



Australian Government

Department of the Environment, Water, Heritage and the Arts

Assessment of the
CORAL REEF FIN FISH FISHERY

November 2008

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Disclaimer

This document is an assessment carried out by the Department of the Environment, Water, Heritage and the Arts of a commercial fishery against the Australian Government *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*. It forms part of the advice provided to the Minister for the Environment, Heritage and the Arts on the fishery in relation to decisions under Parts 13 and 13A of the *Environment Protection and Biodiversity Conservation Act 1999*. The views expressed do not necessarily reflect those of the Minister for the Environment, Heritage and the Arts or the Australian Government.

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Table 1: Summary of the Coral Reef Fin Fish Fishery (CRFFF)

Publicly available information relevant to the fishery	<ul style="list-style-type: none"> • <i>Fisheries (Coral Reef Fin Fish) Management Plan 2003</i> (CRFFF Plan) • <i>Queensland Fisheries Act 1994</i> • <i>Queensland Fisheries Regulation 2008</i> • <i>Great Barrier Reef Marine Park Act 1975</i> • <i>Queensland Marine Parks Act 1982</i> • Annual Status Report 2007 – Queensland Coral Reef Fin Fish Fishery (report covers 2006/2007 fiscal year) • Annual Status Report 2006 – Queensland Coral Reef Fin Fish Fishery (report covers 2005/2006 fiscal year) • Stock Assessment of the East Coast Red Throat Emperor Fishery 2006, Queensland Department of Primary Industries and Fisheries (DPI&F).
Area	<p>Participation in the fishery is limited to holders of Reef Quota (RQ) fishery symbols in conjunction with an “L” or line fishery symbol which defines the area of operation. Permitted line symbols in the CRFFF include L1, L2 and L3¹. Areas of operation for these symbols encompass all east coast Queensland waters as defined by the Offshore Constitutional Settlement between the Commonwealth and the State of Queensland. Despite this broad area of operation much of the effort and reported commercial catch (~95%) in the CRFFF is confined to waters of the Great Barrier Reef World Heritage Area (GBRWhA) which includes the areas of L2 and L3 fishery symbols. For a complete description of line fishery symbols refer to the DPI&F website.</p>
Fishery status	<p>There has been no formal stock assessment for coral trout (CT) which would suggest a degree of uncertainty with this stock; however DPI&F has advised that a management strategy evaluation indicates that the Total Allowable Catch for coral trout is set at an appropriate level.</p> <p>A 2006 stock assessment for red throat emperor (RTE) indicated that the Total Allowable Catch (TAC) for this species was within biological sustainability estimates.</p> <p>While the other coral reef fin fish (OS) ecological risk assessment identified that most species were at low risk from fishing activity pressures, due to the low level of species specific data collection for OS species there is uncertainty in the status of this component of the CRFFF catch. In July 2007, DPI&F also introduced a new logbook to the fishery to better capture OS species reporting.</p>
Target species	<p>The CT quota category covers seven coral trout species: common coral trout (<i>Plectropomus leopardus</i>), barred-cheek coral trout (<i>P. maculatus</i>), square tail trout (<i>P. areolatus</i>); blue spot trout</p>

¹ An L8 fishery symbol also exists and permits deep water line fishing with the use of multi hook apparatus. This apparatus is comprised of up to six droplines with a maximum of 50 hooks on each or three bottom set trotlines with up to 300 hooks in total. Retaining coral trout is prohibited when using multi hook apparatus. Catch taken under the L8 fishery symbol has been considered and accredited separately from the CRFFF, within the Deep Water Fin Fish Fishery. For the latest assessment report for this fishery refer to the DEWhA website.

	<p>(<i>P. laevis</i>), highfin coral trout (<i>P. oligacanthus</i>), coronation trout (<i>Variola louti</i>) and lyretail trout (<i>V. albimarginata</i>).</p> <p>The RTE quota category applies to Red Throat Emperor (<i>Lethrinus miniatus</i>).</p> <p>The OS quota category comprises multiple species of coral reef fin fish as described in schedule five of the <i>Fisheries Regulation 2008</i>, including cods and groupers, emperors (other than red throat emperor), sweetlips, tropical snappers and sea perches.</p> <p>Information on the biology of these species can be found in the 2005 assessment of the fishery located on the Department of the Environment, Water, Heritage and the Arts (DEWHA) website.</p>
Byproduct species	The 2007 Annual Status Report (ASR) does not report on byproduct taken in the fishery however DPI&F has indicated that this comprises a small part of the commercial catch and is reported on in other fisheries including the Queensland Rocky Reef Fin Fish Fishery and the Queensland East Coast Inshore Fin Fish Fishery.
Gear	Permitted gear in the fishery includes up to three rods or handlines with a maximum of six hooks.
Season	Fishing takes place all year except for three 9 day spawning closures for certain reefs based around the new moons in October, November and December each year. DPI&F is undertaking a review of spawning closures which will be completed in 2009.
Commercial harvest	1676 tonnes (t) harvested in the commercial sector in the 2006/2007 fishing year. This was an increase in catch from the 2005/2006 fishing year of 1544 t. From 1998 to 2002 catch fluctuated between 1500 t and 2000 t. Since then, catches have been more stable, but trending downwards. It is believed that this is associated with the introduction of the commercial TAC in 2002 and reduced commercial effort in the fishery in response to a change to the management regime as well as other factors such as the change in area available to fishing due to closures resulting from the Great Barrier Reef Representative Areas Program implemented in 2004.
Value of commercial harvest	\$42 million in the 2006/2007 fishing year.
Take by other sectors	In 2005 the recreational harvest was estimated to be 2601 t comprising several species of coral reef fin fish including the primary target species for the fishery (CT and RTE).
Commercial licences issued	To participate in the CRFFF an RQ symbol is required in addition to an appropriate line symbol that defines the permitted area of operation. Currently there are 412 RQ endorsements across the various line symbols described in the area of the fishery above. Despite the broad area that is considered to be part of the CRFFF much of the effort is conducted in the area of the GBRWHA covered by L2 and L3 symbols. In addition there are 386 charter licenses which may participate in the CRFFF among other fisheries.

Management arrangements	<p>The fishery is managed under the CRFFF Plan in force under the <i>Queensland Fisheries Act 1994</i> and the <i>Queensland Fisheries Regulation 2008</i>.</p> <p><u>Output controls</u></p> <ul style="list-style-type: none"> • TACs for CT, RTE and OS quota categories in conjunction with an Individual Transferable Quota (ITQ) system; • minimum and maximum size limits; • prohibitions on several species of coral reef fin fish; and • possession limits for recreational fishers including a combined limit of 20 coral reef fin fish. <p><u>Input controls</u></p> <ul style="list-style-type: none"> • entry limited to 412 holders of RQ endorsements across the L1, L2 and L3 fishing symbols; • three 9 day spawning closures over the new moons in October, November and December each year; and • gear restrictions.
Export	The majority of product is exported live to Hong Kong and China. Live export is restricted to CT while RTE and OS species are processed as fillets which tend to be marketed domestically.
Bycatch	Bycatch in the fishery is reported to be low and restricted largely to undersized target species.
Interaction with protected species²	<p>DPI&F has implemented a species of conservation interest (SOCI) logbook for operators to report interactions with protected species (including species protected under Part 13 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) and under Queensland environment legislation). No interactions have been reported by line fishers since the introduction of this logbook in 2002.</p> <p>Under sections 199, 214, 232 and 256 of the EPBC Act, persons who interact with a protected species must report that interaction within seven days of the incident occurring to DEWHA.</p> <p>A Memorandum of Understanding between DPI&F and DEWHA for the reporting of fisheries interactions with protected species (MOU) has been in operation since 2005 to streamline reporting requirements for interactions with protected species, assisting fishers in meeting their requirements under the EPBC Act. As such, the MOU reduces the administrative reporting burden on individual fishers and provides for regular reporting of protected species interactions.</p> <p>Unless exceptional circumstances exist, DEWHA will not take any actions against the authority holders in respect of a failure to meet the seven day reporting requirement of protected species interactions, if the interaction was recorded in the authority holder's logbook at the time of the interaction and in accordance with the requirements of the MOU.</p>
Ecosystem impacts	The CRFFF is a line fishery limited in the number of lines and hooks

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.

	<p>that may be used at any one time and therefore impacts to the physical ecosystem are thought to be less than other fishing methods. Impacts on ecosystem function (e.g. trophic dynamics) are mitigated through annual TACs, limiting the level of biomass removed by the fishery. As part of a risk assessment workshop for OS species in 2007 it was identified that discarding and high grading represent a risk to some coral reef fin fish species and as a result DPI&F has indicated that the Queensland Seafood Industry Association will develop a code of conduct for the handling of fish to reduce discard mortality to fin fish.</p>
Impacts on CITES species	<p>No Convention on the International Trade of Endangered Species of Wild Fauna and Flora (CITES) species are harvested in the CRFFF. However the hump headed Maori wrasse (<i>Cheilinus undulates</i>), listed under Appendix II of the convention, is a bycatch species in the fishery.</p> <p>The assessment considered the possible impacts on species harvested in the CRFFF which are listed under CITES. As a party to the Convention, Australia must apply all CITES provisions of the EPBC Act to hump headed Maori wrasse imports and exports as appropriate. Under these provisions, export of CITES specimens may only occur where a permit, supported by a non-detriment finding, has been issued by the CITES Management Authority of the country of export. As Part 13A of the EPBC Act incorporates the requirements of CITES, there are no changes to the criteria for export approval, aside from administrative changes to the permits issued. As a result of the listing, specimens of hump headed Maori wrasse taken from the wild or bred in captivity may only be exported under either a single or multiple use CITES permit.</p> <p>Retention of this species is prohibited under Queensland fisheries legislation and therefore DEWHA is satisfied that the CRFFF does not contravene the requirements of the EPBC Act in regards to CITES specimens.</p>
Impacts on World Heritage property	<p>The assessment also considered the possible impacts on the World Heritage values of the GBRWHA. As the CRFFF is a line fishery the impacts on the physical environment in the GBRWHA are considered less than for other forms of fishing. In addition the recent rezoning of the GBRWHA has increased the overall level of protection for the reef with approximately 30% of the GBRWHA area now designated sanctuary zones. DEWHA believes that the recent rezoning of the reef in addition to the measures in place under the CRFFF Plan will provide adequate protection for the World Heritage values of the GBRWHA.</p> <p>On this basis DEWHA considers that an action taken by an individual fisher, acting in accordance with the CRFFF Plan, would not be expected to have a significant impact on a matter protected by the EPBC Act.</p>

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

Condition	Progress	Recommended Action
Operation of the fishery will be carried out in accordance with the CRFFF Plan in force under the <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 1995</i> .	<p><i>Met and ongoing</i></p> <p>The fishery has operated in accordance with the CRFFF Plan over the duration of the current export approval.</p> <p>DPI&F notified DEWHA of a review and subsequent replacement of the <i>Fisheries Regulation 1995</i> with the <i>Queensland Fisheries Regulation 2008</i> on 1 April 2008. As the changes were administrative in nature, the Delegate of the Minister for the Environment, Heritage and the Arts determined that the assessment of the CRFFF in 2005 against the EPBC Act criteria remained valid and a reassessment at that time was not required. Therefore the EPBC Act instruments were simply remade to reflect the legislative changes.</p>	This condition has been met and will continue to apply under the new Wildlife Trade Operation (WTO) declaration for the next three years (Condition 1 , Table 4).
DPI&F to inform the Department of the Environment and Heritage (now DEWHA) of any intended amendments to the management arrangements that may affect sustainability of the target species or negatively impact on bycatch,	<p><i>Met and ongoing</i></p> <p>There have been no significant changes to the management regime for the CRFFF.</p>	This condition has been met and will continue to apply under the new WTO declaration for the next three years (Condition 2 , Table 4).

protected species or the ecosystem.		
From 2006, DPI&F to report publicly on the status of the CRFFF on an annual basis including explicitly reporting against each performance measure.	<i>Met and ongoing</i> Annual Status Reports (ASRs) for the CRFFF were prepared for 2006 and 2007 and are publicly available from the DPI&F website. The reports provide progress on the implementation of recommendations, a description of the fishery, catch and effort trends, compliance reports and research undertaken or completed in the fishery. DPI&F has also completed a Performance Measurement System (PMS) for the CRFFF and the ASRs will provide a report of the performance of the fishery against the PMS.	This condition has been met and will continue to apply under the new WTO declaration for the next three years (Condition 3 , Table 4).
Recommendation	Progress	Recommended Action
DPI&F to reassess the review events in the CRFFF Plan to ensure their appropriateness, that they are quantitative where possible and they are consistent with the application of operational objectives for the fishery. By December 2006, DPI&F is to establish revised objectives, performance measures and indicators for bycatch, protected species and impacts on the ecosystem.	<i>Complete</i> DPI&F has reassessed the review events in the CRFFF Plan and subsequently incorporated them into the PMS for the CRFFF. The PMS has been finalised and endorsed by the Scientific Advisory Group and the Reef Management Advisory Committee (ReefMAC) and is now operational however the document is considered a working draft and therefore subject to ongoing	DEWHA considers that this recommendation has been met through the development of the PMS. DEWHA expects that DPI&F will continue to update the PMS as required to ensure its ability to monitor the performance of the fishery is maintained.

	review.	
DPI&F to monitor the status of the fishery in relation to the review events and performance measures. Within three months of becoming aware that a review event has been triggered, DPI&F to finalise a clear timetable for the implementation of appropriate management responses.	<i>Complete</i> In 2006 a review event was triggered for the charter fishing sector due to an increase in the charter effort in the Mackay region of greater than 20% and an increase in commercial effort in the Mackay and Swains regions by more than 20%. A review was carried out and based on the outcomes DPI&F determined that the observed increase in effort in these regions was ecologically sustainable. The trigger of this review event was reported on in the 2007 ASR.	DEWHA considers that this recommendation has been met. DEWHA expects that the DPI&F will continue to monitor the status of the fishery as part of the newly developed PMS for the CRFFF for the duration of the new WTO declaration.
DPI&F to complete a compliance risk assessment for the CRFFF by mid 2006 and implement a risk-based compliance strategy by December 2006 taking into account risks associated with non-compliance with: <ul style="list-style-type: none"> • catch, possession, size and gear limits; • reporting of protected species interactions; and • area and fishery closures; and quota limits. 	<i>Complete</i> DPI&F reports that a compliance risk assessment was completed in June 2006 and that the outcomes of this assessment were considered in the strategic and operational planning process for the Queensland Boating and Fisheries Patrol. The assessment found that violation of size and possession limits, GBRWHA zoning provisions and failing to maintain accurate records represented the highest risks in the CRFFF.	DEWHA considers that this recommendation has been met. DEWHA commends DPI&F on the high level of compliance observed in the fishery for 2006 and 2007 of 95.3% and 95% respectively. DEWHA also commends DPI&F on its commitment to maintain this level of compliance in the fishery as part of the newly developed PMS for the CRFFF.
DPI&F to implement a program to validate logbook data by June	<i>Complete and ongoing</i> DPI&F's logbook validation	The FOP has allowed DPI&F to better define OS quota species taken in the CRFFF. The program also serves as the means by

<p>2006. DPI&F to ensure that the program enables collection of information on the composition of OS species sufficient for DPI&F to monitor and respond to changes in the composition of this group.</p>	<p>program was established in December 2005. The validation for the CRFFF was completed in May 2006. Logbook data was validated against multiple sources, including fishery dependent prior and unload reports, as well as fishery independent data from the Fisheries Observer Program. The scale of the analyses ranged from total catch by financial year by species, down to trip-by-trip analysis using a four way comparison of the data. The majority of records indicate a high level of compliance with variation of +/-10%.</p> <p>The Fishery Observer Program (FOP) also became operational in the CRFFF in 2006. This program in conjunction with quota monitoring has allowed DPI&F to define a species list of fish taken as part of the OS quota group. A new logbook was also introduced in July 2007 (LF05 Version 05) that allows for a broader coverage of OS species.</p>	<p>which bycatch is monitored in the fishery, having been incorporated into the PMS. As such the program represents a key tool for the effective management of the CRFFF.</p> <p>The program is hampered by operational difficulties as participation is voluntary and DPI&F needs to provide a safe work environment for observers, limiting the ability of some operators to participate in the program. As a result coverage to date has been low (<1%) and this element of the program requires improvement to ensure that the FOP provides representative data for the ongoing management of the CRFFF. In recognition of this a new recommendation has been developed as part of this assessment to investigate and implement appropriate levels of observer coverage that will allow the program to become an effective tool for the management of bycatch in the CRFFF (Recommendation 3, Table 4).</p>
<p>By end 2006, DPI&F to develop a robust and regular fishery assessment process, that provides a basis for management decisions</p>	<p><i>Partially complete</i> In 2006 DPI&F, in conjunction with the Cooperative Research Centre for the GBRWHA,</p>	<p>The PMS for the CRFFF states that the most robust method for monitoring stock performance is through a quantitative stock assessment that is capable of defining a biomass estimate.</p>

<p>which are precautionary and recognise the uncertainty and level of risk. The assessment process will examine the ecological sustainability of the take of CT and RTE using robust stock assessments.</p>	<p>conducted a stock assessment of RTE using an age structured model incorporating information on catch, Catch per Unit Effort (CPUE) and age structure. This stock assessment determined that the current TAC including commercial catches was appropriate for RTE until a further stock assessment, anticipated in 2009.</p> <p>The TAC for CT was based on historic levels of catch and although CPUE has remained relatively stable in recent years no stock assessment has been completed for CT to date. However, management decisions are assessed through a Management Strategy Evaluation (MSE) system that allows for the modelling of populations of coral trout based on an assumed biomass estimate. The 2008 submission indicates that the DPI&F intends to expand on the MSE framework to incorporate a stock assessment module for coral trout. This would inform future management decisions and will allow DPI&F to determine data gathering priorities for coral trout.</p>	<p>DEWHA commends DPI&F on the stock assessment on RTE and encourages the ongoing monitoring of this resource to maintain biomass levels in line with that required in the PMS.</p> <p>To date CT, a spatially complex species, has not been the subject of a stock assessment and therefore the status of the resource can not be determined with the same level of confidence as RTE. As a result DEWHA recommends that an assessment is completed for CT that will allow DPI&F to ensure the level of harvest is sustainable (Recommendation 1, Table 4).</p>
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<p>Within 18 months, DPI&F to undertake a risk assessment to identify OS species most at risk from the fishery. Actions seeking to reduce risk to be implemented as appropriate within a further 12 months.</p>	<p><i>Complete</i> DPI&F undertook a risk assessment workshop in January 2007 with the outcomes considered by the Reef Scientific Advisory Group in March 2007. DPI&F indicated that the outcomes of the workshop were to be implemented in early 2008. DPI&F reports that some of the outcomes from this workshop have already been implemented including improved reporting of large cods (flowery and camouflage) and jobfish through the introduction of the new line fishing logbook for the fishery (LF05 Version 05).</p>	<p>DEWHA commends DPI&F on the improvements to species level resolution through the development of the new line fishing logbook. DEWHA feels the ongoing sustainability of the OS resource will benefit from continued improvement to the reporting of OS catch and encourages DPI&F to continue to investigate methods to improve the reporting of these species.</p> <p>This issue will be reconsidered in the next EPBC Act assessment of the fishery.</p>
<p>DPI&F to develop a process to improve estimates of recreational take and factor this into stock assessments and management controls to ensure overall catch levels are sustainable.</p>	<p><i>Partially complete</i> DPI&F has commenced a pilot program to assess recreational fishing in south east Queensland. In addition a state-wide diary program, focused on recreational boat owners, commenced in November 2007. DPI&F will use the 2005 state-wide catch estimates in the next RTE stock assessment to be re-run in 2009-2010. The current TAC for CT is based on commercial catch history in the CRFFF and as such it does not take into account take from</p>	<p>DEWHA commends the DPI&F on developing improved estimates of recreational take in the CRFFF. It is important that the harvest from all sectors is considered when developing sustainable harvest levels and as such DEWHA recommends that the recreational harvest is incorporated into stock assessments for target species (Recommendation 2, Table 4).</p>

	other sectors. The ongoing sustainability of fisheries requires that there are estimates of all removals and that these estimates are factored into the catch levels of target species.	
DPI&F to reassess the appropriateness of the TACs for the main target species and OS species, taking into account the outcomes of the stock and risk assessments for CRFFF species by end 2007.	<i>Partially complete</i> The results of the 2006 stock assessment of RTE indicated that the TAC for this species should not be increased at this time, which was agreed by ReefMAC. Actions arising from the results of the OS risk assessment are currently being considered for implementation in 2008. Reassessment of the TAC for OS will occur at this time.	DEWHA commends DPI&F for the stock assessment previously completed for RTE noting that a similar assessment has not been undertaken for CT. As stated previously the TAC for CT is based on catch history and therefore has not been determined to be sustainable. As such the need to conduct an appropriate assessment on CT should be considered a priority for the CRFFF and a recommendation to take effect with the new WTO declaration has been developed to ensure that this takes place (Recommendation 1 , Table 4). DEWHA acknowledges the difficulties with estimating sustainable harvest of the OS quota category and suggests that increased species level resolution in the take of OS species will be a key step in the ongoing sustainable management of these species. DEWHA encourages DPI&F to continue to improve species specific reporting of OS species to ensure appropriate management arrangements can be applied.
DPI&F to review current management arrangements and ensure that adequate protection is being given to spawning stocks of the main target species.	<i>Ongoing</i> DPI&F is currently undertaking a review of the effectiveness of closures to protect spawning stocks for the main target species and other key coral reef fin fish species. The review was due for completion in August 2008 with results to be provided to the DPI&F for consideration by	DEWHA expects that the results of the study will be implemented as appropriate to ensure that spawning stocks of coral reef species will be subject to adequate protection to ensure sustainability of the CRFFF. DEWHA recommends that DPI&F ensures that adequate protection is providing for spawning coral reef fin fish (Recommendation 6 , Table 4).

	ReefMAC.	
DPI&F to use the results of stock and risk assessments, and research projects, to review the need for specific bycatch management measures and introduce effective and appropriate methods to reduce bycatch, or increase survivability, as needed.	<p><i>Partially complete</i></p> <p>A Fisheries Research Development Corporation-funded research project to determine the impacts of barotrauma on post-release survival of six tropical reef fish species (<i>Plectropomus</i> spp., <i>Lethrinus miniatus</i>, <i>Le. laticaudis</i>, <i>Lutjanus sebae</i>, <i>Lu. malabaricus</i> and <i>Lu. erythropterus</i>) will be completed by the end of 2007. The project has provided information on fish handling techniques to be communicated to industry via newsletter, website and other media through a national communication strategy on enhancing fish survival. Final results and recommendations were available to industry and management in early 2008. DPI&F's observer program is also delivering some information on discards in the CRFFF which will be considered in determining the magnitude of bycatch.</p>	DEWHA commends DPI&F for undertaking a study that examines survivability and post release mortality of coral reef fin fish. DEWHA notes that the results of the study became available in early 2008, and that as part of the extension program, DPI&F engaged the public in education relating to techniques in improving the survivability of line-caught fish. DEWHA expects that DPI&F will continue to implement measures as required to ensure that the fishery's impact on bycatch is not detrimental to the sustainability of the fishery.
DPI&F to continue to work with industry and other management agencies to reduce the impact of the CRFFF on the broader ecosystem, including impacts relating to anchoring.	<p><i>Partially complete</i></p> <p>DPI&F indicates that the Queensland Seafood Industry Association (QSIA) is currently developing an industry code of practice that will define mitigation</p>	DEWHA considers that this recommendation has been partially met and commends QSIA on its commitment to develop a code of practice for the fishery that will allow the reduction in post release mortality of bycatch species and minimise other potential impacts of the fishery. DEWHA, however, notes that the code of practice is still being developed and is yet to be implemented in

	methods to reduce the impacts of the CRFFF on the broader marine ecosystem.	the fishery. DEWHA expects the code of practice will be implemented as soon as it has been finalised to ensure that the impacts of the CRFFF on the marine environment are minimised.
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Table 3: The DEWHA assessment of the CRFFF 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 CRFFF
<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 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 CRFFF will be managed under the CRFFF Plan in force under the Queensland <i>Fisheries Act 1994</i> and Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the CRFFF was accredited in October 2005.</p> <p>In March 2008, DPI&F advised DEWHA that on 1 April 2008 the <i>Fisheries Regulation 1995</i> was being replaced with the <i>Fisheries Regulation 2008</i>. The change in regulations did not result in any change to the management of the CRFFF and were administrative in nature. Although the change did not affect the original assessment of the CRFFF against the criteria on which the October 2005 decisions were made, the CRFFF required a new accreditation to be granted which referred to the correct Queensland legislation. As such the CRFFF was reaccredited under Part 13 in April 2008.</p> <p>The management arrangements for the CRFFF have not significantly changed since the April 2008 accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time, as DEWHA</p>

	considers that the CRFFF still takes all reasonable steps to ensure that listed threatened species are not killed or injured and will not adversely affect the survival or recovery in nature of a listed threatened species or a population of that species. Currently, evidence suggests that the CRFFF only has minimal interactions with listed threatened species.
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Division 2 Migratory species Section 222A Minister may accredit plans or regimes	DEWHA assessment of the CRFFF
<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"> i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory; <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 CRFFF will be managed under the CRFFF Plan in force under the Queensland <i>Fisheries Act 1994</i> and Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the CRFFF was accredited in October 2005.</p> <p>In March 2008, DPI&F advised DEWHA that on 1 April 2008 the <i>Fisheries Regulation 1995</i> was being replaced with the <i>Fisheries Regulation 2008</i>. The change in regulations did not result in any change to the management of the CRFFF and were administrative in nature. Although the change did not affect the original assessment of the CRFFF against the criteria on which the October 2005 decisions were made, the CRFFF required a new accreditation to be granted which referred to the correct Queensland legislation. As such the CRFFF was reaccredited under Part 13 in April 2008.</p> <p>The management arrangements for the CRFFF have not significantly changed since the April 2008 accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time as DEWHA considers that the CRFFF still takes all reasonable steps to ensure that listed migratory species are not killed or injured and will not adversely</p>

	affect the conservation status of a listed migratory species or a population of that species. Currently, evidence suggests that the CRFFF only has minimal interactions with listed migratory species.
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Division 3 Whales and other cetaceans Section 245 Minister may accredit plans or regimes	DEWHA assessment of the CRFFF
<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"> i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory; <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 CRFFF will be managed under the CRFFF Plan in force under the Queensland <i>Fisheries Act 1994</i> and Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the CRFFF was accredited in October 2005.</p> <p>In March 2008, DPI&F advised DEWHA that on 1 April 2008 the <i>Fisheries Regulation 1995</i> was being replaced with the <i>Fisheries Regulation 2008</i>. The change in regulations did not result in any change to the management of the CRFFF and were administrative in nature. Although the change did not affect the original assessment of the CRFFF against the criteria on which the October 2005 decisions were made, the CRFFF required a new accreditation to be granted which referred to the correct Queensland legislation. As such the CRFFF was reaccredited under Part 13 in April 2008.</p> <p>The management arrangements for the CRFFF have not significantly changed since the April 2008 accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time as DEWHA considers that the CRFFF still takes all reasonable steps to ensure that cetaceans are not killed or injured and will not adversely affect the conservation status of a cetacean or a population of that species. Currently, evidence suggests that the CRFFF only has minimal</p>

	interactions with cetaceans.
<p>Division 4 Listed marine species</p> <p>Section 265 Minister may accredit plans or regimes</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> <ul style="list-style-type: none"> i. made by a State or self-governing Territory; and ii. in force under a law of the State or self-governing Territory; <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>DEWHA assessment of the CRFFF</p> <p>The CRFFF will be managed under the CRFFF Plan in force under the Queensland <i>Fisheries Act 1994</i> and Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The management regime for the CRFFF was accredited in October 2005.</p> <p>In March 2008, DPI&F advised DEWHA that on 1 April 2008 the <i>Fisheries Regulation 1995</i> was being replaced with the <i>Fisheries Regulation 2008</i>. The change in regulations did not result in any change to the management of the CRFFF and were administrative in nature. Although the change did not affect the original assessment of the CRFFF against the criteria on which the October 2005 decisions were made, the CRFFF required a new accreditation to be granted which referred to the correct Queensland legislation. As such the CRFFF was reaccredited under Part 13 in April 2008.</p> <p>The management arrangements for the CRFFF have not significantly changed since the April 2008 accreditation was granted. Consequently, a new Part 13 declaration is not needed at this time as DEWHA considers that the CRFFF still takes all reasonable steps to ensure that listed marine species are not killed or injured and will not adversely affect the conservation status of a listed marine species or a population of that species. Currently, evidence suggests that the CRFFF only has minimal interactions with listed marine species.</p>

Section 303AA Conditions relating to accreditation of plans, regimes and policies	DEWHA assessment of CRFFF
(1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265.	DEWHA recommends that the CRFFF accreditation under sections 208A, 222A, 245 and 265 remain.
(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 CRFFF 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 CRFFF
(1) Minister may, by instrument published in the Gazette, amend the list referred to in section 303DB (list of exempt native specimens) by: <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. 	No amendment to the List of Exempt Native Specimens (LENS) is required as product derived from the CRFFF approved WTO is already included on the LENS.

Section 303FN Approved wildlife trade operation	DEWHA assessment of the CRFFF
(2) The Minister may, by instrument published in the <i>Gazette</i> , declare that a specified wildlife trade operation is an <i>approved wildlife trade operation</i> for the purposes of this section.	

<p>(3) The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is satisfied that:</p> <p>(a) the operation is consistent with the objects of Part 13A of the Act; and</p> <p>(b) the operation will not be detrimental to:</p> <p>i. the survival of a taxon to which the operation relates; or</p> <p>ii. the conservation status of a taxon to which the operation relates; and</p> <p>(ba) the operation will not be likely to threaten any relevant ecosystem including (but not limited to) any habitat or biodiversity; and</p> <p>(c) if the operation relates to the taking of live specimens that belong to a taxon specified in the regulations – the conditions that, under the regulations, are applicable to the welfare of the specimens are likely to be complied with; and</p> <p>(d) such other conditions (if any) as are specified in the</p>	<p>The CRFFF is consistent with objects of Part 13A (listed after this table) as:</p> <ul style="list-style-type: none"> ▪ the fishery will not harvest any CITES listed species; ▪ there are management arrangements in place to ensure that the resource is being managed in an ecologically sustainable way (see Table 1); ▪ the operation of the CRFFF is unlikely to be unsustainable and threaten biodiversity within the next three years; and ▪ the <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> (EPBC Regulations) do not specify fish as a class of animal in relation to the welfare of live specimens. <p>DEWHA considers that the CRFFF will not be detrimental to the survival or conservation status of a taxon to which it relates within the next three years, given the management measures currently in place, which include limited entry, quota management for target species, minimum and maximum size limits on key target species, gear restrictions and annual spawning closures.</p> <p>DEWHA considers that the CRFFF will not threaten any relevant ecosystem within the next three years, given the management measures currently in place, which include limited entry, quota management for target species, minimum and maximum size limits on key target species, gear restrictions and annual spawning closures.</p> <p>The EPBC Regulations do not specify fish as a class of animal in relation to the welfare of live specimens.</p> <p>No other conditions are specified in relation to commercial fisheries in</p>
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	the EPBC Regulations.
<p>(4) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have regard 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>DEWHA considers that the CRFFF will not have a significant impact on any relevant ecosystem within the next three years, given the management measures currently in place, which include limited entry, quota management for target species, minimum and maximum size limits on key target species, gear restrictions and annual spawning closures.</p> <p>The management arrangements that will be employed for the CRFFF are likely to be effective. The number of operators allowed to participate in the fishery will be limited to those who possess an RQ symbol on their license in addition to having unused RQ quota allocation. The annual take of target species is monitored through the logbook system in place for the CRFFF and this will be limited to the annual TAC defined for each of the target species. The effectiveness of the management regime for the CRFFF is monitored through the PMS for the fishery which defines objectives for all components of the fishery including target species, bycatch and the ecosystem generally.</p> <p>Compliance with the management measures in place for the CRFFF is reported to be at 95% in the 2007 ASR and the PMS requires that this level of compliance is maintained to prevent further management changes.</p>
<p>(5) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have regard to:</p> <p>(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</p> <p>(b) whether the legislation applies throughout the State or Territory concerned; and</p>	<p>The CRFFF will be managed under the CRFFF Plan in force under the Queensland <i>Fisheries Act 1994</i> and Queensland <i>Fisheries Regulation 2008</i>.</p> <p>The CRFFF Plan in force under the Queensland <i>Fisheries Act 1994</i> and Queensland <i>Fisheries Regulation 2008</i> applies throughout</p>

<p>(c) whether, in the opinion of the Minister, the legislation is effective.</p>	<p>Queensland waters.</p> <p>The management arrangements that will be employed for the CRFFF are likely to be effective. The number of operators allowed to participate in the fishery will be limited to those who possess an RQ symbol on their license in addition to having unused RQ quota allocation. The annual take of target species is monitored through the logbook system in place for the CRFFF and this will be limited to the annual TAC defined for each of the target species. The effectiveness of the management regime for the CRFFF is monitored through the PMS for the fishery which defines objectives for all components of the fishery including target species, bycatch and the ecosystem generally.</p> <p>Compliance with the management measures in place for the CRFFF is reported to be at 95% in the 2007 ASR and the PMS requires that this level of compliance is maintained to prevent further management changes.</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> <p>(d) the operation is a commercial fishery.</p>	<p>The CRFFF is a commercial fishery.</p>

Section 303FR Public consultation	DEWHA assessment of the CRFFF
<p>(1) Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice:</p> <p>(a) setting out the proposal to make the declaration; and</p> <p>(b) setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and</p> <p>(c) inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal.</p>	<p>DEWHA considers that consultation requirements of the EPBC Act for declaring a WTO have been met. A public notice, which set out the proposal to declare the CRFFF a WTO and included the 2006 and 2007 annual status reports, was released for public comment which closed on 4 July 2008 with one submission received.</p>
<p>(2) A period specified in the notice must not be shorter than 20</p>	<p>A public notice, which set out the proposal to declare the CRFFF a</p>

business days after the date on which the notice was published on the Internet.	WTO and included the 2006 and 2007 annual status reports was released for public comment on 28 May 2008 and closed on 4 July 2008, a total of 25 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.	The DEWHA assessment has considered the public comment received on the submission.

Section 303FT Additional provisions relating to declarations	DEWHA assessment of the CRFFF
(1) This section applies to a declaration made under section 303FN, 303FO or 303FP.	A declaration for the CRFFF will be made under section 303FN.
<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> <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. <p>In such a case, the instrument of declaration is to specify the period, circumstances or condition.</p>	<p>The standard conditions applied to commercial fishery WTOs include:</p> <ul style="list-style-type: none"> • operation in accordance with the management regime; • notifying DEWHA of changes to the management regime; and • annual reporting in accordance with the requirements of the Australian Government <i>Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition</i> (the Guidelines). <p>The WTO instrument for the CRFFF specifies the standard and any additional conditions applied.</p>
(8) A condition may relate to reporting or monitoring.	One of the standard conditions relates to reporting.
(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 CRFFF made under sections 303FN and the conditions under section 303FT will be gazetted and made available on the DEWHA website.

Part 16

Section 391 Minister must consider precautionary principle in making decisions	DEWHA assessment of the CRFFF
(1) The Minister must take account of the precautionary principle in	The precautionary principle must be considered when making a

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.	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 DEWHA conditions and recommendations to DPI&F for the CRFFF

The material submitted by DPI&F demonstrates that the management arrangements for the CRFFF meet most of the requirements of the Guidelines.

Management of the CRFFF includes limited entry, quota management of RQ species in conjunction with annual TAC limits, minimum and maximum size limits, spatial restrictions, gear restrictions (3 line/6 hook per person limit using either rod or hand reel), three 9 day closures between October and December each year based around spawning periods, in-possession limits for the recreational sector, and prohibition on the take of some fin fish species.

Despite the management arrangements in place in the CRFFF, DEWHA has identified several risks and uncertainties that must be managed in a timely manner in the CRFFF to ensure that impacts are minimised:

- The lack of a stock assessment for the key target species, CT;
- The relatively large recreational take of CT, and the need to incorporate the take from this sector into the assessment for coral trout;
- Concerns about quota integrity, due to uncertainty in the reliability of catch reporting including offload monitoring for the CRFFF;
- The need to ensure monitoring resources (e.g. fishery observers) are allocated to adequately monitor bycatch as required by the PMS;
- Uncertainty about the stock status of OS species due to low species level resolution in catch data; and
- The lack of management arrangements and uncertain stock status for sharks and rays.

DEWHA is satisfied that the CRFFF will not be detrimental to the survival or conservation status of the taxon to which it relates in the short to medium term. Similarly, it is not likely to threaten any relevant ecosystem in the short to medium term. To contain and minimise the risks in the longer term, conditions and recommendations have been made. The immediate key challenges for this fishery are to: conduct stock assessments for key target species; improve quota monitoring; manage fishing for sharks and rays and improve species specific reporting for OS species. DEWHA considers that a three year WTO declaration is appropriate for the CRFFF.

Given the low level of protected species interactions under current fishing operations, DEWHA considers that the operation of the CRFFF 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. For these reasons, the management arrangements were accredited under Part 13 of the EPBC Act in November 2005. Since there have been no significant changes in the management arrangements since the initial assessment of the CRFFF, DEWHA considers that the existing Part 13 accreditation remains valid.

Table 4: CRFFF Assessment– Summary of Issues, Conditions and Recommendations, November 2008

	Issue	Condition
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, 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 byproduct, bycatch, protected species or the ecosystem.</p>	<p>Condition 1: Operation of the fishery will be carried out in accordance with the CRFFF Plan in force under the <i>Fisheries Act 1994</i> and the <i>Fisheries Regulation 2008</i>.</p> <p>Condition 2: DPI&F to inform DEWHA of any intended amendments to the management arrangements that may affect the assessment of the fishery against the criteria on which EPBC Act decisions are based.</p>
2	<p><u>Annual reporting</u></p> <p>It is important that reports be produced and presented to DEWHA annually in order for the performance of the fishery and progress in implementing the conditions and 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 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. Electronic copies of the Guidelines are available from the DEWHA website at http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html</p>	<p>Condition 3: DPI&F to produce and present reports to DEWHA annually as per Appendix B to the Guidelines.</p>
	Issue	Recommendation
3	<p><u>Assessment of key target species in the CRFFF</u></p> <p>In the 2005 assessment of the CRFFF, it was recommended that DPI&F develop a regular fishery assessment process for key target species. The 2008 submission</p>	<p>Recommendation 1: DPI&F to conduct an appropriate resource assessment for coral trout</p>

	<p>indicates that CT represents the most significant target species in the CRFFF accounting for more than half of the commercial catch in the 2006/07 quota year. Catch data indicates that although the CT quota category consists of several <i>Plectropomus</i> spp. the common coral trout (<i>P. leopardus</i>) represents the most significant part of the catch. The submission also states that recreational catch of these species exceeds take in the commercial sector. DEWHA notes that the current TAC is based on historic catch levels in the fishery rather than a quantitative stock assessment for common coral trout.</p> <p>DPI&F indicates that the ability to conduct a robust stock assessment using conventional assessment methodology is limited by the complex spatial structure of the CT stock. DEWHA commends DPI&F on the introduction of the MSE for the fishery; however it is important to note that the MSE is not a formal stock assessment. Development of a stock assessment module to fit to the MSE will allow DPI&F to model stock trends, enabling a review of sustainable harvest levels set by the TAC.</p> <p>DEWHA considers it is important that the assessment for target species should be able to provide a robust assessment of stock status that will lead to a reliable estimate of stock productivity and the level of harvest that will be sustainable.</p> <p>DEWHA agrees that the stock assessment module may provide a suitable alternative to a traditional stock assessment for CT owing to the complex spatial structure of the resource. DEWHA therefore recommends a resource assessment of coral trout is conducted as a matter of priority for the CRFFF.</p> <p>DEWHA reiterates that this recommendation requires that the assessment for CT should be able to demonstrate that harvest levels are sustainable.</p>	<p>within 2 years to ensure that harvest levels are sustainable. This assessment should take into account recreational catch.</p>
4	<p><u>Incorporating recreational harvest into stock assessments</u></p> <p>DEWHA notes the high level of harvest in the recreational sector of the CRFFF and recommends the stock assessment and resulting catch limits for RQ species should take recreational catch into account to ensure that management decisions consider all</p>	<p>Recommendation 2: DPI&F to ensure the setting of harvest levels for target species takes into account take from all sectors including the</p>

	<p>mortalities. It was also recommended in the 2005 assessment that DPI&F develop a process to improve estimates of recreational take and factor this into stock assessments and management controls to ensure overall catch levels are sustainable. DEWHA acknowledges the commencement of a new diary program in November 2007, a voluntary program that involves operators maintaining diary records of recreational fishing activity over a 12 month period. DPI&F indicates that, although there are difficulties in maintaining participant involvement over the 12 month period, the program will allow for the improved estimates of recreational take of CRFFF target species. DEWHA also acknowledges DPI&F's development and implementation of the regional bus creel surveys in 2008 to monitor regional recreational catches.</p> <p>DEWHA reiterates the importance of including these estimates into annual harvest levels for target species. DPI&F has indicated that estimates of the recreational harvest will be factored into the next assessment of RTE in 2009/2010 and suggests similar measures should be undertaken for CT.</p>	recreational sector.
5	<p><u>Quota monitoring and validation of logbook data</u></p> <p>DEWHA commends DPI&F on the introduction of the Fisheries Observer Program (FOP) however notes that observer coverage in this fishery has been less than 1% due to other commercial fisheries being considered a priority for observer days.</p> <p>As part of the 2008 submission DPI&F notes the reliance of quantitative resource assessments on logbook data highlighting the need to ensure that data collected through the logbook system is accurate and representative.</p> <p>In addition, observer coverage also provides the primary means of assessing the quantity and composition of bycatch in the CRFFF. The newly introduced PMS relies on observer data for ongoing monitoring of bycatch in the CRFFF providing additional support for maintaining adequate levels of coverage. DEWHA suggests that a higher level of coverage in the CRFFF is required to accurately monitor bycatch, in particular protected species.</p>	<p>Recommendation 3: DPI&F to continue to improve:</p> <ul style="list-style-type: none"> (a) validation of commercial logbook catch and effort data; and (b) monitoring of interactions with bycatch and protected species including a review of the level of observer coverage needed in the CRFFF within 12 months, to meet the requirements of the PMS.

	<p>DPI&F reports that in 2007, a review of the observer program was undertaken to maximise the effectiveness of the program across the 15 standard fisheries that are observed and allowing observer time for other developmental fisheries. The result was the formulation of a strategic plan to cover each of the 15 standard fisheries over a three year time frame. DEWHA recommends that DPI&F assesses and implements the minimum level of observer coverage required for the FOP to achieve its objectives for the CRFFF.</p> <p>The CRFFF is a relatively targeted fishery and currently has low levels of bycatch and interaction with species of conservation interest. Despite this the reliance on observer coverage for bycatch monitoring suggests that an appropriate level of observer coverage is crucial to the effective management of the CRFFF.</p> <p>The compliance risk assessment completed in 2006 identified that failing to keep required and accurate information, in regards to commercial catch, as one of the major issues for the CRFFF. As the TAC relies heavily on accurate monitoring of landed catch along the chain of custody, measures to validate landed catch are vital to ensuring the TAC for the fishery is not exceeded.</p>	<p>Recommendation 4: DPI&F to improve the accuracy of commercial landing records for quota categories, to ensure the TAC is adhered to.</p>
6	<p><u>Managing catch of sharks and rays in the CRFFF</u></p> <p>DEWHA is concerned that currently the take of sharks and rays in the CRFFF is not subject to management arrangements. The biological characteristic of these species makes them susceptible to fishing pressure. As part of its assessment process DEWHA encourages precautionary management for sharks and rays that will ensure that any impacts of fishing are sustainable.</p> <p>DPI&F has advised DEWHA that management arrangements for sharks are currently under review for several net and line fisheries operating in Queensland waters including the CRFFF. The review has proposed a number of changes to management arrangements for sharks including:</p>	<p>Recommendation 5: Within two years DPI&F to:</p> <ul style="list-style-type: none"> (a) implement management arrangements to ensure the take of sharks and rays is sustainable; (b) implement appropriate measures to limit capture and reduce post-release mortality of discarded shark species; and (c) continue to improve the identification and recording of the composition and

<ul style="list-style-type: none"> • Management arrangements designed to limit the number of operators that are able to target and retain sharks (an ‘S’ fishery symbol); • Prohibitions and in-possession limits for other operators, according to the vulnerability of individual species to fishing pressure; and • In-possession limits for the recreational sector. <p>It is important to note that the review process is yet to be finalised and the exact impact on the CRFFF remains uncertain. It is anticipated that the DPI&F will finalise the management arrangements for sharks and implement them in early 2009.</p> <p>While recognising that the CRFFF is based primarily on the trade of live CT, in addition to several other key fin fish species, DEWHA suggests the sustainability of the fishery, incorporating the mitigation of impacts on the broader marine environment, would benefit from the introduction of management arrangements for sharks and rays. These management arrangements should include measures to reduce the impact on discarded sharks and rays as well as strictly limiting the numbers of retained individuals. Scientific advice suggests populations of some species of sharks have declined in the GBRWHA and while DEWHA acknowledges that other fisheries in the region also impact on populations of sharks and rays, unpublished research indicates that there are significant interactions between reef sharks and the CRFFF. DEWHA recognises that DPI&F’s observer program monitors discards in the CRFFF, including sharks and rays; however, recommends that management arrangements be implemented to address sustainability concerns with reef sharks. Discard mortality may be managed through improved handling practices of discarded shark species encountered in the CRFFF. In addition DEWHA recognises that the management of shark species will be further enhanced by ongoing improvements to the species specific reporting of sharks and rays that are retained in the CRFFF. Improved species specific reporting will allow a more robust assessment of the risks to species taken in the CRFFF.</p>	<p>quantity of retained sharks and rays.</p>
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7	<p><u>Protection for spawning stock of coral reef fin fish species</u></p> <p>In the 2008 submission DPI&F notes that the adequacy of management arrangements for spawning stocks was being reviewed and that the results of the review would be available in August 2008. Previously, protection for spawning included three nine-day closures over the new moons between October and December each year. DEWHA notes that common coral trout aggregate for spawning during these periods and therefore considers these closures are a key component to the ongoing sustainability of the CRFFF. DEWHA recognises that DPI&F is currently undertaking a review of the protection afforded to spawning fish in the CRFFF, based on (but not limited to) independent reviews of spawning closures by James Cook University (JCU), and the expert workshop held by the Great Barrier Reef Marine Park Authority (GBRMPA) in 2007. Therefore DEWHA recommends that DPI&F considers the outcomes of the review of spawning closures to ensure that there is adequate protection for spawning of CRFFF quota species.</p>	<p>Recommendation 6: DPI&F to ensure that there is adequate protection for coral reef fin fish spawning stock.</p>
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Acronyms

ASR	Annual Status Reports
CITES	Convention on the International Trade in Endangered Wildlife of Fauna and Flora
CPUE	Catch Per Unit Effort
CRFFF	Coral Reef Fin Fish Fishery
CRFFF Plan	<i>Fisheries (Coral Reef Fin Fish) Management Plan 2003</i>
CT	coral trout
DEWHA	Department of the Environment, Water, Heritage and the Arts
DPI&F	Department of Primary Industries and Fisheries
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPBC Regulations	<i>Environment Protection and Biodiversity Conservation Regulations 2000</i>
FOP	Fisheries Observer Program
GBRMPA	Great Barrier Reef Marine Park Authority
GBRWHA	Great Barrier Reef World Heritage Area
LENS	List of Exempt Native Specimens
MOU	Memorandum of Understanding
MSE	Management Strategy Evaluation
OS	Other coral reef fin fish
PMS	Performance Measurement System
Reef MAC	Reef Management Advisory Committee
RQ	Reef Quota
RTE	red throat emperor
TAC	Total Allowable Catch
t	tonnes
WTO	Wildlife Trade Operation