="list-style-type: none"><li>(a) during a particular period; or</li><li>(b) while certain circumstances exist; or</li><li>(c) while a certain condition is complied with.</li></ul> In such a case, the instrument of accreditation is to specify the period, circumstances or condition.	The department considers that no conditions are required for the accreditation of the management regime for the Queensland Spanner Crab Fishery 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 303BA Objects of Part 13A

(1) The objects of this Part are as follows:

- (a) to ensure that Australia complies with its obligations under CITES<sup>11</sup> 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.

---

<sup>11</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora

## Part 13A

Section 303DC Minister may amend list	The department's assessment of the Queensland Spanner Crab
<p>(1) Minister may, by instrument published in the <i>Gazette</i>, amend the list referred to in section 303DB (list of exempt native specimens) by:</p> <ul style="list-style-type: none"><li>(a) including items in the list; or</li><li>(b) deleting items from the list; or</li><li>(c) imposing a condition or restriction to which the inclusion of a specimen in the list is subject; or</li><li>(d) varying or revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or</li><li>(e) correcting an inaccuracy or updating the name of a species.</li></ul>	
<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>No assessment of the Queensland Spanner Crab Fishery has been carried out under Part 10 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. The objects of Part 13A, which are set out above 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>The department considers that the amendment of the list of exempt native specimens to include product taken in the Queensland Spanner Crab Fishery until 3 February 2017 would be consistent with the provisions of Part 13A as:</p> <ul style="list-style-type: none"> <li>▪ the fishery will not harvest any CITES listed species;</li> <li>▪ there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way (see Table 1);</li> <li>▪ the operation of the Queensland Spanner Crab Fishery during the period of the recommended inclusion in the list of exempt native specimens is unlikely to be unsustainable or threaten biodiversity; and</li> <li>▪ the <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> do not specify fish as a class of animal in relation to the welfare of live specimens.</li> </ul>
<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"> <li>(a) must consult such other Minister or Ministers as the Minister considers appropriate; and</li> <li>(b) must consult such other Minister or Ministers of each State and self-governing Territory as the Minister considers appropriate; and</li> <li>(c) may consult such other persons and organisations as the Minister considers appropriate.</li> </ul>	<p>The department considers that the consultation requirements have been met. The submission from Fisheries Queensland was released for public comment from 1 November 2011 to 30 November 2011. The public comment period sought comment on:</p> <ul style="list-style-type: none"> <li>▪ the proposal to amend the list of exempt native specimens to include product derived from the Queensland Spanner Crab Fishery; and</li> <li>▪ Fisheries Queensland's submission.</li> </ul> <p>No public comments were received.</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 Queensland Spanner Crab Fishery made under section 303DC will be gazetted and made available on the department's website.</p>

## Part 16

<b>Section 391 Minister must consider precautionary principle in making decisions</b>	<b>The department's assessment of the Queensland Spanner Crab Fishery</b>
(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 department has taken into account the precautionary principle in preparing its advice to you in relation to amendment of the list of exempt native specimens under section 303DC.
(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.	

**The Department of Sustainability, Environment, Water, Population and Communities' final recommendations to Fisheries Queensland for the Queensland Spanner Crab Fishery**

The material submitted by Fisheries Queensland indicates that the Queensland Spanner Crab Fishery operates in accordance with the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries - 2<sup>nd</sup> Edition*.

Since the previous EPBC Act assessment of the fishery in 2007, Fisheries Queensland has:

- developed a new scientifically based method for determining total allowable catch that takes into account the shared stocks with New South Wales, relevant biological characteristics of spanner crabs and changes in effort;
- reviewed the compliance management strategy for the fishery; and
- assessed the cumulative impacts of General Fisheries Permits on the target species and broader ecosystem.

The department considers that the management measures in place in the Queensland Spanner Crab Fishery are sufficient to ensure that the fishery is conducted in a manner that does not lead to overfishing and that stocks are not currently overfished. The commercial fishery is divided into two separate management areas. Managed Area A (south of Yeppoon) has an annual total allowable catch and individual transferable quota system that is reviewed annually. Managed Area B (north of Yeppoon) is subject to trip limits.

Additional management measures include:

- minimum size limits;
- spawning season closures;
- gear limits for commercial and recreational fishers;
- implementation of an ecological risk assessment;
- restrictions on the harvest of egg bearing females; and
- possession limits for recreational fishers.

Taking into account the management measures listed above, the department also considers that fishing operations are managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

Given these management measures the department considers that product taken in the Queensland Spanner Crab Fishery should be included in the list of exempt native specimens under Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999* until 3 February 2017. To ensure that the decisions for the Queensland Spanner Crab Fishery under the EPBC Act continue to be valid, the recommendations listed in Table 4 have been made.

**Table 4: Queensland Spanner Crab Fishery Assessment – Summary of Issues and Recommendations January 2012**

ISSUE	Recommendation
<p><u>General Management</u></p> <p>Export decisions relate to the arrangements in force at the time of the decision. To ensure that these decisions remain valid and export approval continues uninterrupted, the Department of Sustainability, Environment, Water, Population and Communities 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 byproduct, bycatch, protected species or the ecosystem.</p>	<p><b>Recommendation 1:</b> Operation of the Queensland Spanner Crab Fishery will be carried out in accordance with the management regime under the <i>Queensland Fisheries Act 1994</i> and <i>Queensland Fisheries Regulation 2008</i>.</p> <p><b>Recommendation 2:</b> Fisheries Queensland to advise the Department of Sustainability, Environment, Water, Population and Communities of any intended amendments to the Queensland Spanner Crab Fishery legislated management regime and management arrangements that could affect the criteria on which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are based.</p>
<p><u>Annual reporting</u></p> <p>It is important that reports be produced and presented to the Department of Sustainability, Environment, Water, Population and Communities 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 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 assessment 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 - 2<sup>nd</sup> Edition</i> available from the department's website at <a href="http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html">http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html</a>).</p>	<p><b>Recommendation 3:</b> Fisheries Queensland to produce and present reports to the Department of Sustainability, Environment, Water, Population and Communities annually as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2<sup>nd</sup> Edition</i>.</p>



## Acronyms

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DEH	Department of the Environment and Heritage
DPI&F	Queensland Department of Primary Industries and Fisheries
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GBRMP	Great Barrier Reef Marine Park
GBRWHA	Great Barrier Reef World Heritage Area
NSW	New South Wales
QSCF	Queensland Spanner Crab Fishery
t	tonnes
TAC	total allowable catch