



**Australian Government**

---

**Department of the Environment and Water Resources**

Assessment of the  
**East Coast Tropical Rock Lobster Fishery**

December, 2007

© Commonwealth of Australia 2007

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

ISBN: 978-0-642-55405-5

**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*. 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 East Coast Tropical Rock Lobster Fishery (ECTRLF)**

<p><b>Publicly available information relevant to the fishery</b></p>	<ul style="list-style-type: none"> <li>• Queensland (QLD) <i>Fisheries Act 1994</i>.</li> <li>• QLD <i>Fisheries Regulation 1995</i>.</li> <li>• QLD <i>Marine Parks Act 2004</i>.</li> <li>• Annual Status Report 2005 – QLD East Coast Tropical Rock Lobster Fishery.</li> <li>• Annual Status Report – QLD East Coast Tropical Rock Lobster Fishery, January 2007 (reporting for the 2005 calendar year).</li> <li>• Annual Status Report – QLD East Coast Tropical Rock Lobster Fishery, 2007 (reporting for the 2006 calendar year).</li> <li>• Assessment of the Queensland East Coast Tropical Rock Lobster Fishery, November 2004 (Department of Environment and Heritage).</li> <li>• An Ecological Assessment of Queensland’s East Coast Tropical Rock Lobster Fishery, June 2004 (Department of Primary Industries and Fisheries).</li> </ul>
<p><b>Area</b></p>	<p>Major area of the commercial fishery extends along the east coast of Queensland from Cape York (10° 41’ S) to Cape Melville (14° S) and out to the limits of the Australian Fishing Zone (AFZ). Most fishing activity occurs in World Heritage Areas within the Great Barrier Reef Marine Park (GBRMP). The commercial fishery also includes Queensland tidal waters of the Gulf of Carpentaria south of 10° 41’ S and out to 25 nautical miles offshore. The recreational tropical rock lobster fishery extends along the entire Queensland east coast out to the AFZ limit.</p>
<p><b>Fishery status</b></p>	<p>Preliminary maximum sustainable yield (MSY) estimate of 170 t (Pitcher <i>et al.</i>, 2005). Catches in 2004 (180 t) and 2006 (188 t) have been slightly higher than the preliminary MSY estimate. Further stock assessment outcomes, incorporating catch and effort data up to 2007, indicate that MSY is significantly higher than 200 t.</p> <p>Likely to be part of the same stock as the Torres Strait Tropical Rock Lobster Fishery (TSTRLF). In 2004 and 2005 the Bureau of Rural Sciences (BRS) classified the TSTRLF as ‘overfished’. In 2006 this was updated to ‘not overfished’, with an ‘uncertain’ status in regard to overfishing. Spawning population in ECTRLF likely source to re-stock Torres Strait population.</p>
<p><b>Target Species</b></p>	<p>Tropical rock lobster (<i>Panulirus ornatus</i>). Also known as the ornate rock lobster.</p>
<p><b>Byproduct Species</b></p>	<p>Only permitted byproduct species are crayfish and other rock lobsters. Very minor take (less than 1% of total catch) of 3 other tropical rock lobster species – <i>Panulirus versicolor</i>, <i>P. longipes fermorostringa</i> and <i>P. penicillatus</i> – for frozen tail market.</p>
<p><b>Gear</b></p>	<p>Hand collection or by nooses by commercial divers using hookah, SCUBA or free diving<sup>1</sup>. Hookah and other breathing apparatus only permitted for commercial operations. Collection is mainly for live product market. Spear guns and hand spearing also permitted for both</p>

<sup>1</sup> Hookah are air hoses used by divers

	<p>commercial and recreational sectors.</p> <p>Divers work from tenders (~5 m) to a mother ship (up to 20 m). Limitations on number of tenders and divers on each licence.</p>
<b>Season</b>	Seasonal closure 1 October – 31 January. Higher catch rates from July to September.
<b>Commercial harvest (2004-2006)</b>	<p>2004: 181 t</p> <p>2005: 137 t</p> <p>2006: 188 t</p> <p>The total catch in 2006 was higher than that of 2005, however, catch rates were substantially lower. While effort was also higher than in 2005, it was still below the 2000-05 average (4100 tender days). DPI&amp;F accounts the increase in catch to the fleet spending a relatively longer time on the east coast as low catch rates in the Torres Strait were experienced.</p>
<b>Commercial Gross Value of product 2006</b>	\$7.8 million.
<b>Take by other sectors</b>	Recreational harvest unquantified, but believed to be minimal due to the remoteness of the fishery. Harvest for traditional purposes is also unquantified but believed to be small. Possession and size limits apply to recreational sector.
<b>Commercial licences issued 2006</b>	<p>28 primary vessels licenses (15 active) that employ 93 tender vessel endorsements.</p> <p>19 primary vessel licences have dual TSTRLF and ECTRLF endorsements.</p>
<b>Management arrangements</b>	<p>Input and output controlled through:</p> <ul style="list-style-type: none"> <li>• seasonal closure – 1 October to 31 January (commercial and recreational sectors);</li> <li>• limited entry;</li> <li>• vessel restrictions, including size constraints, number of tenders, restrictions on the operating distance between tender and primary vessel and number of operators per vessel;</li> <li>• minimum size limit of 115 mm tail length (90 mm carapace length) (commercial and recreational sectors);</li> <li>• prohibition on taking mated or egg bearing females (commercial and recreational sectors);</li> <li>• gear restrictions; and</li> <li>• in-possession limits, dependent on location (recreational sector).</li> </ul>
<b>Export</b>	Predominantly live lobster market to Hong Kong, China and Taiwan. Some export of frozen tails.
<b>Bycatch</b>	Nil.
<b>Interaction with Protected Species</b>	No interactions recorded.
<b>Ecosystem Impacts</b>	Considered low, given hand harvest methods.

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

<b>Condition</b>	<b>Progress</b>	<b>Recommended Action</b>
Operation in accordance with the management regime.	The fishery has operated in accordance with the legislated management regime over the course of the current export approval.	This condition has been met and will continue to apply under the new Wildlife Trade Operation (WTO) declaration for this fishery for the next three years ( <b>WTO Condition 1</b> ).
<p>Annual reporting on the following:</p> <ul style="list-style-type: none"> <li>• Progress on implementation of the recommendations;</li> <li>• Status of the fishery and annual catch and effort information;</li> <li>• Performance against objectives, performance measures and reference points once developed; and</li> <li>• Research undertaken or completed relevant to the fishery.</li> </ul>	Annual status reports for the ECTRLF were prepared in 2005, 2006 and 2007. These reports are publicly available from the Department of Primary Industries and Fisheries (DPI&F) website. The reports contain information on progress in implementing recommendations, catch and effort trends and research undertaken or completed relevant to the fishery. DPI&F has developed a draft Performance Measurement System (PMS) for the ECTRLF that includes performance measures and reference points for key target species and ecosystem impacts. DPI&F will report on the performance of the ECTRLF against the performance measures in the annual status reports.	The Department of the Environment, Water, Heritage and the Arts (DEWHA) considers that this condition has been met and notes that, as part of the new WTO declaration for this fishery, this condition remains in force for a further three years ( <b>WTO Condition 3</b> ).
<b>Recommendation</b>	<b>Progress</b>	<b>Recommended Action</b>
DPI&F to inform the Department of the Environment and Heritage (DEH, now the Department of the Environment, Water, Heritage and the Arts) of any intended amendment to the management arrangements that may affect the sustainability of the target species or negatively impact on byproduct, bycatch, protected species or the ecosystem.	DPI&F report that there have been no changes to the management regime of the ECTRLF since the last assessment.	DEWHA expects that DPI&F will advise of any changes to the management regime in the future. This remains a condition in force under this new export approval ( <b>WTO Condition 2</b> ).
DPI&F to continue to ensure that consultative processes are conducted in a	The Harvest Management Advisory Committee (Harvest MAC) met three times during the period 2005 to 2006.	DEWHA considers that this recommendation has been met. Ongoing

<p>manner that enables all stakeholders adequate opportunity for input into the management arrangements essential for the sustainability of the fishery.</p>	<p>Harvest MAC meetings provide a consultative mechanism for all interested stakeholders to provide input into the management arrangements for the ECTRLF.</p>	<p>meetings of Harvest MAC and broader consultation will be important for the ECTRLF in 2007 and 2008 given the changes to management arrangements that DPI&amp;F intend to introduce.</p>
<p>By the end of 2006, DPI&amp;F to develop fishery specific objectives linked to performance indicators and performance measures for target species and for fishery impacts on the ecosystem.</p>	<p>A draft PMS was developed in December 2006 and is now awaiting Harvest MAC endorsement before being formally introduced by DPI&amp;F. The draft PMS includes objectives, performance indicators and performance measures for target species and impacts on the ecosystem.</p> <p>Three performance measures have been developed for the target species. The first relates to biomass levels remaining above 40% of virgin biomass. The second requires maintaining harvest levels at or below the estimated MSY. As the current MSY estimate is preliminary, a third performance measure using trends in standardised catch per unit effort (CPUE) data has also been developed.</p> <p>The performance measure for ecosystem impacts is that a significant negative impact of the ecosystem is identified as a direct result of fishing activities in the ECTRLF.</p>	<p>DEWHA considers that this recommendation has been implemented.</p>
<p>DPI&amp;F to monitor the status of the fishery in relation to the performance measures once developed. Within three months of becoming aware that a performance measure has not been met, DPI&amp;F to finalise a clear timetable for the implementation of appropriate management responses.</p>	<p>The draft PMS includes management responses that have incorporated this recommendation. Within 3 months of becoming aware that a review has been triggered, DPI&amp;F, in collaboration with Harvest MAC will finalise a clear timetable for implementation of appropriate management responses.</p>	<p>DEWHA considers that this recommendation has been implemented.</p>

<p>From 2005, DPI&amp;F to report publicly on the status of the fishery on an annual basis, including explicit reporting against each performance measure once developed.</p>	<p>Annual status reports for the ECTRLF were prepared in 2005, 2006 and 2007. These reports are publicly available from the DPI&amp;F website. The reports contain information on progress in implementing recommendations, catch and effort trends and research undertaken or completed relevant to the fishery. DPI&amp;F will report on the performance of the ECTRLF against the performance measures outlined in the final PMS in the annual status reports.</p>	<p>DEWHA considers that this recommendation has been implemented and notes that this is an on-going condition of the new export approval for the ECTRLF (<b>WTO Condition 3</b>).</p>
<p>DPI&amp;F to implement more comprehensive data collection and validation mechanisms to ensure that adequate and reliable data on catch, effort, stock structure and abundance, appropriate to the scale of the fishery, are collected from all sectors of the fishery to ensure sustainable management of the ECTRL resource.</p>	<p>DPI&amp;F report in both the 2006 and 2007 annual status report that data collection and validation mechanisms will be reviewed at the same time as the management arrangements in 2007.</p>	<p>DPI&amp;F have not implemented this recommendation. Given that revised management arrangements are proposed to be introduced to the ECTRLF prior to the 2009 fishing season, DEWHA considers this an opportune time to review the information collection systems and validation mechanisms currently in place (<b>Recommendation 4</b>).</p>
<p>DPI&amp;F, in conjunction with AFMA and other jurisdictions, to continue to work towards developing sustainable yield estimates of the target species to determine sustainable harvest levels that take account of straddling target species stocks in the North East Queensland, Coral Sea and Torres Strait and Papua New Guinea regions. DPI&amp;F to develop and implement biologically-based reference point(s) for the target stocks.</p>	<p>A preliminary stock assessment indicated a MSY estimate of 170 t (whole weight) (Pitcher <i>et al.</i>, 2005). DPI&amp;F report that a MSY updated with 2005, 2006 and 2007 data is being developed and will be used in the PMS for the ECTRLF.</p> <p>BRS report that a 2006 stock assessment for the TSTRFLF estimated MSY at 250 t (tail weight, equal to 640 t live weight). Catches in 2006 were well below the MSY, 124 t tail weight.</p> <p>Performance measures have been incorporated for the target species in the draft PMS, however these can currently only be assessed using preliminary estimates of</p>	<p>While a preliminary MSY for the east coast population has been developed, inclusion of updated data is required. Further work is required on developing a stock-wide resource assessment, in collaboration with other jurisdictions (<b>Recommendation 2</b>).</p>

	MSY that did not originate from a stock-wide assessment of tropical rock lobsters.	
DPI&F to continue to pursue complementary management arrangements with other jurisdictions responsible for managing shared rock lobster stocks to ensure that all removals and other relevant impacts on the stock are properly accounted for in stock assessments and harvest control measures.	The Minister for Primary Industries and Fisheries is a member of the Protected Zone Joint Authority (PZJA), the body responsible for the management of the TSRLF. As such DPI&F officers and scientists are active members of the Torres Strait Management Advisory Committees and its various sub-committees. DPI&F view this as being an ideal forum to ensure consistency between the Torres Strait and Queensland fisheries and the inclusion of TSRLF data in the assessments of the ECTRLF.	The implementation of this recommendation is ongoing. Ongoing collaboration will be important as new management arrangements are developed for the TSRLF to ensure flow on effects to the ECTRLF are managed.
DPI&F, within eighteen months, to control fishing mortality in sectors under its direct control, through effort controls or other mechanisms, to maintain stocks at ecologically sustainable levels. DPI&F to implement interim measures within six months to prevent significant increases in catch and/or effort while the above controls are being formalised.	<p>The 2005 and 2006 annual status reports for the ECTRLF report that a review of management arrangements is planned for 2007, the objective of which will be to develop a quota management system that is complementary to that being proposed for the TSRLF. DPI&amp;F have provided updated advice that the planned General Fisheries Regulatory Impact Statement (RIS) will include details of the proposed individual transferable quota (ITQ) arrangements for the ECTRLF. Release of the RIS is awaiting Queensland Cabinet approval.</p> <p>The measures to be outlined in the RIS have been developed in collaboration with Harvest Fishery Management Advisory Committee (HarvestMAC), the HarvestMAC Scientific Advisory Group, the HarvestMAC Tropical Rock Lobster Working Group and the Tropical Rock Lobster Resource Assessment Group (TRLRAG). The TRLRAG's aim is to maintain the sustainability of the entire tropical rock lobster stock, and</p>	<p>This recommendation has not been implemented by DPI&amp;F, however, advanced preparations are in place.</p> <p>DEWHA is concerned that with the restructuring occurring in the Commonwealth Torres Strait Fishery (TSRLF), effort could shift across to the East Coast, placing this substock under considerable pressure. A number of dual endorsed licences have been bought out from the TSRLF, therefore, effort could be displaced to the east coast from the 2008 fishing season. While DPI&amp;F are advanced in preparations to introduce a quota management system (QMS), this will not be in place in the ECTRLF until the 2009 fishing season. Therefore DEWHA considers that interim arrangements that ensure that the 2008</p>

	<p>its outputs are used to advise on East Coast, Torres Strait and Papua New Guinea substock issues. A revised stock assessment is currently being undertaken, the results of which are expected to be available within the coming months.</p>	<p>total catch does not increase above 200 t are required (<b>Recommendation 1</b>).</p>
<p>DPI&amp;F to conduct a formal compliance risk assessment of the ECTRLF within one year and implement any resultant recommendations. DPI&amp;F to periodically review the compliance risk assessment.</p>	<p>A compliance risk assessment was undertaken in 2005. The outcomes have been incorporated into the Queensland Boating and Fisheries Patrol's current operation plan.</p>	<p>DEWHA considers that this recommendation has been met.</p>

**Table 3: The DEWHA assessment of the ECTRLF against the requirements of the EPBC Act related to decisions made under Parts 13 and 13A**

**Part 13**

Section 208A Minister may accredit plans, regimes or policies	DEWHA assessment of the ECTRLF
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: <ul 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> </ul> </li> </ul> <p>if the Minister is <b>satisfied</b> that:</p> <ul style="list-style-type: none"> <li>(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</li> <li>(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.</li> </ul>	<p>The ECTRLF will be managed under the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTRLF was accredited in November 2004. The management arrangements for the ECTRLF have not significantly changed since this accreditation was granted, therefore a new Part 13 declaration related to threatened species is not needed at this time.</p> <p>As there have been no significant management changes, DEWHA considers that the ECTRLF still takes all reasonable steps to ensure that threatened species are not killed or injured.</p> <p>The report provided by DPI&amp;F indicates that there have been no interactions with threatened species reported in the ECTRLF since 2004. Therefore, DEWHA considers the current operation of the ECTRLF continues not to adversely affect the survival or recovery in nature of any listed threatened species.</p>

Section 222A Minister may accredit plans, regimes or policies	DEWHA assessment of the ECTRLF
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: <ul 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> </ul> </li> </ul> <p>if the Minister is <b>satisfied</b> that:</p> <ul style="list-style-type: none"> <li>(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</li> <li>(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 a listed migratory species.</li> </ul>	<p>The ECTRLF will be managed under the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTRLF was accredited in November 2004. The management arrangements for the ECTRLF have not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration related to migratory species is not needed at this time.</p> <p>As there have been no significant management changes, DEWHA considers that the ECTRLF still takes all reasonable steps to ensure that migratory species are not killed or injured.</p> <p>The report provided by DPI&amp;F indicates that there have been no interactions with migratory species reported in the ECTRLF since 2004. Therefore, DEWHA considers the current operation of the ECTRLF continues not to adversely affect the survival or recovery in nature of any listed migratory species.</p>

Section 245 Minister may accredit plans, regimes or policies	DEWHA assessment of the ECTRLF
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: <ul 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> </ul> </li> </ul>	<p>The ECTRLF will be managed under the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTRLF was accredited in November 2004. The management arrangements for the ECTRLF have</p>

<p>if the Minister is <b>satisfied</b> that:</p> <ul style="list-style-type: none"> <li>(f) the plan, regime or policy requires persons engaged in fishing under the plan to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing; and</li> <li>(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.</li> </ul>	<p>not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration related to cetaceans is not needed at this time.</p> <p>As there have been no significant management changes, DEWHA considers that the ECTRLF still takes all reasonable steps to ensure that cetaceans are not killed or injured.</p> <p>The report provided by DPI&amp;F indicates that there have been no interactions with cetaceans reported in the ECTRLF since 2004. Therefore, DEWHA considers the current operation of the ECTRLF continues not to adversely affect the survival or recovery in nature of any cetacean.</p>
---	---

<b>Section 265 Minister may accredit plans, regimes or policies</b>	<b>DEWHA assessment of the ECTRLF</b>
<p>Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <ul style="list-style-type: none"> <li>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is: <ul 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> </ul> </li> </ul> <p>if the Minister is <b>satisfied</b> that:</p> <ul style="list-style-type: none"> <li>(f) the plan 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</li> </ul>	<p>The ECTRLF will be managed under the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTRLF was accredited in November 2004. The management arrangements for the ECTRLF have not significantly changed since this accreditation was granted. Consequently, a new Part 13 declaration related to listed marine species is not needed at this time.</p> <p>As there have been no significant management changes, DEWHA considers that the ECTRLF still takes all reasonable steps to ensure that listed marine species are not killed or injured.</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 report provided by DPI&amp;F indicates that there have been no interactions with listed marine species reported in the ECTRLF since 2004. Therefore, DEWHA considers the current operation of the ECTRLF continues not to adversely affect the survival or recovery in nature of any listed marine species.</p>
--	--

**Part 13A**

<p><b>Section 303DC Minister may amend list</b></p>	<p><b>DEWHA assessment of the ECTRLF</b></p>
<p>Minister may, by instrument in published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by:</p> <p>(a) including items in the list;</p>	<p>No amendment to the list of exempt native specimens (LENS) is required as product sourced from the ECTRLF approved wildlife trade operation is already included on the LENS.</p>

<p><b>Section 303FN Approved wildlife trade operation</b></p>	<p><b>DEWHA assessment of the ECTRLF</b></p>
<p>The Minister may, by instrument published in the <i>Gazette</i>, declare that a specified wildlife trade operation is an <i>approved wildlife trade operation</i> for the purposes of this section.</p>	
<p>The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is <b>satisfied</b> that:</p> <p>(a) the operation is consistent with the objects of Part 13A of the Act; and</p>	<p>The ECTRLF is consistent with objects of Part 13A (listed after this table) as:</p> <ul style="list-style-type: none"> <li>▪ the fishery does not harvest any species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);</li> <li>▪ there are management arrangements in place and planned to ensure that the resource is being managed in an ecologically sustainable way (see Table 1). The implementation of <b>Recommendation 1</b> will also be an important factor in meeting this requirement;</li> </ul>

<p>(b) the operation will not be detrimental to:</p> <ol style="list-style-type: none"> <li>i. the survival of a taxon to which the operation relates; or</li> <li>ii. the conservation status of a taxon to which the operation relates; and</li> </ol> <p>(ba) the operation will not be likely to threaten any relevant ecosystem including (but not limited to) any habitat or biodiversity; and</p> <p>(c) if the operation relates to the taking of live specimens that belong to a taxon specified in the regulations – the conditions that, under the regulations, are applicable to the welfare of the specimens are likely to be complied with; and</p> <p>(d) such other conditions (if any) as are specified in the regulations have been, or are likely to be, satisfied.</p>	<ul style="list-style-type: none"> <li>▪ the operation of the ECTRLF is unlikely to be unsustainable and threaten biodiversity within the next 3 years. The implementation of <b>Recommendation 1</b> will be an important factor in meeting this requirement ; and</li> <li>▪ the EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</li> </ul> <p>DEWHA considers that the ECTRLF will not be detrimental to the survival or conservation status of a taxon to which it relates within the next 3 years, given the management measures currently in place, which include limited entry, a seasonal closure, minimum size limits, and gear and vessel restrictions. The fishery does not operate in various closed areas of the Great Barrier Reef Marine Park. The implementation of <b>Recommendation 1</b> will also be an important factor in meeting this requirement.</p> <p>DEWHA considers that the ECTRLF will not threaten any relevant ecosystem within the next 3 years, given the hand harvest method and the management measures currently in place, which include limited entry, a seasonal closure, minimum size limits, and gear and vessel restrictions. The fishery does not operate in various closed areas of the Great Barrier Reef Marine Park.</p> <p>The EPBC Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</p> <p>No other conditions are specified in relation to commercial fisheries in the EPBC Regulations 2000.</p>
--	--

<p>In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to:</p> <ul style="list-style-type: none"> <li>(a) the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and</li>   <li>(b) the effectiveness of the management arrangements for the operation (including monitoring procedures).</li> </ul>	<p>DEWHA considers that the ECTRLF will not have a significant impact on any relevant ecosystem within the next 3 years, given the management measures currently in place, which include limited entry, a seasonal closure, minimum size limits, and gear and vessel restrictions. The fishery does not operate in various closed areas of the Great Barrier Reef Marine Park.</p> <p>The management arrangements that will be employed for the ECTRLF are likely to be effective. Management arrangements for the ECTRLF are included in the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>. Management arrangements include a seasonal closure, gear restrictions, and minimum and maximum size limits. The performance of the ECTRLF will be reviewed annually, against a series of objectives, performance measures and reference points for the target species and ecosystem impact.</p>
<p>In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to:</p> <ul style="list-style-type: none"> <li>(a) whether legislation relating to the protection, conservation or management of the specimens to which the operation relates is in force in the State or Territory concerned; and</li>   <li>(b) whether the legislation applies throughout the State or Territory concerned; and</li>   <li>(c) whether, in the opinion of the Minister, the legislation is effective.</li> </ul>	<p>The ECTRLF will be managed under the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>.</p> <p>The <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i> apply throughout QLD waters.</p> <p>The management arrangements that will be employed for the ECTRLF are likely to be effective. Management arrangements for the ECTRLF are included in the <i>QLD Fisheries Act 1994</i> and the <i>QLD Fisheries Regulation 1995</i>. Management arrangements include limited entry, a seasonal closure, minimum size limits, and gear and vessel restrictions. The performance of the ECTRLF will be reviewed annually, against a series of objectives, performance measures and reference points for the</p>

	target species and ecosystem impact.
For the purposes of section 303FN, an operation is a wildlife trade operation if, and only if, the operation is an operation for the taking of specimens and: (d) the operation is a commercial fishery.	The ECTRLF is a commercial fishery.
In deciding whether to declare that a commercial fishery is an approved wildlife trade operation for the purposes of this section, 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.	No assessment of the ECTRLF has been carried out under Part 10 of the EPBC Act.
The above does not limit the matters that may be taken into account in deciding whether to declare that a fishery is an approved wildlife trade operation for the purposes of this section.	

<b>Section 303FR Public consultation</b>	<b>DEWHA assessment of the ECTRLF</b>
Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice: (a) setting out the proposal to make the declaration; and (b) setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and (c) inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal.	DEWHA considers that consultation requirements of the EPBC Act for declaring a WTO have been met. A public notice, which set out the proposal to declare the ECTRLF a WTO and included the annual reports, was released for public comment which closed on 8 October 2007 with no submissions received.
A period specified in the notice must not be shorter than 20 business days after the date on which the notice was published on the Internet.	A public notice, which set out the proposal to declare the ECTRLF a WTO and included the annual reports, was released for public comment on 6 September 2007 and closed on 8 October 2007, a total of 21 business days.
In making a decision about whether to make a declaration under section 303FN, the Minister must consider any comments about the	No public comments about the proposal were received.

proposal to make the declaration that were given in response to the invitation in the notice.	
---	--

<b>Section 303FT Additional provisions relating to declarations</b>	<b>DEWHA assessment of the ECTRLF</b>
This section applies to a declaration made under section 303FN, 303FO or 303FP.	A declaration for the ECTRLF will be made under section 303FN.
<p>The Minister may make a declaration about a plan or operation even though he or she considers that the plan or operation should be the subject of the declaration 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 declaration is to specify the period, circumstances or condition.</p>	<p>The standard conditions applied to commercial fishery WTOs include:</p> <ul style="list-style-type: none"> <li>• operation in accordance with the management regime; and</li> <li>• notifying DEWHA of changes to the management regime; and</li> <li>• annual reporting.</li> </ul> <p>It is recommended the standard conditions are applied to the ECTRLF WTO declaration. DEWHA will monitor progress with the implementation of <b>Recommendation 1</b> and with DPI&amp;F's proposed management changes. If progress is not sufficient, we will recommend that consideration be given to reviewing the conditions applied to this declaration.</p> <p>The WTO instrument for the ECTRLF specifies the conditions applied.</p>
A condition may relate to reporting or monitoring.	One of the standard conditions relates to reporting.
The Minister must, by instrument published in the <i>Gazette</i> , revoke a declaration if he or she is satisfied that a condition of the declaration has been contravened.	
A copy of an instrument under section 303FN, 303FO or 303FP or this section is to be made available for inspection on the Internet.	The instrument for the ECTRLF made under sections 303FN and 303FT will be gazetted and made available on the DEWHA website.

<b>Section 391 Minister must consider precautionary principle in making decisions</b>	<b>DEWHA assessment of the ECTRLF</b>
The Minister must take account of the precautionary principle in making a decision under section 303DC and/or section 303FN, to the	You must consider the precautionary principle when making a decision to include specimens on the LENS.

extent he or she can do so consistently with the other provisions of this Act.	
The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.	

**Objects of Part 13A**

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

## **Final recommendations to DPI&F for the ECTRLF**

The material submitted by DPI&F demonstrates that the management arrangements for the ECTRLF meet most of the requirements of the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries*. Management arrangements include limited entry, a seasonal closure, minimum size limits, and gear and vessel restrictions. As such, DEWHA considers that overall the management regime aims to ensure that fishing is conducted in a manner that does not lead to over-fishing and for fishing operations to be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

While the fishery is relatively well managed, DEWHA has identified a number of risks and uncertainties that must be managed to ensure that impacts are minimised:

- the existing high level of latent effort in the fishery and the risk that with the recent restructure of the Commonwealth Torres Strait Tropical Rock Lobster Fishery, effort and catch will be displaced to the ECTRLF from the 2008 fishing season;
- the lack of management arrangements that limit the catch and/or effort in the ECTRLF;
- the fishery is currently harvesting tropical rock lobsters at or slightly above the preliminary MSY estimate of 170 t; and
- the need to review the current data collection system and introduce appropriate validation mechanisms.

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. The key challenges for this fishery will be introducing management arrangements that limit the total catch and/or effort. DEWHA considers that, until it can be demonstrated that this issue has been adequately dealt with, a 3-year WTO declaration is appropriate.

Given no protected species interactions have been reported since 2004, 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. As no management changes have been introduced since 2004, DEWHA considers a new Part 13 accreditation is not required at this time.

Unless a specific time frame is provided in the recommendation each recommendation must be addressed within the life of the declaration (3 years). Note that a standard condition of a WTO is an annual reporting requirement, the details of which are provided in Table 4.

**Table 4: Queensland East Coast Tropical Rock Lobster Fishery (ECTRLF) Assessment - Issues, Conditions and Recommendations**

	<b>Issue</b>	<b>DEWHA WTO Condition</b>
1	<p><u>General Management</u> Export decisions relate to the arrangements in force at the time of the decision. In order to ensure that these decisions remain valid, DEWHA needs to be advised of any changes that are made to the management regime and make an assessment that the new arrangements are equivalent or better, in terms of ecological sustainability, than those in place at the time of the original decision.</p>	<p><b>Condition 1:</b> Operation of the ECTRLF will be carried out in accordance with the Queensland <i>Fisheries Regulation 1995</i> and the Queensland <i>Fisheries Act 1994</i>.</p> <p><b>Condition 2:</b> DPI&amp;F to inform DEWHA of any intended amendments to the management arrangements that may affect the criteria on which EPBC Act decisions are based.</p>
2	<p><u>Annual Reporting</u> 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 (3 years). Annual reports should follow Appendix B to the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i> (the Guidelines) and include a description of the fishery, management arrangements in place, research and monitoring outcomes, recent catch data for all sectors of the fishery, status of target stock, interactions with protected species, impacts of the fishery on the ecosystem in which it operates, and progress in implementing DEWHA recommendations. Electronic copies of the Guidelines are available from the DEWHA website 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>Condition 3:</b> DPI&amp;F to continue to produce and present reports to DEWHA annually as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2<sup>nd</sup> Edition</i>.</p>

	<b>Issue</b>	<b>DEWHA Recommendation</b>
3	<p><u>Lack of limits on overall catch and/or effort</u></p> <p>A preliminary maximum sustainable yield (MSY) estimate of 170 t has been developed (Pitcher <i>et al.</i>, 2005). However, it is recognised that the model that provided the estimate was a poor fit with the catch history. DPI&amp;F advise that this precluded the use of the MSY estimate as the baseline for setting a commercial Total Allowable Catch (TAC) for the fishery. Recently, the Tropical Rock Lobster Resource Assessment Group (TRLRAG) discussed methods for setting the TAC for the ECTRLF and recommended a substantial revision of the stock assessment model to provide a better estimate of MSY. A new MSY estimate is expected to be developed in early 2008 and this will be used as the baseline for setting the TAC.</p> <p>In the absence of a reliable MSY estimate, DPI&amp;F have developed a preliminary performance indicator for the ECTRLF based on catch trend analysis. The performance of the fishery during the 2007 and 2008 seasons will be measured against the indicator while the MSY estimate is being revised.</p> <p>The commercial harvest in recent years has been slightly above (2004 and 2006) or below (2005) the preliminary MSY estimate of 170 t. Between 15 and 17 licences fished between 2004 and 2006, indicating existing latency in effort of approximately 40%. If the existing latent effort in the ECTRLF was to be activated, catches could rise significantly. Given the new management arrangements being finalised for the Commonwealth Torres Strait Rock Lobster Fishery (TSRLF), which is introducing a quota management system (QMS), a substantial flow of effort could be expected into the ECTRLF from the 2008 fishing season. DPI&amp;F have advised DEWHA that management arrangements and supporting legislation are currently being prepared to implement a quota management system (QMS) into the ECTRLF prior to the 2009 fishing season. The individual transfer quotas will be based on the most recent estimate of MSY, expected to be available in early 2008.</p>	<p><b>Recommendation 1:</b> DPI&amp;F to develop and implement interim management arrangements, prior to the commencement of the 2008 fishing season, to ensure that the 2008 total catch does not exceed 200 tonnes.</p>

	<p>DEWHA congratulates DPI&amp;F on the progress made in implementing a QMS for the ECTRLF to ensure the continued sustainability of the fishery. In the interim, DEWHA recommends that DPI&amp;F develop and implement, prior to the commencement of the 2008 fishing season, interim management arrangements to ensure that the total catch in 2008 does not exceed 200 tonnes.</p>	
4	<p><u>Stock wide assessments</u>  A preliminary stock assessment indicated a MSY estimate of 170 t (whole weight) (FRDC project 2002/008). DPI&amp;F advise that an updated stock assessment is currently underway, with the results expected in early 2008. DEWHA congratulates DPI&amp;F on the progress made in determining a sustainable harvest estimate for the ECTRLF since the 2004 assessment. Given the tropical rock lobsters caught on the east coast of Queensland are considered part of a larger stock also covering Torres Strait and Papua New Guinea, DEWHA recommends that DPI&amp;F continue to work towards developing a stock-wide sustainable resource assessment for tropical rock lobster, in conjunction with the Australian Fisheries Management Authority (AFMA) and other appropriate jurisdictions, based on the best available research. DEWHA notes that work is ongoing regarding oceanography and productivity in the Great Barrier Reef.</p>	<p><b>Recommendation 2:</b> DPI&amp;F, in conjunction with AFMA and other jurisdictions, to continue to work towards developing a stock-wide resource assessment for tropical rock lobster.</p>
5	<p><u>Accounting for all removals in stock assessments</u>  DEWHA notes that the recreational and Indigenous take of tropical rock lobsters is likely to be minimal given the relative remoteness of the fishing grounds, however, the 2001 National Recreational and Indigenous Fishing Survey (NRIFS) estimated figures of 20 000 lobsters taken recreationally across Queensland and an Indigenous take of approximately 13 000 lobsters harvested from North Queensland waters, should be periodically updated and included in resource assessments.</p>	<p><b>Recommendation 3:</b> DPI&amp;F to continue to improve estimates of recreational and Indigenous harvest and take these into account in resource assessments.</p>
6	<p><u>Information collection and validation systems</u>  A recommendation from the 2004 assessment of the ECTRLF was for DPI&amp;F to implement more comprehensive data collection and validation mechanisms to ensure</p>	<p><b>Recommendation 4:</b> DPI&amp;F to review the current information collection system and</p>

adequate and reliable data on catch, effort, stock structure and abundance were collected. In the 2007 Annual Status Report, DPI&F reported that data collection and validation mechanisms will be reviewed concurrently with the review of management arrangements.

Given the management changes proposed to be introduced to the ECTRLF, DEWHA considers this an opportune time for DPI&F to review the current information collection systems in the fishery. Appropriate validation of this data will be an integral part of ensuring the integrity of the proposed QMS and ensuring accurate resource assessments. Therefore, DEWHA recommends that DPI&F review the current information collection and validation systems to ensure adequate information is collected to monitor compliance with the management arrangements, inform reliable resource assessment and conduct performance measurement.

validation mechanisms for the ECTRLF and implement further systems as appropriate to ensure compliance with management arrangements, reliable resource assessment and adequate measurement of fishery performance.

## References

Pitcher, C. R., Turnbull, C., Atfield, J., Griffin, D., Dennis, D. M. and Skewes, T. D. (2005). *Biology, larval transport modelling and commercial logbook data analysis to support management of the NE Queensland rock lobster Panulirus ornatus fishery*. Final Report to the Fisheries Research and Development Corporation (2002/008). Commonwealth Scientific and Industrial Research Organisation Marine and Atmospheric Research and the Department of Primary Industries and Fisheries. 144 pages.

## Acronyms

BRS	Bureau of Rural Sciences
CPUE	Catch per unit effort
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DEH	Department of the Environment and Heritage
DEWHA	Department of the Environment, Water, Heritage and the Arts
DPI&F	Department of Primary Industries and Fisheries
ECTRLF	East Coast Tropical Rock Lobster Fishery
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FRDC	Fisheries Research and Development Corporation
GBRMP	Great Barrier Reef Marine Park
Harvest MAC	Harvest Fisheries Management Advisory Committee
ITQ	Individual Transferable Quotas
LENS	List of Exempt Native Specimens
MSY	Maximum sustainable yield
PMS	Performance Measurement System
PZJA	Protected Zone Joint Authority
QLD	Queensland
QMS	Quota Management System
RFISH	Recreational Fishing Information System
RIS	Regulatory Impact Statement
SCUBA	Self-contained underwater breathing apparatus
TACC	Total Allowable Commercial Catch
TRLRAG	Tropical Rock Lobster Resource Assessment Group
TSTRLF	Torres Strait Tropical Rock Lobster Fishery
WTO	Wildlife Trade Operation