



Australian Government

Department of the Environment, Water, Heritage and the Arts

Assessment of the
Queensland East Coast Trochus Fishery

June 2010

© Commonwealth of Australia 2010

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


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


Disclaimer

This document is an assessment carried out by the Department of the Environment, Water, Heritage and the Arts of a commercial fishery against the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*. It forms part of the advice provided to the Minister for Environment Protection, 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 Environment Protection, 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 Trochus Fishery (ECTF)

<p>Publicly available information relevant to the fishery</p>	<ul style="list-style-type: none"> • Queensland <i>Fisheries Act 1994</i> • Queensland <i>Fisheries Regulation 2008</i> • Queensland <i>Marine Parks Act 1982</i> • <i>Great Barrier Reef Marine Park Act 1975</i> • 2009 Progress against DEWHA conditions and recommendations • Annual Status Report (ASR) 2009 – East Coast Trochus Fishery • Annual Status Report 2008 – East Coast Trochus Fishery • Annual Status Report 2007 – East Coast Trochus Fishery • Annual Status Report 2006 – East Coast Trochus Fishery • Department of the Environment and Heritage (DEH) Assessment Report 2005
<p>Area</p>	<p>The area of the East Coast Trochus Fishery (ECTF) encompasses State and Commonwealth waters off the east coast of Queensland. The main focus of the fishery is offshore from Mackay in central Queensland (Figure 1).</p>  <p>Figure 1: ECTF fishing area</p>

Fishery status	<p>The stock status of trochus is currently not assessed. Fisheries Queensland has advised that trochus will be included in Fisheries Queensland's stock status assessment program¹ in 2010.</p> <p>Fisheries Queensland advise that there are no current resource concerns for the fishery.</p>
Target Species	<p>Trochus (<i>Trochus niloticus</i>), conical shells reaching approximately 8-12cm in diameter (Figure 2) are targeted for their shells, which contain a layer of mother-of-pearl. Trochus meat is also utilised but is of secondary importance to the shell.</p> <p>Trochus inhabit intertidal and shallow subtidal areas of coral reefs. Further information on the biology of this species can be found in the 2005 assessment of the fishery located on the DEWHA website.</p>  <p>Figure 2: <i>Trochus niloticus</i></p>
Byproduct Species	None permitted.
Gear	<p>Commercial fishers use hand-held non-mechanical implements. Trochus are collected from coral reefs and the intertidal zone by divers using Self Contained Underwater Breathing Apparatus (SCUBA) or hookah breathing apparatus.</p> <p>Recreational fishers are not permitted to use SCUBA or hookah apparatus.</p>

¹ Fisheries Queensland *Framework for Defining Stock Status* 2010

Season	Harvest of trochus is permitted throughout the year. Collection usually occurs between August and February to take advantage of the more favourable conditions for divers.
Commercial harvest [2008-09]	<p>44t. Due to low prices for product, participation and catch have declined since 2005-06 (2009 ASR).</p> <p>Since 1997-98, harvests have been highly variable due to rapid fluctuations in market conditions. Total annual harvest has remained below the total allowable commercial catch of 250t, with the largest annual harvest of approximately 223t recorded in 1997-98. Annual harvest has remained below 200t since 1998-99. Further details of trends in catch and effort data can be found in the 2009 ASR.</p>
Value of commercial harvest	Not available.
Take by other sectors	Considered negligible.
Commercial licences issued	<p>6 authority holders with a maximum of 10 workers per authority.</p> <p>3 authority holders accessed the fishery in 2008-09.</p>
Management arrangements	<p>The ECTF is managed under the Queensland <i>Fisheries Act 1994</i> and the Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The ECTF is managed through a series of input and output controls which vary between commercial and recreational fishers. In addition, only shells sized 8cm to 12.5 cm may be retained.</p> <p>Commercial:</p> <ul style="list-style-type: none"> - limited entry with a maximum of 6 authorities, a maximum of 10 assistant harvesters under each authority, one primary vessel and maximum 4 tenders per authority; - commercial total allowable catch (TAC) of 250t (transfer of quota between authorities is permitted); and - gear restrictions - hand held non-mechanical implements only. <p>Recreational (including traditional and customary fishing):</p> <ul style="list-style-type: none"> - limit of 50 trochus shells in possession (included in the 50 shell limit for gastropod and bivalve molluscs); and - prohibition on use of underwater breathing apparatus other than snorkel. <p>Amendments to the Queensland <i>Fisheries Act 1994</i> in October 2008 include the restriction of traditional and customary fishing to:</p> <ul style="list-style-type: none"> - personal, domestic and non-commercial communal use only; and - recreational fishing or prescribed traditional apparatus.
Export	Trochus shell is utilised domestically and internationally in the manufacture of jewellery, buttons, ornaments and cosmetics. No estimate of export value is available at this time.
Bycatch	No bycatch due to the selective nature of the fishing operation.

Interaction with Protected Species²	Due to the selective harvesting methods used, the likelihood of interactions with protected species is very low. No interactions with protected species have been reported from the fishery.
Ecosystem Impacts	Due to the benign harvesting method used in the fishery (hand harvesting), the small number of operators and the existence of a total allowable commercial catch, impacts to the ecosystem are considered negligible.
Impacts on the Great Barrier Reef Marine Park/ Great Barrier Reef World Heritage Area	<p>The assessment also considered the possible impacts on the Great Barrier Reef Marine Park (GBRMP) and on the World Heritage values of the Great Barrier Reef World Heritage Area (GBRWhA).</p> <p>Due to the benign harvesting method used in the fishery (hand collection), spatial closures within the GBRMP and gear, size and harvest restrictions limiting fishing, significant impacts on the GBRMP or the World Heritage values of the GBRWhA are considered unlikely.</p> <p>On this basis DEWhA considers that an action taken by an individual fisher, acting in accordance with the ECTF management regime in force under the <i>Queensland Fisheries Regulation 2008</i> and the <i>Queensland Fisheries Act 1994</i>, would not be expected to have a significant impact on a matter protected by the EPBC Act.</p>

² 'Protected species' means all species listed under Part 13 of the EPBC Act, including whales and other cetaceans and threatened, marine and migratory species.

Table 2: Progress in implementation of recommendations and conditions made in 2007 assessment of the ECTF

Recommendation	Progress	Recommended Action
1. DPI&F to inform DEH of any material change to the management arrangements that may affect sustainability of the target species or negatively impact on protected species or the ecosystem.	Fisheries Queensland have advised that no relevant changes to the management arrangements have occurred since the last assessment.	This recommendation is ongoing. See Recommendation 2 , Table 4.
2. From 2005, DPI&F to report publicly on the status of the fishery on an annual basis, including explicit reporting against each performance measure (once developed).	Annual Status Reports (ASRs) have been received. A Performance Measurement System (PMS) was implemented by Fisheries Queensland in 2010, with fishery performance for 2008-2009 against the performance measures reported in the ASR.	This recommendation is ongoing. See Recommendation 3 , Table 4.
3. DPI&F to develop and implement a robust system to validate commercial logbook reporting of catch and effort in the fishery within two years.	Fisheries Queensland has advised that a logbook validation exercise was conducted in 2007. Results indicated that catch reporting discrepancy was less than 4%. Fisheries Queensland has advised that an automated validation system to routinely identify discrepancies greater than 10% was implemented across Queensland fisheries in 2010.	DEWHA considers that this recommendation has been met.
4. Within two years, DPI&F to investigate extinguishing the unallocated quota of 50 tonnes.	Fisheries Queensland have advised that legislation was amended in 2008 to remove the annual quota of 300t. Subsequent to this, Fisheries Queensland issued 6 commercial harvest licences for the ECTF with a combined total allowable commercial catch of trochus of 250t.	DEWHA considers that this recommendation has been met.

Recommendation	Progress	Recommended Action
<p>5. If the risk assessment to be conducted by DPI&F indicates that available stocks of trochus are at other than low risk of localised depletion, DPI&F to implement strategies to mitigate this risk in a timely manner.</p>	<p>Fisheries Queensland has advised that the 2009 desktop ecological risk assessment (ERA) of the ECTF concluded that there is a moderate risk from fishing to trochus populations at reef level. Trochus are density dependent spawners and have minimal capacity to replenish populations through migration between reefs.</p> <p>Over 50% of the trochus harvest has historically occurred in one 30 nautical mile reporting grid. The PMS for the ECTF includes catch rates in this grid as a performance indicator, as well as catch rate across the fishery. Data provided by Fisheries Queensland indicates that the performance measure for the grid-based indicator is capable of detecting decreases in catch rate greater than long term variation in catch rates (+/- 30% of the average) in the relevant grid.</p> <p>The PMS also provides for catch data to be reviewed should an indicator be triggered. Where review indicates that subsequent management action is required, the PMS states that Fisheries Queensland will finalise a clear timetable for implementation of appropriate management responses.</p>	<p>DEWHA considers that this recommendation has been met.</p> <p>DEWHA recommends that Fisheries Queensland continue to monitor the relevant performance measures and review the performance indicators and performance measures in the PMS as necessary.</p> <p>See Recommendation 4, Table 4.</p>

Recommendation	Progress	Recommended Action
<p>6. Within two years, DPI&F to develop a process to improve estimates of recreational and Indigenous take and factor these into risk assessments, or any future stock assessments, and management controls.</p>	<p>Fisheries Queensland has advised that the harvest of trochus by the recreational, charter and indigenous sectors is considered negligible.</p> <p>Fisheries Queensland have advised that the next state wide recreational fishing survey will commence in 2010 following development of updated methodology though the 2008 south-east Queensland recreational fishing survey.</p> <p>Fisheries Queensland report that no indigenous catches of trochus were reported from the National and Indigenous Fishing Survey in 2000-2001. Fisheries Queensland advise that in 2008, regulations were introduced which restrict traditional and customary fishing in Queensland to the use of non-commercial fishing gear. This brings arrangements for Indigenous fishers in line with recreational fishing regulations (see Table 1). DEWHA is also aware that Fisheries Queensland is in collaboration with a number of other agencies in initiatives to improve understanding of indigenous fishing practices.³</p>	<p>DEWHA considers this recommendation has now been met.</p> <p>DEWHA notes that the inclusion of trochus in Fisheries Queensland's stock status assessment program and the implementation of a reviewable PMS for the ECTF provide opportunities for consideration of updated estimates of sectoral harvest levels.</p> <p>While acknowledging that the non-commercial harvest of trochus is constrained by regulations and is likely to be negligible, DEWHA encourages Fisheries Queensland to consider opportunities to confirm previous assumptions.</p>
<p>7. DPI&F to develop fishery specific objectives linked to performance indicators and performance measures for the target species.</p>	<p>As discussed above, the PMS for the ECTF was implemented in 2010.</p>	<p>DEWHA considers that this recommendation has been met.</p> <p>DEWHA expects that Fisheries Queensland will continue to regularly review the PMS and to monitor and report the status of the fishery in relation to the performance measures.</p> <p>See Recommendation 4, Table 4.</p>

³ See, for example, *Annual status report 2009 Gulf of Carpentaria Inshore Fin Fish Fishery*.

Table 3: The Department of the Environment, Water, Heritage and the Arts (DEWHA) assessment of the East Coast Trochus Fishery (ECTF) against the requirements of the EPBC Act related to decisions made under Parts 13 and 13A

Please Note – the table below is not a complete or exact representation of the EPBC Act. It is intended as a summary of relevant sections and components of the EPBC Act to provide advice on the fishery in relation to decisions under Parts 13 and 13A. A complete version of the EPBC Act can be found on the DEWHA website.

Part 13

Division 1 Listed threatened species Section 208A Minister may accredit plans or regimes	DEWHA assessment of the ECTF
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p style="padding-left: 40px;">(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <p style="padding-left: 80px;">i. made by a State or self-governing Territory; and</p> <p style="padding-left: 80px;">ii. in force under a law of the State or self-governing Territory;</p> <p>if satisfied that:</p> <p style="padding-left: 40px;">(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed threatened species (other than conservation dependent species) are not killed or injured as a result of the fishing; and</p> <p style="padding-left: 40px;">(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the survival or recovery in nature of the species.</p>	<p>The ECTF is managed under the Queensland <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTF was first accredited in June 2005 and reaccredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the <i>Fisheries Regulation 2008</i>. DEWHA considers that the management regime for the ECTF still takes all reasonable steps to ensure that listed threatened species are not killed or injured.</p> <p>Due to the selective nature of the fishing method (hand collection), the likelihood of interactions with listed threatened species is very low. Therefore, DEWHA considers the current operation of the ECTF is not likely to adversely affect the survival or recovery in nature of any listed threatened species.</p>

Part 13 (cont.)

Division 2 Migratory species Section 222A Minister may accredit plans or regimes	DEWHA assessment of the ECTF
<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: 40px;">i. made by a State or self-governing Territory; and</p> <p style="margin-left: 40px;">ii. in force under a law of the State or self-governing Territory;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed 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 ECTF is managed under the Queensland <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTF was first accredited in June 2005 and recredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the <i>Fisheries Regulation 2008</i>. DEWHA considers that the management regime for the ECTF still takes all reasonable steps to ensure that listed migratory species are not killed or injured.</p> <p>Due to the selective nature of the fishing method (hand collection), the likelihood of interactions with listed migratory species is very low. Therefore, DEWHA considers the current operation of the ECTF is not likely to adversely affect the survival or recovery in nature of any listed migratory species.</p>

Part 13 (cont.)

Division 3 Whales and other cetaceans Section 245 Minister may accredit plans or regimes	DEWHA assessment of the ECTF
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <p>i. made by a State or self-governing Territory; and</p> <p>ii. in force under a law of the State or self-governing Territory;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing; and</p> <p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a species of cetacean or a population of that species.</p>	<p>The ECTF is managed under the Queensland <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTF was first accredited in June 2005 and recredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the <i>Fisheries Regulation 2008</i>. DEWHA considers that the management regime for the ECTF still takes all reasonable steps to ensure that cetaceans are not killed or injured.</p> <p>Due to the selective nature of the fishing method (hand collection), the likelihood of interactions with cetaceans is very low. Therefore, DEWHA considers the current operation of the ECTF is not likely to adversely affect the conservation status of a species of cetacean or a population of that species.</p>

Part 13 (cont.)

Division 4 Listed marine species Section 265 Minister may accredit plans or regimes	DEWHA assessment of the ECTF
<p>(1) Minister may, by instrument in writing, accredit for the purposes of this Division:</p> <p>(c) a plan of management, or a policy, regime or any other arrangement, for a fishery that is:</p> <p>i. made by a State or self-governing Territory; and</p> <p>ii. in force under a law of the State or self-governing Territory;</p> <p>if satisfied that:</p> <p>(f) the plan, regime or policy requires persons engaged in fishing under the plan, regime or policy to take all reasonable steps to ensure that members of listed marine species are not killed or injured as a result of the fishing; and</p> <p>(g) the fishery to which the plan, regime or policy relates does not, or is not likely to, adversely affect the conservation status of a listed marine species or a population of that species.</p>	<p>The ECTF is managed under the Queensland <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 1995</i>.</p> <p>The management regime for the ECTF was first accredited in June 2005 and recredited in April 2008 following the replacement of the Queensland <i>Fisheries Regulation 1995</i> with the <i>Fisheries Regulation 2008</i>. DEWHA considers that the management regime for the ECTF still takes all reasonable steps to ensure that listed marine species are not killed or injured.</p> <p>Due to the selective nature of the fishing method (hand collection), the likelihood of interactions with listed marine species is very low. Therefore, DEWHA considers the current operation of the ECTF is not likely to adversely affect the conservation status of a listed marine species or a population of that species.</p>

Part 13 (cont.)

Section 303AA Conditions relating to accreditation of plans, regimes and policies	DEWHA assessment of ECTF
(1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265.	DEWHA recommends that ECTF be accredited under sections 208A, 222A, 245 and 265.
(2) The Minister may accredit a plan, regime or policy under that section even though he or she considers that the plan, regime or policy should be accredited only: <ul style="list-style-type: none"> (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.	No condition has been imposed on the ECTF to satisfy sections 208A, 222A, 245 and 265 under Part 13.
(7) The Minister must, in writing, revoke an accreditation if he or she is satisfied that a condition of the accreditation has been contravened.	

Part 13A

Section 303DC Minister may amend list	DEWHA assessment of the ECTF
<p>(1) Minister may, by instrument published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by:</p> <ul style="list-style-type: none"> (a) including items in the list; (b) deleting items from the list; or (c) imposing a condition or restriction to which the inclusion of a specimen in the list is subject; or (d) varying of revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or (e) correcting an inaccuracy or updating the name of a species. 	
<p>(3) Before amending the list referred to in section 303DB (list of exempt native specimens), the Minister:</p> <ul style="list-style-type: none"> (a) must consult such other Minister or Ministers as the Minister considers appropriate; and (b) must consult such other Minister or Ministers of each State and self-governing Territory as the Minister considers appropriate; and (c) may consult such other persons and organisations as the Minister considers appropriate. 	<p>The public comment period on the Fisheries Queensland submission sought comment on the annual reports for the ECTF and provided sufficient opportunity for consultation with other persons and organisations.</p> <p>A letter to the Hon Tim Mulherin MP, Minister for Primary Industries, Fisheries and Rural and Regional Queensland advises him of the intention to declare the fishery exempt from the export provisions of the EPBC Act.</p>
<p>(5) A copy of an instrument made under section 303DC is to be made available for inspection on the Internet.</p>	<p>The instrument for the ECTF made under section 303DC will be gazetted and made available on the DEWHA website.</p>

Part 16

Section 391 Minister must consider precautionary principle in making decisions	DEWHA assessment of the ECTF
(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 when making a decision to include specimens on the LENS.
(2) The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.	

Objects of Part 13A

- (a) to ensure that Australia complies with its obligations under 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 Fisheries Queensland, a service of the Department of
Employment, Economic Development and Innovation for the
East Coast Trochus Fishery.**

The material submitted by Fisheries Queensland indicates that the East Coast Trochus Fishery (ECTF) operates in accordance with the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries*, 2nd edition. DEWHA considers that the fishery is well managed and unlikely to have an unacceptable or unsustainable impact on the environment in the short to mid term. Overall, DEWHA recognises that management measures including limited entry, a commercial total allowable catch (TAC) and recreational harvest restrictions, gear restrictions and shell size specifications are conservative and suggest that the fishery is being managed in an ecologically sustainable way.

In making its assessment, DEWHA considers that the range of management measures are sufficient to ensure that the fishery is conducted in a manner that does not lead to over-fishing and that stocks are not currently overfished. Taking into account the shell size limits, commercial TAC and recreational harvest restrictions and the selective fishing methods employed (hand collection), DEWHA considers that fishing operations are managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.

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 a number of recommendations have been made (Table 4). DEWHA believes that product taken in the fishery should be exempt from the export controls of Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), with that exemption to be reviewed in 5 years.

DEWHA considers that the operation of the fishery does not, or is not likely to, adversely affect the survival in nature of a listed threatened species or population of that species, or the conservation status of a listed migratory species, cetacean or listed marine species or a population of any of those species. DEWHA also considers that under the management plan operators are required to take all reasonable steps to avoid the killing or injuring of protected species, and the level of interaction under current fishing operations is low.

For these reasons, the management regime was accredited under Part 13 of the EPBC Act in June 2005 and was reaccredited in April 2008 following the replacement of the Queensland *Fisheries Regulation 1995* with the *Fisheries Regulation 2008*. Given the selective fishing method employed in this fishery (hand collection), the likelihood of interactions with protected species is very low. Accordingly, DEWHA believes it appropriate to accredit the management regime for the fishery under Part 13 of the EPBC Act.

Recommendations are provided below with a brief explanation of the related issue/intent. Each recommendation is to be addressed within the life of the exemption (5 years).

Table 4: East Coast Trochus Fishery Assessment – Summary of Issues, Conditions and Recommendations - May, 2010

	Issue	Recommendation
1	<p><u>General Management</u></p> <p>Export decisions relate to the arrangements in force at the time of the decision. In order to ensure that these decisions remain valid and export approval continues uninterrupted, the Department of the Environment, Water, Heritage and the Arts (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. This includes operational and legislated amendments that may affect sustainability of the target species or negatively impact on by-product, bycatch, protected species or the ecosystem.</p>	<p>Recommendation 1: Operation of the fishery will be carried out in accordance with the management arrangements for the East Coast Trochus Fishery (ECTF) in force under the Queensland <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 2008</i>.</p> <p>Recommendation 2: Fisheries Queensland to inform the Department of the Environment, Water, Heritage and the Arts (DEWHA) of any intended amendments to the ECTF management arrangements that may affect the assessment of the ECTF against the criteria on which EPBC Act decisions are based.</p>
2	<p><u>Annual Reporting</u></p> <p>Reports must be produced and presented to DEWHA annually in order for the performance of the fishery and progress in implementing the conditions and recommendations in this report and other managerial commitments to be monitored and assessed throughout the life of the declaration. Annual reports are to be provided prior to the anniversary of the export declaration.</p> <p>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 conditions and recommendations.</p> <p>Electronic copies of the Guidelines are available from the DEWHA website at http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html</p>	<p>Recommendation 3: Fisheries Queensland to produce and present reports to DEWHA annually as per Appendix B to the Guidelines for the <i>Ecologically Sustainable Management of Fisheries - 2nd Edition</i>.</p>

	Issue	Recommendation
3	<p><u>Reviewable Performance Measurement</u></p> <p>In its 2005 assessment of the ECTF, the then Department of the Environment and Heritage (now DEWHA) recommended that Fisheries Queensland (then DPI&F) develop fishery-specific objectives linked to performance indicators and performance measures.</p> <p>In consultation with commercial fishers in the ECTF, Fisheries Queensland developed a Performance Measurement System (PMS) for the fishery. The PMS was implemented by Fisheries Queensland in 2010, reporting fishery performance for 2008-2009 against the performance measures in the Annual Status Report (ASR) for the fishery.</p> <p>DEWHA supports the implementation of a PMS with performance indicators and measures capable of detecting and responding to changes in the fishery.</p> <p>Ongoing monitoring of the fishery against performance measures and a clear process for responding to performance triggers provides a valuable safeguard in conjunction with the specific harvesting method, small number of operators and continuing low market prices for product contributing to a low annual take in the ECTF.</p> <p>DEWHA notes that the PMS is to be reviewed annually, providing an opportunity for the PMS to be updated to take into account available data relevant to the fishery.</p> <p>The PMS also provides for catch data to be reviewed should an indicator be triggered. Where review indicates that subsequent management action is required, the PMS states that Fisheries Queensland will finalise a clear timetable for implementation of appropriate management responses.</p> <p>Performance measures are reported on annually in the ASR for the fishery. DEWHA recommends that where performance measures for the fishery are triggered, Fisheries Queensland report in the ASR on any management measures implemented, including the reasons for a nil management response.</p>	<p>Recommendation 4: Fisheries Queensland to continue to regularly review the Performance Measurement System for the ECTF, monitor the status of the fishery in relation to the performance measures and report annually against those measures, including any management actions implemented in response to performance triggers and the rationale for any nil management response.</p>

Acronyms

ASR	Annual Status Report
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DEH	Department of Environment and Heritage
DEWHA	Department of Environment, Water, Heritage and the Arts
DPI&F	Department of Primary Industry and Fisheries
ECTF	East Coast Trochus Fishery
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ERA	Environmental Risk Assessment
GBRMP	Great Barrier Reef Marine Park
GBRWHA	Great Barrier Reef World Heritage Area
LENS	Listing of Exempt Native Specimens
TAC	Total Allowable Catch
PMS	Performance Management System
SCUBA	Contained Underwater Breathing Apparatus