



**Australian Government**

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

Assessment of the  
**Queensland Coral Fishery**

**June 2012**

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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.

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**Table 1: Summary of the Queensland Coral Fishery**

<p><b>Description of the Coral Fishery</b></p>	<p>The Queensland Coral Fishery is a hand harvest fishery based on the collection of a large range of coral and coral products from waters off the east coast of Queensland. Most collection occurs in coastal and reef waters off Cairns and in the Keppel region (central Queensland).</p> <p>The fishery targets live coral (anemones, soft and hard coral), ornamental (non living) coral, live rock (dead coral skeletons with algae and other organisms living on them) and coral rubble (coarsely broken up coral fragments). Most corals harvested in the Coral Fishery are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). All order Scleractinia (hard corals) plus families Helioporidae (blue corals), Milleporidae (fire corals) and Stylasteridae (lace corals) are listed under Appendix II of CITES. Fossils of species in these groups are not subject to the provisions of the convention. The entire order Antipatharidae (black corals), including fossils, is also listed under Appendix II of the convention.</p> <p>Under an Offshore Constitutional Settlement agreement between the Australian Government and the Queensland Government, collection of coral is managed by Fisheries Queensland under Queensland legislation.</p>
<p><b>Publicly available information relevant to the fishery</b></p>	<ul style="list-style-type: none"> <li>• Queensland <i>Fisheries Act 1994</i></li> <li>• Queensland Fisheries Regulation 2008</li> <li>• Queensland <i>Marine Parks Act 1982</i></li> <li>• <i>Great Barrier Reef Marine Park Act 1975</i></li> <li>• Policy for the Management of the Coral Fishery – January 2009</li> <li>• Performance Measurement System - Queensland Coral Fishery - Version 1 - April 2009</li> <li>• A guide to the Queensland Marine Aquarium Fish Fishery and the Queensland Coral Fishery</li> <li>• Coral stress response plan for the coral and marine aquarium fish fisheries - May 2009</li> <li>• A vulnerability assessment of coral taxa collected in the Queensland Coral Fishery</li> <li>• Ecological Risk Assessment of the Queensland Coral Fishery - October 2008</li> <li>• Queensland Coral Fishery 2011 - Progress against SEWPaC conditions and recommendations</li> <li>• Queensland Coral Fishery 2010 - Progress against SEWPaC conditions and recommendations</li> <li>• Queensland Coral Fishery 2009 - Progress against SEWPaC conditions and recommendations</li> <li>• Annual Status Report 2011 - Queensland Coral Fishery</li> <li>• Annual Status Report 2010 - Queensland Coral Fishery</li> <li>• Annual Status Report 2009 - Queensland Coral Fishery</li> <li>• Department of the Environment, Water, Heritage and the Arts - Assessment of the Queensland Coral Fishery - June 2009</li> <li>• Department of the Environment and Heritage - Assessment of the Queensland Coral Fishery - June 2006</li> <li>• Ecological Assessment of the Queensland Coral Fishery - December 2005</li> </ul>

<p><b>Area</b></p>	<p>The area of the Coral Fishery (Figure 1) includes Queensland and Commonwealth waters off the east coast of Queensland to the eastern boundary of the Great Barrier Reef Marine Park. Under Fisheries Queensland's Policy for the Management of the Coral Fishery, collection is largely restricted to waters north of 24°30' S (the southern boundary of the Great Barrier Reef Marine Park), with access to two collection areas south of 24°30' S by two authorities for supply to local public aquaria only.</p> <p>Within the fishery area, the available area for coral harvesting is restricted through:</p> <ul style="list-style-type: none"> <li>- general fisheries closures</li> <li>- state and Commonwealth marine reserve zoning arrangements under the Queensland <i>Marine Parks Act 1982</i> and the <i>Great Barrier Reef Marine Park Act 1975</i>, and</li> <li>- conditions on the coral endorsement attached to fishing licences.</li> </ul>
<p><b>Target Species</b></p>	<p>The Queensland Fisheries Regulation 2008 permits the harvest of:</p> <ul style="list-style-type: none"> <li>▪ live and dead coral</li> <li>▪ marine organisms (other than fish) living in or on coral, and</li> <li>▪ coral sand consisting of fine remnants of coral.</li> </ul> <p>Under the coral policy the fishery is managed as five components:</p> <p><u>Specialty coral</u> - a wide variety of hard corals, soft corals, anemones and related (cnidarian - <i>i.e. jellyfish, corals, and other stingers</i>) species taken for live display in coral reef aquaria. Corals for the live aquarium trade are usually small pieces or colonies less than 15 centimetres in diameter. The policy considers all corals not belonging to the families Pocilloporidae or Acroporidae and not belonging to any of the other categories in this section to be 'specialty coral'.</p> <p><u>Ornamental coral</u> - corals from the families Pocilloporidae and Acroporidae, initially taken live, and traded as either non-living ornaments/art or live aquarium corals. When taken for ornamental purposes, this type of coral is dried, hardened, treated and often decorated. While other taxa are occasionally used for ornamental purposes, the majority of corals targeted for the market belong to the families Pocilloporidae and Acroporidae.</p> <p><u>Live rock</u> - dead pieces of coral/limestone, often with organisms such as algae, bryozoans, sponges and small corals living on them, taken for use as substrate and for textural and aesthetic purposes in aquaria.</p> <p><u>Coral rubble</u> - coarsely broken up non-living fragments of coral, and</p> <p><u>Coral sand</u> - finely broken up remnants of coral taken in small quantities as a consequence of live rock and coral rubble collection. No targeted collection of this component is allowable within the Great Barrier Reef Marine Park.</p>
<p><b>Byproduct Species</b></p>	<p>None - only harvest of coral and other organisms associated with coral is permitted.</p>

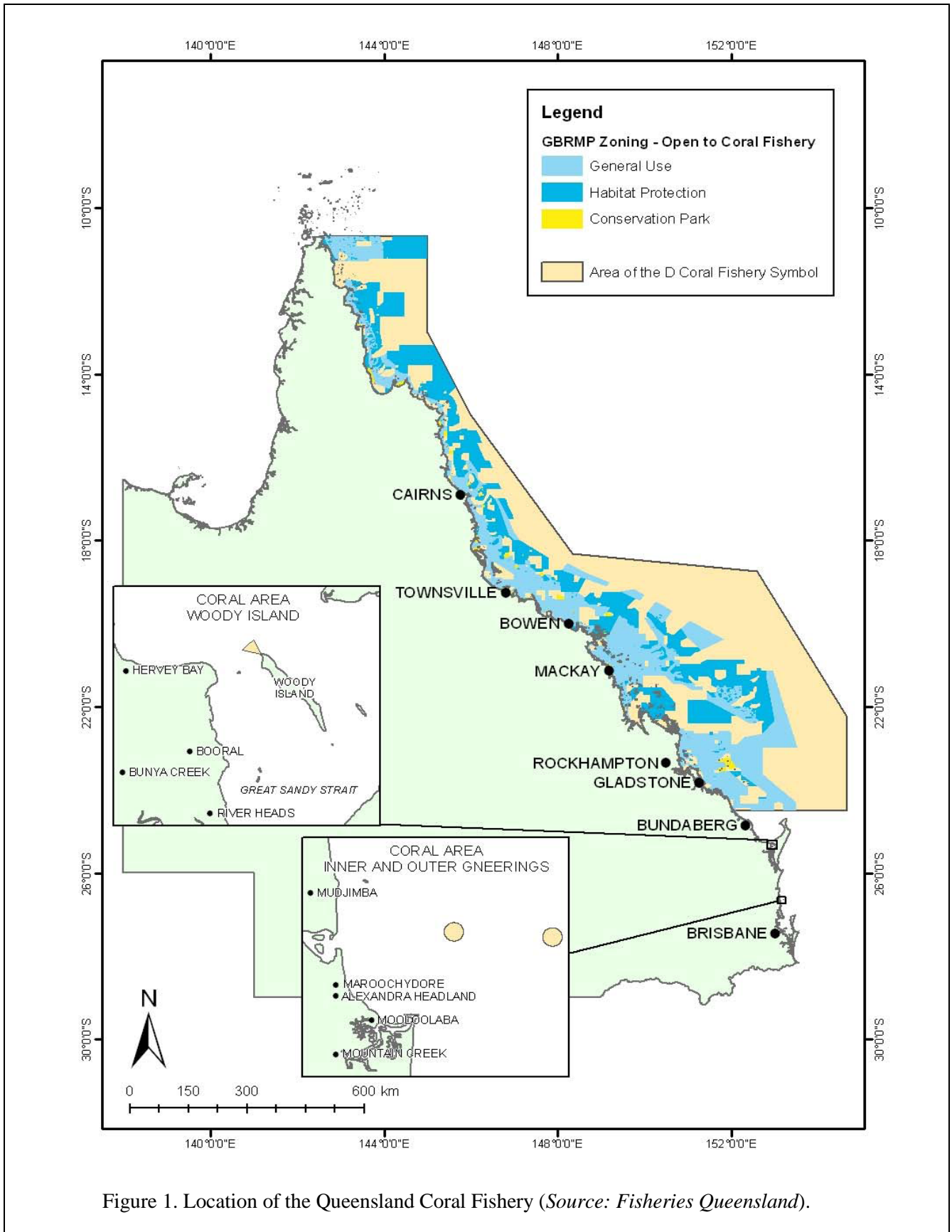


Figure 1. Location of the Queensland Coral Fishery (Source: Fisheries Queensland).

<b>Fishery status</b>	<p>Fisheries Queensland has concluded that coral species do not fit the criteria for inclusion in its annual stock status assessment program. The performance of the Coral Fishery is reviewed annually through the fishery's performance measurement system. Fisheries Queensland considers that there are no resource concerns in the fishery at current participation levels and with the management controls that are in place.</p> <p>In addition, in June 2012, Australia's Scientific Authority for Marine Species for the Convention on International Trade in Endangered Species (Australia's CITES Scientific Authority for Marine Species) made a non-detriment finding for CITES listed coral taxa harvested within the Coral Fishery, concluding that allowing export of these taxa will not be detrimental to their survival.</p>
<b>Season</b>	1 July to 30 June each year.
<b>Gear</b>	<p>Coral may only be taken by hand or by using hand held non-mechanical devices, such as a hammer and chisel. Underwater breathing apparatus such as Self Contained Underwater Breathing Apparatus (SCUBA) and hookah may be used by licence holders.</p> <p>Recreational fishers are not permitted to use SCUBA or hookah.</p>
<b>Commercial harvest July 2010 - June 2011</b>	<p>75 tonnes, comprising:</p> <ul style="list-style-type: none"> <li>- specialty coral - 34 tonnes</li> <li>- ornamental coral - 7 tonnes, and</li> <li>- live rock, coral rubble and coral sand - 34 tonnes.</li> </ul>
<b>Value of commercial harvest 2010 - 2011</b>	There is currently no estimated value of commercial harvest available.
<b>Take by other sectors</b>	<p><b><u>Recreational</u></b> harvest of coral is considered negligible as:</p> <ul style="list-style-type: none"> <li>• collection is not permitted in state and Commonwealth marine reserves (the majority of the fishing area);</li> <li>• the known distribution of coral outside marine reserves is limited, and</li> <li>• gear restrictions are imposed on recreational collection (restricted to hand held non-mechanical devices only).</li> </ul> <p><b><u>Indigenous</u></b> harvest is considered negligible.</p> <p>Harvest is also permitted for <b><u>research</u></b> purposes. Fisheries Queensland issued seven General Fisheries Permits (of which two permits were active) in 2010-2011, allowing limited harvest of coral species for research purposes. The combined total of hard coral pieces collected under these permits was 249. Additionally, 6 bins<sup>1</sup> of live rock were collected.</p> <p><b><u>Coral Sea Fishery</u></b> - An annual catch limit of 20 metric tonnes of <b>live rock</b> per concession holder applies to two concession holders in the Commonwealth Coral Sea Fishery (harvest of coral is not permitted).</p>
<b>Commercial licences issued</b>	59 Commercial Harvest Fishery Licences are endorsed to collect coral. In 2010-11, 25 commercial licences accessed the fishery.

<sup>1</sup> Maximum size of 68.2 litres.



## Management arrangements

The management arrangements for the Coral Fishery are described in Fisheries Queensland's 2009 publication - 'A guide to the Queensland Marine Aquarium Fish Fishery and the Queensland Coral Fishery', which also outlines industry stewardship initiatives for coral. The Coral Fishery is managed by Fisheries Queensland via:

- the Queensland *Fisheries Act 1994* and Fisheries Regulation 2008
- Commercial Harvest Fishery Licences or Commercial Fishing Boat Licences endorsed with a “D” (coral) fishery symbol. The “D” symbol endorsement is usually subject to conditions, for example:
  - individual quota allocations
  - catch and effort reporting requirements
  - identification of the authorised boat and divers, and
  - authorised area of operation.
- policies and non-regulatory measures:
  - Policy for the Management of the Coral Fishery (coral policy). The policy aims to ensure that Queensland’s coral resources are harvested in an ecologically sustainable manner by safeguarding the fishery against adverse effects of:
    - localised concentrations of fishing effort, and
    - targeted take of particular types of coral.
  - Performance Measurement System - Queensland Coral Fishery - Version 1 - April 2009. The performance measurement system contains management objectives, performance indicators, performance measures including review reference points, management responses and annual review and reporting of performance. Fisheries Queensland has also indicated that the performance measurement system for the fishery will be reviewed following the review of the ecological risk assessment.
  - Coral stress response plan for the coral and marine aquarium fish fisheries - May 2009.

Under legislation there are also:

- limits on the number of boats and collectors operating under a licence at any one time
- area restrictions
- requirements for permits issued under relevant Commonwealth or state legislation, to operate in marine reserves, and
- gear restrictions (hand held non-mechanical devices only).

Specific management measures prescribed by the coral policy are described below.

### Ecological risk assessment

The 'Ecological Risk Assessment of the Queensland Coral Fishery - October 2008' provides ecological risk rankings for 30 species or species groups harvested from the fishery. None were assessed as being at higher than low risk from harvesting. In the 2011 annual status report for the Coral Fishery, Fisheries Queensland indicates that the risk assessment is planned to be revised in 2012 to take account of new knowledge, the different species mix now being collected, and the predicted effects of climate change related impacts.

### Limited entry

Limited entry - 59 Commercial Harvest Fishery Licences are endorsed to harvest coral.

<p><b>Management arrangements</b> (<i>cont.</i>)</p>	<p><u>Harvest limits</u></p> <p>The coral policy specifies an annual commercial total allowable catch for the fishery of 200 tonnes, comprising:</p> <ul style="list-style-type: none"> <li>- a 'specialty coral' component limited to annual take of 60 tonnes, and</li> <li>- an 'other coral' component limited to annual take of 140 tonnes (this includes 'ornamental coral', live rock and coral rubble/coral sand).</li> </ul> <p>Individual quota allocations are made through licence conditions.</p> <p><u>Managing localised concentrations of effort</u></p> <p>There are two designated 'high use' areas termed Coral Collection Areas (CCAs) in the Coral Fishery - one offshore from Cairns and the other around the Keppel group of islands in central Queensland (see Figure 1). CCAs represent areas with historically high concentrations of fishing effort. As a management measure to control the potential for excessive collection in these areas, the coral policy introduces review reference points that if reached would initiate investigation into the collection activities in the region and whether management intervention was required.</p> <p>Harvest within the Cairns and Keppel CCAs is monitored against benchmarks in the performance measurement system. The performance measurement system includes a management response process. Fisheries Queensland has indicated that similar monitoring and management mechanisms are to be introduced in the same manner for any other high use coral collection areas identified in the future.</p>
<p><b>Export</b></p>	<p>237,546 pieces of harvested coral were exported from Queensland in 2010-2011 with the majority of export (83 per cent) going to markets in France, the United States of America and the United Kingdom.</p>
<p><b>Bycatch, interaction with protected species<sup>2</sup> and ecosystem impacts</b></p>	<p>Due to the selective harvesting method (hand harvesting with hand held non-mechanical devices only), there is no bycatch in the Coral Fishery and operators pose a negligible risk to protected species. Similarly, impacts on the physical ecosystem are unlikely. In addition, impacts on the food web are unlikely given that take of the target species is limited to ecologically sustainable levels.</p> <p>Coral collectors have committed to best practise harvesting methods through an industry stewardship action plan (Donnelly 2009). A climate change vulnerability assessment (Donnelly 2011) incorporates the outputs of the 2008 fishery ecological risk assessment when assessing the likely risks to coral species collected in the fishery from impacts related to climate change. The assessment concluded that the overall risk to key species is low. However, it was highly recommended that if the fishery is to remain resilient and adapt/respond to climate change, then more timely analysis of logbook information is urgently required. Fisheries Queensland has indicated that it will include recommendations from the climate change vulnerability assessment in the review of the ecological risk assessment planned for late 2012.</p>

<sup>2</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.

**Impacts on Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) species**

This assessment considered the possible impacts on coral taxa harvested in the Coral Fishery which are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (see Table 3). As discussed above, most corals harvested in the Coral Fishery are listed under CITES.

Export of CITES specimens may only occur where:

- the CITES Scientific Authority of the country of export has found that the export will not be detrimental to the survival of the species (a non-detriment finding)

Australia's Scientific Authority for Marine Species for CITES has made the 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Queensland Coral Fishery - June 2012' (2012 NDF), which concluded that, provided Fisheries Queensland's planned reviews of the fishery's ecological risk assessment and performance measurement system address the issues identified by the 2012 NDF, harvest of CITES listed coral from the Coral Fishery is considered non-detrimental to the species in question. This assessment is time limited, and is only considering the environmental impact of harvest for the next three years (the period of the recommended approved wildlife trade operation declaration for the fishery), and

- a CITES export permit has been issued by the CITES Management Authority.

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) gives effect to Australia's obligations as a party to CITES. Under the EPBC Act, CITES export permits must not be issued unless the Minister administering the EPBC Act is satisfied that the export will not be detrimental to, or contribute to trade which is detrimental to:

- i. the survival of any taxon to which the specimen belongs, or
- ii. the recovery in nature of any taxon to which the specimen belongs:

Taking into account the management arrangements in place to monitor and control the level of harvest of CITES listed specimens from the Coral Fishery and the non-detriment finding described above, the department considers that the harvest of CITES listed specimens from the fishery until 26 June 2015 will not be detrimental to the survival of any taxon to which the CITES specimen belongs, or

- iii. any relevant ecosystem (for example, detriment to habitat or biodiversity):

Given the management measures controlling the level of harvest of coral taxa, the extent of the areas protected from harvesting by marine reserve zoning and the permitted harvest methods (hand held non-mechanical instruments only), the potential for the Coral Fishery to be detrimental to any relevant ecosystem generally is considered low.

*Note: While coral sand and coral rubble are not covered by the convention, at the time of writing live rock and ornamental coral - dead corals, that may have been alive when harvested - imported into the European Union (EU) require both individual CITES export permits and EU CITES import permits.*

<p><b>Impacts on the Commonwealth marine area</b></p>	<p>As the Coral Fishery operates partially in Commonwealth waters, this assessment considered the possible impacts of the operation of the fishery on the Commonwealth marine area.</p> <p>Given:</p> <ul style="list-style-type: none"> <li>• the outcomes of the ecological risk assessment of coral taxa harvested from the fishery</li> <li>• areas closed to harvest under Great Barrier Reef Marine Park zoning (see below)</li> <li>• harvest limits and gear restrictions where coral collection is permitted</li> <li>• the performance measures and management responses in the performance measurement system, and</li> <li>• the non-detriment finding for coral taxa harvested from the fishery,</li> </ul> <p>significant impacts on the environment in a Commonwealth marine area are considered unlikely.</p> <p>On this basis, the department considers that an action taken by an individual fisher, acting in accordance with the Coral Fishery management arrangements in force under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008, would not be expected to have a significant impact on the environment in a Commonwealth marine area.</p>
<p><b>Impacts on World Heritage property/ Great Barrier Reef Marine Park</b></p>	<p>This assessment considered the possible impacts of the operation of the Coral Fishery on the World Heritage values of the Great Barrier Reef World Heritage Area and on the Great Barrier Reef Marine Park. Harvest of coral occurs within the Great Barrier Reef World Heritage Area and the Great Barrier Reef Marine Park.</p> <p>The Great Barrier Reef Marine Park is subject to spatial zoning arrangements that are designed to protect the biodiversity and health of the marine park. Approximately 33 per cent of the marine park is closed to coral harvest. Marine park permits are required to operate in the Great Barrier Reef Marine Park.</p> <p>Given the areas closed to harvest and:</p> <ul style="list-style-type: none"> <li>• the outcomes of the ecological risk assessment of coral taxa harvested from the fishery</li> <li>• harvest limits and gear restrictions where coral collection is permitted</li> <li>• the performance measures and management responses in the performance measurement system, and</li> <li>• the non-detriment finding for coral taxa harvested from the fishery,</li> </ul> <p>significant impacts on the Great Barrier Reef Marine Park or the World Heritage values of the Great Barrier Reef World Heritage Area are considered unlikely.</p> <p>On this basis, the department considers that an action taken by an individual fisher, acting in accordance with the Coral Fishery management arrangements in force under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008, would not be expected to have a significant impact on the Great Barrier Reef Marine Park or the World Heritage values of the Great Barrier Reef World Heritage Area.</p>

**Table 2: Progress in implementation of conditions and recommendations made in the 2009 assessment of the Queensland Coral Fishery**

Condition	Progress	Recommended Action
<p>1. Operation of the fishery will be carried out in accordance with the Queensland Coral Fishery (QCF) management arrangements in force under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p>	<p>Fisheries Queensland advises that the operation of the Coral Fishery has been carried out in accordance with the management regime for the fishery in force under the Queensland <i>Fisheries Act 1994</i>, Queensland Fisheries Regulation 1995 and Queensland Fisheries Regulation 2008.</p>	<p>The Department of Sustainability, Environment, Water, Population and Communities considers that this condition has been met.</p> <p>The department recommends that a new approved wildlife trade operation declaration for the Coral Fishery specify a similar condition (see <b>Condition 1</b>, Table 4).</p>
<p>2. Queensland Primary Industries and Fisheries (QPIF) to inform the Department of the Environment, Water, Heritage and the Arts (DEWHA) of any intended amendments to the management arrangements that may affect the assessment of the QFC against the criteria on which Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) decisions are based.</p>	<p>The department is satisfied that there have been no changes to the management arrangements for the Coral Fishery since implementation of the Policy for the Management of the Coral Fishery in 2009.</p>	<p>The department considers that this condition has been met.</p> <p>The department recommends that a new approved wildlife trade operation declaration for the Coral Fishery specify a similar condition (see <b>Condition 2</b>, Table 4).</p>
<p>3. QPIF to produce and present reports to DEWHA annually as per Appendix B to the Guidelines for the Ecologically Sustainability Management of Fisheries 2<sup>nd</sup> Edition.</p>	<p>Fisheries Queensland has provided reports to the department annually.</p>	<p>The department considers that this condition has been met.</p> <p>The department recommends that a new approved wildlife trade operation declaration for the Coral Fishery specify a similar condition (see <b>Condition 3</b>, Table 4).</p>

<b>Condition</b>	<b>Progress</b>	<b>Recommended Action</b>
<p>4. QPIF to consult with DEWHA prior to implementing any changes to the management arrangements for a species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora or EPBC Act listed species.</p>	<p>The department is satisfied that there have been no changes to the management arrangements for species listed under the convention or for EPBC Act listed species.</p>	<p>The department considers that this condition has been met.</p> <p>The department recommends that a new approved wildlife trade operation declaration for the Coral Fishery specify a similar condition (see <b>Condition 8</b>, Table 4).</p>

Recommendation	Progress	Recommended Action
<p>1. QPIF to:</p> <p>a) continue to investigate finer spatial scale analysis of data if PMS indicators are triggered;</p> <p>b) factor estimates of recreational take, as well as permitted take under research and other relevant permits, into fishery assessments and management controls to ensure overall catch levels are sustainable.</p>	<p>(a) The 2009 assessment of the Coral Fishery under the EPBC Act noted that:</p> <ul style="list-style-type: none"> <li>- the 'Performance Measurement System - Queensland Coral Fishery - Version 1 - April 2009' incorporates review reference points and management measures to monitor collection of corals and identify increases in take in particular regions</li> <li>- commercial operators are required to report the location of their catch by dive site and latitude and longitude, and that this data is available for analysis by Fisheries Queensland when required</li> <li>- public reporting of spatial information through the annual status reports is restricted to the six nautical mile scale to protect operator confidentiality through the less than five boat agreement, and</li> <li>- if performance measures are triggered, Fisheries Queensland can access and analyse the finer scale information.</li> </ul> <p>The assessment concluded that finer scale analysis should continue and be documented, and recommended that Fisheries Queensland (then Queensland Primary Industries and Fisheries) continue to investigate finer spatial scale analysis of data if indicators were triggered.</p> <p>Fisheries Queensland's 2012 application for further export approval indicates that finer spatial scale analysis data continues to be conducted when relevant performance measurement system indicators are triggered. Nonetheless, the 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Queensland Coral Fishery - June 2012' made by Australia's Scientific Authority for Marine Species for CITES, identified a need to review the performance measurement system's spatial performance measures for CITES listed coral taxa to effectively manage localised concentrations of harvest (see Table 4).</p>	<p>The department considers the issues covered by this recommendation to be ongoing. The department recommends that monitoring and appropriate management of spatial harvest patterns in the fishery be considered in the next review of the Coral Fishery performance measurement system, particularly in relation to those coral taxa listed under CITES (see Recommendation 3, Table 4).</p>

Recommendation	Progress	Recommended Action
	<p>(b) While acknowledging that recreational harvest of coral and harvest for research purposes is generally low (see Table 1), the department is aware that:</p> <ul style="list-style-type: none"> <li>- results from Fisheries Queensland's 2010 state wide recreational fishing survey, and</li> <li>- harvest data from general fisheries permits</li> </ul> <p>will be available for consideration in the upcoming review of the ecological risk assessment of coral taxa collected in the Coral Fishery.</p>	
<p>2. QPIF to formalise a data sharing agreement with the Great Barrier Reef Marine Park Authority and Queensland Parks and wildlife Service.</p>	<p>Fisheries Queensland advises that formal data sharing agreements with the Great Barrier Reef Marine Park Authority and Queensland Parks and Wildlife Service have not yet been implemented.</p> <p>The department acknowledges that although a formal agreement has not yet been implemented, there has been close collaboration and sharing of data and information between management agencies and industry as evidenced through the triggering of actions under the 'Coral stress response plan for the coral and marine aquarium fish fisheries' in the Keppel region as a result of significant coral bleaching in January and February 2011.</p>	<p>The department understands that current information sharing arrangements meet the needs of each organisation and considers that no further recommendation is required on this matter.</p>



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

**Please Note** – the table below is not a complete or exact representation of the EPBC Act. It is intended as a summary of relevant sections and components of the EPBC Act to provide advice on the fishery in relation to decisions under Parts 13 and 13A. A complete version of the EPBC Act can be found at <http://www.comlaw.gov.au>.

**Part 13**

<p><b>Division 1 Listed threatened species</b>  <b>Section 208A Minister may accredit plans or regimes</b></p>	<p><b>The department’s assessment of the Queensland Coral Fishery</b></p>
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <p style="margin-left: 20px;">i. made by a State or self-governing Territory; and</p> <p style="margin-left: 20px;">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 members of listed threatened species (other than conservation dependent species) are not killed or injured as a result of the fishing; and</p> <p>(g) The fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the survival or recovery in nature of the species.</p>	<p>The Queensland Coral Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p>The management regime for the Coral Fishery was most recently accredited under Part 13 of the EPBC Act in June 2009. The department considers that the management regime for the fishery still requires operators to take all reasonable steps to ensure that listed threatened species are not killed or injured as a result of the fishing.</p> <p>Given the selective harvesting method used in the fishery (hand harvesting with hand held non-mechanical devices only), the department considers that the likelihood of interactions with listed threatened species is very low. Therefore, the department considers the current operation of the Coral Fishery is not likely to adversely affect the survival or recovery in nature of any listed threatened species.</p>

**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 Coral 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> <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> <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 Coral Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p>The management regime for the Coral Fishery was most recently accredited under Part 13 of the EPBC Act in June 2009. The department considers that the management regime for the fishery still requires operators to take all reasonable steps to ensure that listed migratory species are not killed or injured as a result of the fishing.</p> <p>Given the selective harvesting method used in the fishery (hand harvesting with hand held non-mechanical devices only), the department considers that the likelihood of interactions with listed migratory species is very low. Therefore, the department considers the current operation of the Coral Fishery is not likely to adversely affect the conservation status of a 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 Coral 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> <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> <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 Coral Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p>The management regime for the Coral Fishery was most recently accredited under Part 13 of the EPBC Act in June 2009. The department considers that the management regime for the fishery still requires operators to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing.</p> <p>Given the selective harvesting method used in the fishery (hand harvesting with hand held non-mechanical devices only), the department considers that the likelihood of interactions with whales or other cetaceans is very low. Therefore, the department considers the current operation of the Coral Fishery is not likely to adversely affect the conservation status of a 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 Coral 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> <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> <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 marine species are not killed or injured as a result of the fishing; and</p> <p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a listed marine species or a population of that species.</p>	<p>The Coral Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p>The management regime for the Coral Fishery was most recently accredited under Part 13 of the EPBC Act in June 2009. The department considers that the management regime for the fishery still requires operators to take all reasonable steps to ensure that listed marine species are not killed or injured as a result of the fishing.</p> <p>Given the selective harvesting method used in the fishery (hand harvesting with hand held non-mechanical devices only), the department considers that the likelihood of interactions with listed marine species is very low. Therefore, the department considers the current operation of the Coral 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 Conditions relating to accreditation of plans, regimes and policies</b>	<b>The department's assessment of the Queensland Coral 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 Coral Fishery be accredited under sections 208A, 222A, 245 and 265.
(2) The Minister may accredit a plan, regime or policy under that section even though he or she considers that the plan, regime or policy should be accredited only: (a) during a particular period; or (b) while certain circumstances exist; or (c) while a certain condition is complied with. In such a case, the instrument of accreditation is to specify the period, circumstances or condition.	The department considers that no conditions are required for the accreditation of the management regime for the 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>3</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.

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<sup>3</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora

**Part 13A (cont.)**

Section 303DC Minister may amend list	The department's assessment of the Queensland Coral Fishery
<p>(1) Minister may, by instrument published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by:</p> <ul style="list-style-type: none"> <li>(a) including items in the list;</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>The department recommends that specimens derived from species harvested in the Coral Fishery, other than specimens that belong to species listed under Part 13 of the EPBC Act and specimens that belong to taxa listed under section 303CA of the EPBC Act, be included in the list of exempt native specimens while the Coral Fishery is subject to a declaration as an approved wildlife trade operation.</p>
<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 Coral 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 Coral Fishery, as described above, would be consistent with the provisions of Part 13A as:</p> <ul style="list-style-type: none"> <li>▪ the inclusion excludes specimens listed under CITES</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 Coral Fishery during the period of the recommended declaration as an approved wildlife trade operation is unlikely to be unsustainable or threaten biodiversity, and</li> <li>▪ the Environment Protection and Biodiversity Conservation Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</li> </ul>

<b>Section 303DC Minister may amend list</b>	<b>The department's assessment of the Queensland Coral Fishery</b>
<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 application from Fisheries Queensland was released for public comment from 2 April 2012 to 4 May 2012. 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 Coral Fishery; and</li> <li>▪ Fisheries Queensland's application.</li> </ul> <p>Four 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 Coral Fishery made under section 303DC will be gazetted and made available on the department's website.</p>



**Part 13A (cont.)**

Section 303FN Approved wildlife trade operation	The department's assessment of the Queensland Coral Fishery
<p>(2) The Minister may, by instrument published in the <i>Gazette</i>, declare that a specified wildlife trade operation is an <b>approved wildlife trade operation</b> for the purposes of this section.</p>	
<p>(3) 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 department considers that the operation of the Coral Fishery is consistent with the objects of Part 13A (listed above this table) as:</p> <ul style="list-style-type: none"> <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>• in relation to the harvest of CITES listed specimens: <ul style="list-style-type: none"> <li>- Taking into account: <ul style="list-style-type: none"> <li>- the outcomes of Fisheries Queensland's vulnerability assessment and ecological risk assessment for coral taxa harvested from the Coral Fishery, and</li> <li>- the management arrangements in place to monitor and control the level of harvest of CITES specimens (see Table1),</li> </ul> </li> </ul> <p>the department considers that the harvest of CITES specimens from the fishery until 26 June 2015 will not be detrimental to the survival of any taxon to which the CITES specimen belongs, and</p> <ul style="list-style-type: none"> <li>- Given the management measures controlling the level of harvest of coral taxa and the gear used (hand held non-mechanical instruments only), the potential for the Coral Fishery to be detrimental to any relevant ecosystem generally is considered low.</li> </ul> </li> <li>• Australia's Scientific Authority for Marine Species has made the 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Coral Fishery - June 2012' (2012 NDF), which concluded that, provided that Fisheries Queensland's proposed reviews of the fishery's ecological risk assessment and performance measurement system address the issues identified by the 2012 NDF, harvest of CITES listed coral from the Coral Fishery is non-detrimental to the species in question during the period of the recommended declaration as an approved wildlife trade operation.</li> </ul>

Section 303FN Approved wildlife trade operation	The department's assessment of the Queensland Coral Fishery
<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>	<ul style="list-style-type: none"> <li>• the operation of the Coral Fishery during the period of the recommended declaration as an approved wildlife trade operation is unlikely to be unsustainable and threaten biodiversity, and</li> <li>• the Environment Protection and Biodiversity Conservation Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</li> </ul> <p>Given the:</p> <ul style="list-style-type: none"> <li>• outcomes of Fisheries Queensland's vulnerability assessment and ecological risk assessment for coral taxa harvested from the Coral Fishery</li> <li>• substantial areas of coral closed to harvest under marine reserve zoning and general fisheries closures</li> <li>• management arrangements in place to monitor and control the level of harvest, and</li> <li>• 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Coral Fishery - June 2012',</li> </ul> <p>the department considers that the operation of the Coral Fishery during the period of the recommended declaration as an approved wildlife trade operation will not be detrimental to the survival or conservation status of a taxon to which it relates.</p> <p>Given the:</p> <ul style="list-style-type: none"> <li>• selective hand harvest methods employed</li> <li>• outcomes of Fisheries Queensland's vulnerability assessment and ecological risk assessment for coral taxa harvested from the Coral Fishery</li> <li>• substantial areas of coral closed to harvest under marine reserve zoning and general fisheries closures</li> <li>• management arrangements in place to monitor and control the level of harvest, and</li> <li>• 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Coral Fishery - June 2012',</li> </ul> <p>the department considers that the operation of the Coral Fishery during the period of the recommended declaration as an approved wildlife trade operation will not threaten any relevant ecosystem.</p> <p>The Environment Protection and Biodiversity Conservation Regulations 2000 do not specify fish as a class of animal in relation to the welfare of live specimens.</p>

Section 303FN Approved wildlife trade operation	The department's assessment of the Queensland Coral Fishery
(d) such other conditions (if any) as are specified in the regulations have been, or are likely to be, satisfied.	No other conditions are specified in relation to commercial fisheries in the Environment Protection and Biodiversity Conservation Regulations 2000.
<p>(4) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to:</p> <p>(a) the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and</p> <p>(b) the effectiveness of the management arrangements for the operation (including monitoring procedures).</p>	<p>Given the:</p> <ul style="list-style-type: none"> <li>• selective hand harvest methods employed</li> <li>• outcomes of Fisheries Queensland's vulnerability assessment and ecological risk assessment for coral taxa harvested from the Coral Fishery</li> <li>• substantial areas of coral closed to harvest under marine reserve zoning and general fisheries closures</li> <li>• management arrangements in place to monitor and control the level of harvest, and</li> <li>• 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Coral Fishery - June 2012',</li> </ul> <p>the department considers that the operation of the Coral Fishery during the period of the recommended declaration as an approved wildlife trade operation will not threaten any relevant ecosystem.</p> <p>The department considers that the management arrangements for the Coral Fishery are likely to be effective. Management controls (described in Table 1) are included in the Queensland <i>Fisheries Act 1994</i>, Queensland Fisheries Regulation 2008, conditions attached to fishing licences and policies and non-regulatory measures, including Fisheries Queensland's 'Policy for the Management of the Coral Fishery'.</p> <p>Under the 'Performance Measurement System - Queensland Coral Fishery - Version 1 - April 2009', Fisheries Queensland reviews the performance of the fishery annually against a series of objectives, performance measures and performance indicators.</p>

Section 303FN Approved wildlife trade operation	The department's assessment of the Queensland Coral Fishery
<p>(5) 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 Coral Fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p>The Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulations 2008 applies throughout Queensland waters.</p> <p>The legislation is likely to be effective.</p>
<p>(10) 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:</p> <ul style="list-style-type: none"> <li>(d) the operation is a commercial fishery.</li> </ul>	<p>The Coral Fishery is a commercial fishery.</p>

**Part 13A (cont.)**

<b>Section 303FR Public consultation</b>	<b>The department's assessment of the Queensland Coral Fishery</b>
(1) 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.	A public notice, which: <ul style="list-style-type: none"><li>▪ set out the proposal to declare the Coral Fishery an approved wildlife trade operation</li><li>▪ included Fisheries Queensland's application, and</li><li>▪ invited persons and organisations to give written comments about the proposal within the period 2 April 2012 to 4 May 2012</li></ul> was published on the department's website.
(2) A period specified in the notice must not be shorter than 20 business days after the date on which the notice was published on the Internet.	The period specified in the notice included a total of 22 business days.
(3) In making a decision about whether to make a declaration under section 303FN, the Minister must consider any comments about the proposal to make the declaration that were given in response to the invitation in the notice.	Four comments were received during the period specified in the notice. The department's assessment has considered the comments received.

**Part 13A (cont.)**

Section 303FT Additional provisions relating to declarations	The department's assessment of the Queensland Coral Fishery
<p>(1) This section applies to a declaration made under section 303FN, 303FO or 303FP.</p>	<p>The department recommends that the Coral Fishery be declared an approved wildlife trade operation under section 303FN.</p>
<p>(3) 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 to the extent that the plan or operation relates to a particular class of specimens. In such a case:</p> <p>(a) the instrument of declaration is to specify that class of specimens; and</p> <p>(b) the plan or operation is covered by the declaration only to the extent that the plan or operation relates to that class of specimens.</p>	<p>The department considers that the Coral Fishery should be the subject of a declaration under section 303FN only to the extent that it relates to specimens that belong to taxa that are:</p> <ul style="list-style-type: none"> <li>• not listed under Part 13 of the EPBC Act, and</li> <li>• not listed under section 303CA of the EPBC Act (listing of CITES species), except for specimens that belong to taxa to which the 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Coral Fishery - June 2012' refers.</li> </ul> <p>The instrument of declaration for the Coral Fishery specifies the classes of specimens.</p>
<p>(4) 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>(c) during a particular period; or</p> <p>(d) while certain circumstances exist; or</p> <p>(e) 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 department considers that the Coral Fishery should be the subject of a declaration under section 303FN only if the conditions described in Table 4 are complied with.</p> <p>The instrument of declaration for the Coral Fishery specifies the conditions.</p>
<p>(8) A condition may relate to reporting or monitoring.</p>	<p><b>Condition 3</b> and <b>Condition 8</b> relate to reporting.</p>

<b>Section 303FT Additional provisions relating to declarations</b>	<b>The department's assessment of the Queensland Coral Fishery</b>
(9) 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.	
(11) A copy of an instrument under section 303FN or this section is to be made available for inspection on the Internet.	The instrument for the Coral Fishery made under section 303FN and the conditions under section 303FT will be gazetted and made available on the department's website.

**Part 16**

<b>Section 391 Minister must consider precautionary principle in making decisions</b>	<b>The department's assessment of the Queensland Coral 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 precautionary principle has been considered in preparing the department's advice about a decision to declare the Coral Fishery an approved wildlife trade operation under section 303FN.
(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 conditions and recommendations to Fisheries Queensland for the Queensland Coral Fishery**

The material submitted by Fisheries Queensland demonstrates that the management arrangements for the Coral Fishery continue to meet most of the requirements of the Australian Government 'Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition'. The management arrangements for the Coral Fishery are described in Fisheries Queensland's 2009 publication - 'A guide to the Queensland Marine Aquarium Fish Fishery and the Queensland Coral Fishery', which also outlines industry stewardship initiatives for coral. The management arrangements for the fishery are summarised in Table 1 of this report.

### **Stock Status**

The department considers that overall the management regime for the Coral Fishery aims to ensure that fishing is conducted in a manner that does not lead to overfishing.

Entry to the Coral Fishery is limited to endorsement holders. The 'Policy for the Management of the Coral Fishery' specifies an annual total allowable catch limit of 200 tonnes for the fishery.

The 'Ecological Risk Assessment of the Queensland Coral Fishery - October 2008' provides ecological risk rankings for 30 species or species groups harvested from the fishery. None were assessed as being at higher than low risk from harvesting. In the 2011 annual status report for the Coral Fishery, Fisheries Queensland indicates that the risk assessment is planned to be revised in 2012 to take account of new knowledge, the different species mix now being collected, and the predicted effects of climate change related impacts.

Fisheries Queensland implemented a performance measurement system for the Coral Fishery in 2009 - the 'Performance Measurement System Queensland Coral Fishery - Version 1 - April 2009'. The performance measurement system contains management objectives, performance indicators, performance measures including review reference points, management responses and annual review and reporting of performance. Fisheries Queensland has also indicated that the performance measurement system for the fishery will be reviewed following the review of the ecological risk assessment.

Effort in the Coral Fishery is concentrated in two 'high use' areas termed Coral Collection Areas (CCAs). To control the potential excessive collection in these areas, the 'Policy for the Management of the Coral Fishery' outlines review reference points that if reached would initiate investigation into the collection activities in the region and aid in determining whether management intervention was required. CCAs are monitored annually for indications of unsustainable harvest levels brought about by localised concentration of effort.

The fishery is also managed through area restrictions, limits on the number of boats and collectors operating under a licence at any one time and gear restrictions (hand held non-mechanical devices only).

### **Ecosystem Impacts**

Taking into account the management measures described above, the department considers that the management regime for the Coral Fishery provides for fishing operations to be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

### **Ongoing Issues**

While the fishery is relatively well managed, the department has identified a number of risks and uncertainties that must be managed to ensure that impacts are minimised and to enable ongoing CITES non detriment findings to be made.

On the advice of Australia's Scientific Authority for Marine Species for the Convention on International Trade in Endangered Species, the department considers there is a need to:

- review the vulnerability assessment and ecological risk assessment for coral taxa harvested from the fishery
- review the fishery's performance measurement system, and
- until a revised performance measurement system is implemented, review the harvest of CITES-listed coral taxa annually in conjunction with Australia's Scientific Authority for Marine Species for CITES.

The key priority for this fishery will be putting in place a management system that ensures that requirements for international trade in CITES specimens continue to be met.

The department considers that declaration of the harvest operations of the Coral Fishery as an approved wildlife trade operation for three years, until 26 June 2015, is appropriate. The department considers that the declaration should be subject to the conditions listed in Table 4. To contain and minimise the risks in the longer term the recommendations outlined in Table 4 have been made.

Unless a specific time frame is provided, each condition and recommendation must be addressed within the period of the declaration.

**Table 4: Queensland Coral Fishery Assessment – Summary of Issues, Conditions and Recommendations – June 2012**

<b>Issue</b>	<b>Condition/Recommendation</b>
<p><u>General management</u>  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>Condition 1:</b> Operation of the fishery will be carried out in accordance with the Queensland Coral Fishery management arrangements in force under the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p><b>Condition 2:</b> Fisheries Queensland to inform the Department of Sustainability, Environment, Water, Population and Communities of any intended amendments to the management arrangements that may affect the assessment of the Queensland Coral Fishery against the criteria on which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are based.</p>
<p><u>Annual reporting</u>  It is important that reports be produced and presented to the department 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. Annual reports should follow Appendix B to the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2<sup>nd</sup> Edition</i> 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 the department's conditions and recommendations. Electronic copies of the guidelines are 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>Condition 3:</b> Fisheries Queensland to produce and present reports to the Department of Sustainability, Environment, Water, Population and Communities annually as per Appendix B to the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2<sup>nd</sup> Edition</i>.</p>

### CITES listed species

An objective of Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is to ensure that Australia complies with its obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Australia's obligations under CITES are met through the EPBC Act. As a party to the Convention, Australia must apply all CITES provisions of the EPBC Act to CITES imports and exports as appropriate. Prior to permitting export of CITES-listed species, Australia's Scientific Authority for Marine Species for the Convention on International Trade in Endangered Species (Australia's CITES Scientific Authority for Marine Species) must establish that allowing export will not be detrimental to the species' survival. This is known as a 'non-detriment finding'. (All CITES specimens harvested from the fishery will still require a CITES export permit to allow export of the specimens)

Most **Specialty coral** and **Ornamental coral** taxa harvested in the Queensland Coral Fishery are listed on Appendix II of CITES:

- black corals (order Antipatharia - the entire order is listed (including fossils))
- blue corals (family Helioporidae - *the entire family is listed. Fossils are not subject to the provisions of the Convention.*)
- stony corals (order Scleractinia - *the entire order is listed. Fossils are not subject to the provisions of the Convention.*)
- pipe coral (family Tubiporidae - *the entire family is listed. Fossils are not subject to the provisions of the Convention.*)
- fire corals (family Milleporidae - *the entire family is listed. Fossils are not subject to the provisions of the Convention.*), and
- lace or branched corals (family Stylasteridae - *the entire family is listed. Fossils are not subject to the provisions of the Convention.*).
- (Note that while **Coral sand** and **Coral rubble** are not covered by the convention, **Live rock** and **Ornamental coral** - dead coral, that may have been alive when harvested - imported into the European Union (EU) require both individual CITES export permits and EU CITES import permits.)

There has been an increasing focus within CITES over recent years on how the convention is applied to marine species. In light of this, to ensure that:

- (a) non-detriment findings for CITES listed species harvested from the Coral Fishery remain ongoing, and
- (b) non-detriment findings for new and emerging target species are able to be made,

the department considers it critical that key management documents for the Coral Fishery are reviewed as soon as practicable and that long term arrangements for ongoing review are put in place. The department considers it essential that any such reviews take into account the guidance provided by Rosser and Haywood (2002)<sup>4</sup> and recommends that reviews take place in consultation with Australia's CITES Scientific Authority for Marine Species.

*(continued next page)*

<sup>4</sup> Rosser, AR & Haywood MJ 2002, 'Guidance For CITES Scientific Authorities: Checklist to assist in making non-detriment findings for Appendix II exports', IUCN, Gland, Switzerland and Cambridge, UK.

### Vulnerability assessment of coral taxa collected

In 2008 Fisheries Queensland undertook a vulnerability assessment of key coral taxa collected in the Coral Fishery to inform a subsequent ecological risk assessment and development of a performance measurement system for the fishery. However, since that time, the species and volume of coral collected in the fishery has changed markedly with the number of species, and the volume of individual key species harvested, having increased.

For example, key trends include:

- Acroporid coral harvest has increased in recent years, especially in the Cairns region. This appears due to improvements in husbandry techniques for live export of Acroporid corals and increased demand from export markets, particularly from the USA. In the *Annual status report 2011 - Queensland Coral Fishery*, Fisheries Queensland indicates that collection occurs from a broad range of Acroporid species and that it will seek to document the full range of species collected from the Acroporid family which will be assessed in the 2012 revision of the fishery's ecological risk assessment. Acroporid corals are generally known to be fast growing species.
- increasing take of unspecified coral species reported as Other Hard Corals. Fisheries Queensland intends to investigate the species that comprise this harvest and what the collection means to their sustainability, with the ecological risk to these species to be assessed in the revision of the fishery's ecological risk assessment.

A number of the species which have emerged as key target species for the fishery have recently been the subject of a Review of Significant Trade by CITES. (For a species to be included in a Review of Significant Trade, they are usually heavily traded internationally and considered vulnerable to over exploitation, meaning they may require a more rigorous assessment for a non-detriment finding.) Australia's CITES Scientific Authority for Marine Species therefore considers it critical that, to ensure that non detriment findings can continue to be made for new and emerging target species harvested in the Coral Fishery, Fisheries Queensland review and update the vulnerability assessment.

In updating the vulnerability assessment as required under Condition 4, particular consideration should be given to the relevant points raised in the conclusions of the 'Non-Detriment Finding for the Export of CITES-Listed Coral Species Harvested from the Queensland Coral Fishery - June 2012'. Ensuring that the updated vulnerability assessment adequately addresses those issues identified in the non-detriment finding is vital for the ongoing harvest to be found to be non-detrimental. The specific points from the non-detriment finding conclusion that should be addressed include points 1, 2, 3, 4 and 5.

**Condition 4:** By 31 December 2012, Fisheries Queensland, in consultation with Australia's CITES<sup>5</sup> Scientific Authority for Marine Species (Department of Sustainability, Environment, Water, Population and Communities) to review and update the vulnerability assessment of coral taxa collected in the Queensland Coral Fishery to include new and emerging target species/species groups, with particular reference to taxa that are listed on Appendix II of CITES.

<sup>5</sup> Convention on International Trade in Endangered Species of Wild Fauna and Flora

### Ecological risk assessment of the fishery

The *Ecological Risk Assessment of the Queensland Coral Fishery - October 2008* provides ecological risk rankings for 30 species or species groups harvested from the fishery. *Fisheries Queensland* has advised that the risk assessment is planned to be revised in 2012 to take account of new knowledge, the different species mix now being collected, and the predicted effects of climate change related impacts.

To ensure that non-detriment findings for CITES Appendix II species harvested from the fishery can continue to be made, Australia's CITES Scientific Authority for Marine Species considers it essential that Fisheries Queensland review and update the ecological risk assessment for the fishery as a priority.

The Scientific Authority considers that an updated ecological risk assessment should consider the potential impact of the harvest method used for the species. For example, only small sections are removed from some species, allowing the colony to continue growing, whilst for other species the entire coral is removed, which could result in increased risk to those species.

The Scientific Authority has identified a need to clearly explain the methodology for selecting species from the vulnerability assessment for further consideration in the ecological risk assessment. It is not clear in the *Ecological Risk Assessment of the Queensland Coral Fishery - October 2008* why some species with higher vulnerability scores were excluded from further consideration and species with lower vulnerability scores included.

The Scientific Authority also considers that, given the highly selective and targeted nature of collection, consideration should be given to the sensitivity of the assigned risk rankings to increases in demand for, and harvest of, particular species. The specific areas for focus within the review and revision of the ecological risk assessment of the Coral Fishery, as referred to in Condition 5 and Recommendations 1 and 2, are explained in detail in the conclusions of the 2012 Queensland Coral Fishery non-detriment finding. Ensuring that the updated vulnerability assessment adequately addresses those issues identified in the non-detriment finding is vital, if the ongoing harvest is to be found to be non-detrimental. The specific points for focus in the review and revision of the ecological risk assessment are set out in points 1, 2, 3, 4 and 5 of the conclusions to the non-detriment finding.

**Condition 5:** By 30 June 2013, Fisheries Queensland to conduct an updated ecological risk assessment for the Queensland Coral Fishery.

**Recommendation 1:** The ecological risk assessment referred to in Condition 5 to:

- a) include additional species based on current and predicted harvest patterns
- b) document the methodology and justification for selecting species for inclusion in the risk assessment
- c) consider any variation in risk attributable to harvest method in relation to the life history characteristics of the species in question (for example, removal of all or part of the colony, taking into consideration the reproductive traits of the species), and
- d) account for potential future increases in harvest of individual target species/species groups that may result from changes in demand.

**Recommendation 2:** The review of the ecological risk assessment to be undertaken in conjunction with Australia's CITES Scientific Authority for Marine Species (Department of Sustainability, Environment, Water, Population and Communities), relevant scientific and management experts and other relevant stakeholders.

#### Performance measurement system

Fisheries Queensland implemented a performance measurement system for the Coral Fishery in 2009. The *Performance Measurement System Queensland Coral Fishery - Version 1 April 2009* has now been in operation for three years.

Analysis of performance of the fishery against the performance measures indicated that three review reference points were triggered during the 2010–11 reporting year (increasing harvest, generally in the Cairns region - see above and the *Annual status report 2011 - Queensland Coral Fishery*). Fisheries Queensland has advised that it plans to revise the ecological risk assessment for the fishery in 2012 and that the performance measurement system will be reviewed to account for the outcomes of the ecological risk assessment.

As a key management document for the fishery, Australia's CITES Scientific Authority for Marine Species has identified the need to revise the performance measurement system to ensure that ongoing harvest of taxa listed on Appendix II of CITES is non-detrimental. The specific areas for focus within the review and revision of the performance measurement system, as referred to in Condition 6 and Recommendation 3, are explained in detail in the conclusions of the 2012 Queensland Coral Fishery non-detriment finding. Ensuring that the updated performance measurement system adequately addresses those issues identified in the non-detriment finding is vital, if the ongoing harvest is to be found to be non-detrimental. The specific points for focus in the review and revision of the performance measurement system are set out in points 6, 7, 8, 9, 10 and 11 of the conclusions to the non-detriment finding.

**Condition 6:** By 31 December 2013, Fisheries Queensland, in consultation with and for the approval of Australia's CITES Scientific Authority for Marine Species (Department of Sustainability, Environment, Water, Population and Communities) to review and update the performance measurement system for the Queensland Coral Fishery, with particular reference to performance measures and management responses relating to taxa listed on Appendix II of CITES.

**Recommendation 3:** The review referred to in Condition 6 to include, but not be limited to:

- a review of management responses for CITES listed species to include provision for the collection of additional data and information that would underpin ongoing CITES non detriment findings
- a review of the units of measure for monitoring and reporting how much coral is removed at the point of collection
- a review of the levels at which the review reference points for increases or decreases in harvest are currently set
- a review of the management responses associated with spatial performance measures for individual species, and

	<ul style="list-style-type: none"> <li>• the introduction of a species/species group level indicator/measure to identify harvest trends requiring additional data collection, analysis or management response, including, but not limited to <ul style="list-style-type: none"> <li>- slow but consistent increases in harvest over time, and/or</li> <li>- harvest increases above pre-defined thresholds.</li> </ul> </li> </ul>
<p><u>Annual Review of management of CITES listed taxa</u></p> <p>Until such time as a revised performance measurement system is implemented, the department considers that annual reviews of the harvest of CITES listed taxa from the fishery are required, with the revision of management arrangements as appropriate following each review.</p> <p>Reviews should consider catch composition and spatial distribution of catch, and should be used to update risk assessments for individual taxa.</p>	<p><b>Condition 7:</b> By 31 December each year, Fisheries Queensland to:</p> <p>a) review the harvest of CITES listed taxa in the Queensland Coral Fishery in the preceding fishing year</p> <p>b) report the results of the review to Australia’s CITES Scientific Authority for Marine Species (Department of Sustainability, Environment, Water, Population and Communities). The report should include at a minimum:</p> <ul style="list-style-type: none"> <li>• analysis of harvest and harvest trends by species/species group</li> <li>• spatial analysis of harvest by species/species group, and</li> <li>• updated risk assessments for species/groups, and</li> </ul> <p>c) revise management arrangements as appropriate following each review.</p> <p>This condition applies until such time as the revised performance measurement system for the Coral Fishery, referred to in Condition 6 above, is implemented.</p>



Changes to management of CITES listed taxa

To ensure that EPBC Act requirements continue to be met in relation to CITES-listed taxa, it is important that Fisheries Queensland continue to advise the department of any additional CITES species being, likely to be, or able to be, harvested in the fishery, including the level of harvest.

**Condition 8:** Fisheries Queensland to consult with the Department of Sustainability, Environment, Water, Population and Communities prior to any change to the management arrangements for a species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora being implemented in the Queensland Coral Fishery.

## References

Donnelly, R (2009) Pro-vision Reef: Stewardship Action Plan. *A Statement of Operational Standards and Climate Change Contingency Planning*. Pro-vision reef.

Donnelly, R (2011) Climate change vulnerability assessment: *Queensland marine aquarium supply industry, 2010*. Research Publication no. 108. Great Barrier Reef Marine Park Authority, Townsville.

## Acronyms

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DEWHA	Department of the Environment, Water, Heritage and the Arts
EPBC Act	<i>Environment Protection Biodiversity Conservation Act 1999</i>
PMS	Performance measurement system
QCF	Queensland Coral Fishery
QPIF	Queensland Primary Industries and Fisheries
SEWPaC	(Department of) Sustainability, Environment, Water, Population and Communities