



**Australian Government**

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**Department of the Environment and Energy**

Assessment of the  
**QUEENSLAND**  
**MARINE AQUARIUM FISH FISHERY**

**MARCH 2018**

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This report should be attributed as '*Assessment of the Queensland Marine Aquarium Fish Fishery March 2018*, Commonwealth of Australia 2018'.

### Disclaimer

This document is an assessment carried out by the Department of the Environment and Energy 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 and Energy 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 and Energy or the Australian Government.

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## **EXECUTIVE SUMMARY OF THE ASSESSMENT OF THE QUEENSLAND MARINE AQUARIUM FISH FISHERY**

In March 2017, the Queensland Department of Agriculture and Fisheries submitted an application for the Queensland Marine Aquarium Fish Fishery (MAFF) to the Department of the Environment and Energy for assessment under the EPBC Act, against the Australian Government 'Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition'. A public comment period was open from 6 April 2017 to 26 May 2017.

### **The fishery**

The fishery operates in Queensland and Commonwealth waters using hand collection, SCUBA, single hook line and small mesh nets to target reef fish species for the aquarium trade. Most fishing effort occurs within the Great Barrier Reef Marine Park. The fishery is managed using input controls such as limited entry, possession limits, gear restrictions and spatial closures. An ecological risk assessment was completed for the fishery in 2008 and remains valid.

### **Target stocks**

While there are no stock assessments in place due to the high number of species harvested, the fishery is managed in a mosaic of small scale harvesting areas and the industry has a Stewardship Action Plan in place for operating in the Great Barrier Reef Marine Park. There has been no recent assessment of the dynamics and status of target stocks however impacts are considered likely to be low due to the harvesting methods employed.

### **Protected species (including CITES listed species) and ecosystems**

Due to the highly selective fishing methods, there are no incidental interactions with protected species and no damage caused to ecosystems. Small numbers of hammerhead sharks (up to 240 over two years), humphead Maori wrasse (25 over two years, not for export), seahorses (not for export) and sawfish (two over two years, also not for export) may be caught through General Fisheries Permits (GFP). There are currently two GFP's allocated to one operator. A non-detriment finding (NDF) was completed in 2014 for the take of hammerhead sharks from Australian fisheries. The NDF concluded that take within historic harvest levels will not be detrimental to the species in Australian waters and that take included harvest from the Fishery.

### **Conclusion**

Following assessment against the Guidelines at Section 2, the Queensland MAFF has been found to meet the requirements of the EPBC Act. Given the fishery's harvest includes appropriately managed CITES species for export, declaration of the harvest operations of the fishery as an approved wildlife trade operation for three years, under Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999* until 26 March 2021 is appropriate.

**SECTION 1: ASSESSMENT SUMMARY OF THE QUEENSLAND MARINE AQUARIUM FISH FISHERY AGAINST THE *GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT OF FISHERIES (2<sup>ND</sup> EDITION)***

	Meets	Partially meets	Does not meet	Details
<b>Guidelines</b>				
Management regime	6 of 9	2 of 9	1 n/a	Generally robust management regime, although would be improved by more regular evaluation of performance.
Principle 1 (target stocks)	6 of 11	3 of 11 (1.1.2, 1.1.4, 1.1.6)	2 n/a	Generally robust management of target stocks.  1.1.2 – understanding of status of target stocks would be improved by more regular assessments  1.1.4 – logbook validation is limited and no reliable estimates available of recreational and Indigenous take.  1.1.6 – Performance Management System not reviewed since 2008.
Principle 2 (bycatch and TEPS)	5 of 12		7 n/a	No concerns for bycatch or protected species interactions, due to the highly selective fishing method.
Principle 2 (ecosystem impacts)	4 of 5	1 of 5 (2.3.4)		Ecosystem impacts considered to be low due to highly selective fishing method.  2.3.4 - Performance Management System not reviewed since 2008.

EPBC requirements				
Part 13	N/a	N/a	N/a	Part 13 accreditation not sought.
Part 13A	Met			Low level of take of some CITES species - juvenile hammerhead sharks, humphead Maori wrasse, sawfish and hippocampus.  Based on outcomes of Guidelines assessment, the Objects of Part 13A are considered met, with EPBC consultation requirements also met.
Part 12	Met			The fishery operates in the Temperate East and Coral Sea Marine regions. Highly selective fishing method is unlikely to have an impact on ecological values.
Part 16	Met			Appropriate precautionary measures are in place to prevent serious or irreversible environmental damage being caused by this fishery.

### **Notes:**

#### **Assessment history:**

1<sup>st</sup> assessment finalised 2005 – WTO with four conditions and nine recommendations

2<sup>nd</sup> assessment finalised 2008 – WTO with four conditions and four recommendations

3<sup>rd</sup> assessment finalised 2011 – WTO with three conditions and two recommendations

4<sup>th</sup> assessment finalised 2014 – WTO with three conditions and three recommendations.

#### **Fishery reporting:**

Annual report – last provided in March 2017 (2015 data) with the submission. <https://www.daf.qld.gov.au/fisheries/monitoring-our-fisheries/data-reports/sustainability-reporting/queensland-fisheries-summary/marine-aquarium-fish-fishery>

2008 report <http://www.environment.gov.au/system/files/pages/f2f189a7-8e98-4d3f-81f3-ddd9a7e3e0cf/files/status-report-08.pdf>

2010 report <https://www.environment.gov.au/system/files/pages/477d00b7-2e20-40df-8507-0aae5522e6ce/files/status-report-2010.pdf>

Protected species interactions – provided directly to Department and included in Fishery Status Reports.

### **Key links:**

#### **Fishery information –**

Fishery information page on agency website - <https://www.daf.qld.gov.au/fisheries/monitoring-our-fisheries/commercial-fisheries/data-reports/sustainability-reporting/queensland-fisheries-summary/marine-aquarium-fish-fishery>

Guide to the Queensland Marine Aquarium Fish Fishery and the Queensland Coral Fishery (2009) -

[https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0005/59837/marine-aquarium-coral-fishery-Guide-QLD.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0005/59837/marine-aquarium-coral-fishery-Guide-QLD.pdf)

Performance Management System (2009) - [https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0020/64622/Fishery-PMS-Marine-Aquarium.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0020/64622/Fishery-PMS-Marine-Aquarium.pdf)

#### **Enforcing legislation -**

Queensland *Fisheries Act 1994* - <https://www.legislation.qld.gov.au/LEGISLTN/CURRENT/F/FisherA94.pdf>

Queensland Fisheries Regulation 2008 - [https://www.legislation.qld.gov.au/LEGISLTN/SLS/RIS\\_EN/2008/08SL083E.pdf](https://www.legislation.qld.gov.au/LEGISLTN/SLS/RIS_EN/2008/08SL083E.pdf)

#### **Harvest strategy -**

Harvest Strategy Policy and Guidelines - <https://www.daf.qld.gov.au/fisheries/sustainable-fisheries-strategy/harvest-strategy>

#### **ERA -**

Ecological Risk Assessment (2008) - [https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0008/51749/EcolRiskAssess-Aquarium-Sustain.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0008/51749/EcolRiskAssess-Aquarium-Sustain.pdf)

#### **Other relevant documents:**

Sustainable Fisheries Strategy - <https://www.daf.qld.gov.au/fisheries/consultations-and-legislation/sustainable-fisheries-strategy>

QLD Regulatory Impact Statement Guidelines - <https://www.treasury.qld.gov.au/publications-resources/ris-system-guidelines/ris-system-guidelines.pdf>

Non-detriment finding for five shark species including hammerhead sharks - <http://www.environment.gov.au/biodiversity/wildlife-trade/publications/non-detriment-finding-five-shark-species>

Stewardship Action Plan [http://www.gbrmpa.gov.au/\\_data/assets/pdf\\_file/0015/4236/gbrmpa\\_StewardshipActionPlan2009.pdf](http://www.gbrmpa.gov.au/_data/assets/pdf_file/0015/4236/gbrmpa_StewardshipActionPlan2009.pdf)

Coral stress plan

[http://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/3028/1/2009\\_Coral\\_Stress\\_Response\\_Plan\\_for\\_fish\\_fisheries.pdf](http://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/3028/1/2009_Coral_Stress_Response_Plan_for_fish_fisheries.pdf)

**SECTION 2: DETAILED ANALYSIS OF THE QUEENSLAND MARINE AQUARIUM FISH FISHERY AGAINST *THE GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT OF FISHERIES (2<sup>ND</sup> EDITION)***

Guidelines for the Ecologically Sustainable Management of Fisheries (2nd edition)	Comment
<b>THE MANAGEMENT REGIME</b>	
The management regime does not have to be a formal statutory fishery management plan as such, and may include non-statutory management arrangements or management policies and programs. The regime should:	
Be documented, publicly available and transparent	<p><b>Meets</b> The fishery is managed by the Queensland Department of Agriculture and Fisheries (QDAF) under the <i>Queensland Fisheries Act 1994</i> and Fisheries Regulation 2008. Legislation can be found at <a href="http://www.legislation.qld.gov.au">www.legislation.qld.gov.au</a></p> <p>The fishery is also co-managed with the Great Barrier Reef Marine Park Authority (GBRMPA) under permits to operate in the Marine Park.</p>
Be developed through a consultative process providing opportunity to all interested and affected parties, including the general public	<p><b>Meets</b> The original management arrangements were developed with industry and relevant stakeholders. There is a statutory process in place for public consultation and advisory committees. A Regulatory Impact Statement (RIS) process is used as the main mechanism for ongoing consultation. The Queensland RIS guidelines can be found on the Queensland Department of Treasury website (link above).</p> <p>The Queensland Sustainable Fisheries Strategy 2017-2027 (link above) sets out priorities for future engagement with stakeholders through working groups which will include membership from commercial, recreational, conservation and Indigenous representatives.</p>
Ensure that a range of expertise and community interests are involved in individual fishery management committees and during the stock assessment process	<p><b>Meets</b> Consultation is completed through a formal RIS and/or show cause process under Section 63 of the <i>Queensland Fisheries Act 1994</i>. There is ongoing scientific research and management expertise within QDAF.</p> <p>QDAF, GBRMPA and industry collaborated to establish:</p> <ul style="list-style-type: none"> <li>• the Stewardship Action Plan (link above) to ensure that fisheries that supply to the aquarium industry in Queensland adhere to operations standards and have contingency plans in place to respond to catastrophic events linked to global climate change, and</li> <li>• the Coral Stress Response Plan (link above) which outlines the strategy being adopted by this fishery to minimise impacts on coral reef systems showing signs of stress.</li> </ul> <p>While there are no stock assessments in place due to the number of species collected (&gt;500), the Ecological Risk Assessment (ERA) process incorporates a range of expertise.</p> <p>The Queensland Sustainable Fisheries Strategy 2017-2027 (link above) sets out priorities for future engagement with stakeholders through working groups which will include membership from commercial, recreational, conservation and Indigenous representatives.</p>

<p>Be strategic, containing objectives and performance criteria by which the effectiveness of the management arrangements are measured</p>	<p><b>Partially meets</b> Objectives and performance criteria are contained in the <i>Fisheries Act 1994</i> and the fishery Performance Measurement System (PMS). Currently, these are not regularly measured, although catch and effort data is still reviewed annually against historic harvest. Future performance monitoring will be integrated into the Harvest Strategy for this fishery. This is due to commence development in 2018 as part of the Sustainable Fisheries Strategy.</p>
<p>Be capable of controlling the level of harvest in the fishery using input and/or output controls</p>	<p><b>Meets</b> The fishery uses a mixture of input controls (limited entry, possession limits for some species, fine scale spatial management and gear restrictions) to control the level of harvest. Management arrangements such as spatial closures can be implemented if the fishery is having an impact on a target or byproduct stock.</p>
<p>Contain the means of enforcing critical aspects of the management arrangements</p>	<p><b>Meets</b> The Queensland <i>Fisheries Act 1994</i> contains provisions for the enforcement of the management arrangements for the fishery. Compliance and enforcement activities are carried out by the Queensland Boating and Fisheries Patrol. Compliance capacity should increase in future, according to commitments made in the Sustainable Fisheries Strategy.</p>
<p>Provide for the periodic review of the performance of the fishery management arrangements and the management strategies, objectives and criteria.</p>	<p><b>Partially meets</b> When operational, the PMS regularly evaluated the performance of fishery management arrangements against specified objectives and criteria. However, while catch and effort data is still reviewed annually against historic harvest, the last PMS review of this fishery was undertaken in 2008.  Future performance review and monitoring will be integrated into the Harvest Strategy for this fishery. This is due to commence development in 2018 as part of the Sustainable Fisheries Strategy (link above).</p>
<p>Be capable of assessing, monitoring and avoiding, remedying or mitigating any adverse impacts on the wider marine ecosystem in which the target species lives and the fishery operates.</p>	<p><b>Meets</b> An ERA was conducted in 2008 and assessed the impacts of the fishery on the ecosystem and target species. The hand held fishing methods used in this fishery pose a low risk to the wider marine ecosystem. The Sustainable Fisheries Strategy also outlines further monitoring and research that will inform management needs and fill information gaps.</p>
<p>Requires compliance with relevant threat abatement plans, recovery plans, the National Policy on Fisheries Bycatch, and bycatch action strategies developed under the policy</p>	<p><b>N/A</b> There are no relevant plans to be considered at this time.</p>
<p><b>PRINCIPLE 1</b> - A fishery must be conducted in a manner that does not lead to over-fishing, or for those stocks that are over-fished, the fishery must be conducted such that there is a high degree of probability the stock(s) will recover.</p>	
<p><b>Objective 1</b> - The fishery shall be conducted at catch levels that maintain ecologically viable stock levels at an agreed point or range, with acceptable levels of probability.</p>	
<p><b>Information requirements</b></p>	
<p><b>1.1.1</b> There is a reliable information collection system in place appropriate to the scale of the fishery. The level of data collection should be based upon an appropriate mix of fishery independent and dependent research and monitoring.</p>	<p><b>Meets</b> Fishers are required to complete a logbook at the end of each fishing day and submit that to QDAF within 15 days of the end of each month. Logbooks include any harvest of CITES species (hammerhead sharks, seahorses, sawfish and humphead Maori wrasse).  A Vessel Monitoring System will also implemented this fishery by 2020 as part of the Sustainable Fisheries Strategy.</p>

<b>Assessment</b>	
<p><b>1.1.2</b> There is a robust assessment of the dynamics and status of the species/fishery and periodic review of the process and the data collected. Assessment should include a process to identify any reduction in biological diversity and /or reproductive capacity. Review should take place at regular intervals but at least every three years.</p>	<p><b>Partially meets</b>  Species-specific stock assessments are impractical due to the large number of target species (&gt; 500). While the 2008 ERA provides robust consideration of the susceptibility to collection activities of most (587) species taken in the fishery, these assessments have not been reviewed.</p> <p>The Sustainable Fisheries strategy commits to undertaking additional monitoring of key biological stocks to better understand the fishery performance and support management actions.</p> <p>A non-detriment finding (NDF) has been completed which considered the fishery's take of hammerhead sharks. The NDF includes consideration of the biology, life history characteristics, distribution, threats, historical harvest and population status. The NDF contains recommendations to enhance monitoring capabilities.</p> <p>While an NDF for humphead Maori wrasse has been completed, it notes that any harvest from the Marine Aquarium Fishery is solely for the purpose of public display in Australia only and/or public education or broodstock for aquaculture and are not to be exported.</p>
<p><b>1.1.3</b> The distribution and spatial structure of the stock(s) has been established and factored into management responses.</p>	<p><b>Meets</b>  The distribution and spatial structure of the target stocks have been established and the information was incorporated into the 2008 ERA.</p> <p>The 2014 NDF for hammerhead sharks has considered the distribution and spatial structure of the hammerhead stock.</p>
<p><b>1.1.4</b> There are reliable estimates of all removals, including commercial (landings and discards), recreational and indigenous, from the fished stock. These estimates have been factored into stock assessments and target species catch levels.</p>	<p><b>Partially meets</b>  Reliable estimates from commercial fishers are provided through mandatory logbooks, however logbook validation is limited. Initiatives under the Sustainable Fisheries Strategy include the development of a Data Validation Plan and implementation of vessel monitoring on all commercial vessels by 2020.</p> <p>There are no estimates available on recreational and Indigenous take.</p>
<p><b>1.1.5</b> There is a sound estimate of the potential productivity of the fished stock/s and the proportion that could be harvested.</p>	<p><b>Meets</b>  Due to the high number of species collected (&gt;500), species-specific stock assessments are impractical and estimates of potential productivity are also difficult. However, the 2008 ERA explicitly considered the life history characteristics of 587 species caught in the fishery to determine vulnerability and susceptibility to collection activities.</p> <p>The NDF for hammerhead sharks sets out appropriate catch levels which includes harvest from this fishery. The General Fisheries Permit in place that allows the harvest of hammerhead sharks for aquaria has a limit of up to 240 'sharks' for the two year life of the permit which may include hammerhead sharks.</p>
<b>Management responses</b>	
<p><b>1.1.6</b> There are reference points (target and/or limit), that trigger management actions including a biological bottom line and/or a catch or effort upper limit beyond which the stock should not be taken.</p>	<p><b>Partially meets</b>  The PMS identified species-specific reference points and management response triggers, informed by the 2008 ERA. The PMS has not been reviewed in this fishery since 2008, however the Queensland Harvest Strategy Policy and Guidelines (link above) sets out how future management will include suitable reference points, decision rules and performance indicators.</p>

1.1.7 There are management strategies in place capable of controlling the level of take.	<b>Meets</b> The level of take is maintained through limited entry, possession limits for some species, spatial management and closures, gear restrictions, hand collection, single hook fishing lines
1.1.8 Fishing is conducted in a manner that does not threaten stocks of byproduct species.	<b>Meets</b> There are no byproduct species taken in the fishery due to the selective fishing methods used. Any unwanted species can be released quickly.
(Guidelines 1.1.1 to 1.1.7 should be applied to byproduct species to an appropriate level)	
1.1.9 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	<b>Meets</b> As selective fishing methods are used, there is a high likelihood that the management actions will achieve the objective of maintaining target and byproduct species at appropriate levels.
<b>If overfished, go to Objective 2: If not overfished, go to PRINCIPLE 2:</b>	
<b>Objective 2</b> - Where the fished stock(s) are below a defined reference point, the fishery will be managed to promote recovery to ecologically viable stock levels within nominated timeframes.	
<b>Management responses</b>	
1.2.1 A precautionary recovery strategy is in place specifying management actions, or staged management responses, which are linked to reference points. The recovery strategy should apply until the stock recovers, and should aim for recovery within a specific time period appropriate to the biology of the stock.	<b>N/A</b> No target stocks are currently considered likely to be overfished.
1.2.2 If the stock is estimated as being at or below the biological and / or effort bottom line, management responses such as a zero targeted catch, temporary fishery closure or a 'whole of fishery' effort or quota reduction are implemented.	<b>N/A</b> No target stocks are currently considered likely to be overfished.
<b>PRINCIPLE 2</b> - Fishing operations should be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.	
<b>Objective 1</b> - The fishery is conducted in a manner that does not threaten bycatch species.	
<b>Information requirements</b>	
2.1.1 Reliable information, appropriate to the scale of the fishery, is collected on the composition and abundance of bycatch.	<b>Meets</b> There is no significant bycatch due to the highly selective fishing methods.
<b>Assessments</b>	
2.1.2 There is a risk analysis of the bycatch with respect to its vulnerability to fishing.	<b>Meets</b> An ERA was conducted in 2008 and assessed the impacts of the fishery on the ecosystem and target species. The risk to bycatch is considered low due to the highly selective fishing methods used.
<b>Management responses</b>	
2.1.3 Measures are in place to avoid capture and mortality of bycatch species unless it is determined that the level of catch is sustainable (except in relation to endangered, threatened or protected species). Steps must be taken to develop suitable technology if none is available.	<b>N/A</b> Due to the highly selective fishing methods, there is no capture of bycatch. If unwanted species are caught (on line or in nets), they can be released immediately.
2.1.4 An indicator group of bycatch species is monitored.	<b>N/A</b> Monitoring of an indicator group of bycatch species is not necessary due to the low risk posed by the harvesting method.

2.1.5 There are decision rules that trigger additional management measures when there are significant perturbations in the indicator species numbers.	<b>N/A</b> There are no specific decision rules in place that trigger additional management measures - which is appropriate given the low risk posed to bycatch species.
2.1.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	<b>Meets</b> The management arrangements are likely to have a high chance of achieving the objective of fishing being conducted in a manner that does not threaten bycatch.
<b>Objective 2 - The fishery is conducted in a manner that avoids mortality of, or injuries to, endangered, threatened or protected species and avoids or minimises impacts on threatened ecological communities.</b>	
<b>Information requirements</b>	
2.2.1 Reliable information is collected on the interaction with endangered, threatened or protected species and threatened ecological communities.	<b>Meets</b> All operators are required to report any interactions with protected species and there are no threatened ecological communities in the area of the fishery. Species of Conservation Interest logbooks are considered reliable for this fishery due to the harvesting methods used.
<b>Assessments</b>	
2.2.2 There is an assessment of the impact of the fishery on endangered, threatened or protected species.	<b>Meets</b> An ERA was conducted in 2008 and assessed the impacts of the fishery on the ecosystem and target species. Due to the highly selective fishing method, the risk of interactions with threatened, endangered and protected species is considered to be low.
2.2.3 There is an assessment of the impact of the fishery on threatened ecological communities.	<b>N/A</b> There are no threatened ecological communities in the area of the fishery.
<b>Management responses</b>	
2.2.4 There are measures in place to avoid capture and/or mortality of endangered, threatened or protected species.	<b>N/A</b> Due to targeted collection methods threatened, endangered and protected species interactions are considered negligible therefore no specific management measures are considered required.
2.2.5 There are measures in place to avoid impact on threatened ecological communities.	<b>N/A</b> There are no threatened ecological communities in the area of the fishery.
2.2.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	<b>N/A</b> The management arrangements are likely to have a high chance of achieving the objective of ensuring that fishing is conducted in a manner that avoids mortality of, or injuries to, endangered, threatened or protected species and avoids or minimises impacts on threatened ecological communities.
<b>Objective 3 - The fishery is conducted in a manner that minimises the impact of fishing operations on the ecosystem generally.</b>	
<b>Information requirements</b>	
2.3.1 Information appropriate for the analysis in 2.3.2 is collated and/or collected covering the fishery's impact on the ecosystem and environment generally.	<b>Meets</b> Information is collected for some target species, however no specific information is collected on the fishery's impact on the ecosystem and environment generally. The impact on the ecosystem and environment is considered to be low due to the highly selective fishing method.

<b>Assessment</b>	
<p><b>2.3.2</b> Information is collected and a risk analysis, appropriate to the scale of the fishery and its potential impacts, is conducted into the susceptibility of each of the following ecosystem components to the fishery.</p> <ol style="list-style-type: none"> <li>1. Impacts on ecological communities <ul style="list-style-type: none"> <li>• Benthic communities</li> <li>• Ecologically related, associated or dependent species</li> <li>• Water column communities</li> </ul> </li> <li>2. Impacts on food chains <ul style="list-style-type: none"> <li>• Structure</li> <li>• Productivity/flows</li> </ul> </li> <li>3. Impacts on the physical environment <ul style="list-style-type: none"> <li>• Physical habitat</li> <li>• Water quality</li> </ul> </li> </ol>	<p><b>Meets</b></p> <p>An ERA was conducted in 2008 and assessed the impacts of the fishery on target species, but did not assess the impacts on ecological communities, food chains or the physical environment. However, the fishing methods as described in the ERA would pose very low risk to the environment, with no damaging collection activities permitted and highly selective harvesting.</p> <p>The Sustainable Fisheries Strategy notes that ERAs will be completed for all fished stocks. QDAF has advised that an updated ERA is being completed for this fishery and will be available in early 2018.</p>
<b>Management responses</b>	
<p><b>2.3.3</b> Management actions are in place to ensure significant damage to ecosystems does not arise from the impacts described in 2.3.1.</p>	<p><b>Meets</b></p> <p>Although there is no ERA for ecosystems in place, due to the highly selective harvesting method (hand collection) it is likely that the fishery is not having an adverse impact on the ecosystem.</p>
<p><b>2.3.4</b> There are decision rules that trigger further management responses when monitoring detects impacts on selected ecosystem indicators beyond a predetermined level, or where action is indicated by application of the precautionary approach.</p>	<p><b>Partially meets</b></p> <p>There are decision rules in place that trigger further management responses in the PMS, however these are not regularly measured and the PMS has not been reviewed for this fishery since 2008. Future performance monitoring will be integrated into the Harvest Strategy for this fishery. This is due to commence development in 2018 as part of the Sustainable Fisheries Strategy.</p> <p>The collection of data through logbooks enables QDAF to implement any appropriate management response, if a response was required.</p>
<p><b>2.3.5</b> The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.</p>	<p><b>Meets</b></p> <p>The management arrangements, considering any precautionary management actions, appear to have a high chance of achieving the objective of ensuring that the fishery is conducted in a manner that minimises the impact of fishing operations on the ecosystem generally.</p>

### SECTION 3: ASSESSMENT OF THE QUEENSLAND MARINE AQUARIUM FISHERY AGAINST THE REQUIREMENTS OF THE EPBC ACT

**Please Note** – the table below is not a complete or exact representation of the EPBC Act. It is intended as a checklist of relevant sections and components of the EPBC Act to provide advice on the fishery in relation to decisions under Part 13 and Part 13A.

#### Part 12

	Comment
<b>Section 176 Bioregional Plans</b>	
(5) Minister must have regard to relevant bioregional plans	<p><b>Meets</b></p> <p>The fishery operates in the Coral Sea and the Temperate East Marine Regions. There is no bioregional plan currently in place for the Coral Sea Marine Region.</p> <p>There is no evidence to suggest any systematic change to species diversity or richness caused by these fisheries, indicating fishing effort is not having a material impact on the food chain or trophic structure. Given the low impact fishing methods used in the fishery and the mitigation measures in place, impact to key ecological features is considered low.</p>

**Part 13** - accreditation not sought.

#### Part 13A

<b>Section 303BA Objects of Part 13A</b>	
<p>(1) The objects of this Part are as follows:</p> <ul style="list-style-type: none"> <li>(a) to ensure that Australia complies with its obligations under CITES and the Biodiversity Convention;</li> <li>(b) to protect wildlife that may be adversely affected by trade;</li> <li>(c) to promote the conservation of biodiversity in Australia and other countries;</li> <li>(d) to ensure that any commercial utilisation of Australian native wildlife for the purposes of export is managed in an ecologically sustainable way;</li> <li>(e) to promote the humane treatment of wildlife;</li> <li>(f) to ensure ethical conduct during any research associated with the utilisation of wildlife; and</li> <li>(h) to ensure the precautionary principle is taken into account in making decisions relating to the utilisation of wildlife.</li> </ul>	
	Comments
<b>Section 303CG Minister may issue permits (CITES permits)</b>	
<p>(3) The Minister must not issue a permit unless the Minister is satisfied that:</p> <ul style="list-style-type: none"> <li>(a) the action or actions specified in the permit will not be detrimental to, or contribute to trade which is detrimental to: <ul style="list-style-type: none"> <li>i. the survival of any taxon to which the specimen belongs; or</li> <li>ii. the recovery in nature of any taxon to which the specimen belongs; or</li> <li>iii. any relevant ecosystem (for example, detriment to habitat or biodiversity).</li> </ul> </li> </ul>	<p><b>Meets</b></p> <p>This fishery harvests low numbers of hammerhead sharks and humphead Maori wrasse (annually up to 240 and 25, respectively). Both of these species are listed under CITES although only hammerhead sharks are exported from this fishery. Neither species are considered overfished in Queensland waters and management arrangements in place, including hand collection and harvest limits, assist in ensuring their ecologically sustainable harvest.</p> <p>Taking account of the very low numbers taken from the wild, this harvest will not be detrimental to the survival of either species in the short to medium term. A condition on the Wildlife Trade Operation declaration includes annual reporting requirements, which will allow the Department to monitor the status of hammerhead sharks and humphead Maori wrasse harvested in the fishery.</p> <p>Recognising the nature of harvest and gear used in the fishery, the potential for this fishery to impact unacceptably and unsustainably on any relevant ecosystem is low. The Department is satisfied that the fishery is conducted in a manner that minimises the impact of fishing operations on the ecosystem generally.</p>

<b>Section 303DC Minister may amend list (non CITES species)</b>	
(1) Minister may amend the List of Exempt Native Specimens (LENS) by: (e) including items; (f) deleting items; or (g) imposing a condition or restriction to which the inclusion of a specimen is subject; or (h) varying or revoking a condition or restriction to which the inclusion of a specimen is subject.	
(1A) In deciding to amend LENS, Minister must rely primarily on outcomes of Part 10, Div 1 Or 2 assessment	<b>N/A</b> – Not a Commonwealth fishery
(1C) The above does not limit matters that may be considered when deciding to amend LENS.	<b>Meets</b> Through the above assessment at Section 2 against the Guidelines, the Department has taken into account all matters relevant to making an informed decision to amend the list of exempt native specimens to include product taken in this fishery.
(3) Before amending LENS, Minister must consult: (a) other Minister or Ministers as appropriate; and (b) other Minister or Ministers of each State and self-governing Territory as appropriate; and (c) other persons and organisations as appropriate.	<b>Meets</b> The submission from QDAF was made available on the Department's website from 6 April – 26 May 2017. No comments were received.
<b>Section 303FN Approved wildlife trade operation</b>	<b>Comment</b>
(2) The Minister may, by instrument published in the <i>Gazette</i> , declare that a specified wildlife trade operation is an <b>approved wildlife trade operation</b> for the purposes of this section.	
(3) The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is <b>satisfied</b> that: (a) the operation is consistent with the objects of Part 13A of the Act; and	<b>Meets</b> The fishery is consistent with the objects of part 13A – see assessment against the Guidelines at Section 2 above.
(b) the operation will not be detrimental to: i. the survival of a taxon to which the operation relates; or ii. the conservation status of a taxon to which the operation relates; and (ba) the operation will not be likely to threaten any relevant ecosystem including (but not limited to) any habitat or biodiversity; and	<b>Meets</b> The fishery will not be detrimental to the survival or conservation status of a taxon to which it relates, nor will it threaten any relevant ecosystem, within the next <b>3</b> years, given the management measures currently in place, which include limited licences, size limits and closed areas. Take is constrained through the harvest methods (hand collection, SCUBA, hook and line and small set nets).
(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	<b>N/a</b> - The Environment Protection and Biodiversity Conservation Regulations 2000 do not specify crustacea or fish as a class of animal in relation to the welfare of live specimens.

(d) such other conditions (if any) as are specified in the regulations have been, or are likely to be, satisfied.	<b>N/a</b> - No other conditions are specified in relation to commercial fisheries in the EPBC Regulations.
(4) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to: (a) the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and	<b>Meets</b> The fishery will not have a significant impact on any relevant ecosystem within the next <b>3 years</b> , given the management measures currently in place, which include the arrangements described above at s303FN 3(b).
(b) the effectiveness of the management arrangements for the operation (including monitoring procedures).	<b>Meets</b> The management arrangements that will be employed for the fishery as outlined in in the assessment against the Guidelines (above), are likely to be effective.
(5) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have <b>regard</b> to: (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 (b) whether the legislation applies throughout the State or Territory concerned; and (c) whether, in the opinion of the Minister, the legislation is effective.	<b>Meets</b> The fishery will be managed under the Queensland <i>Fisheries Act 1994</i> and the Fisheries Regulation 2008, which apply throughout Queensland waters and is considered to be effective.
(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: (a) the operation is a commercial fishery.	<b>Meets</b> The Queensland Marine Aquarium Fish Fishery is a commercial fishery.

<b>Section 303FR Public consultation</b>	<b>Comment</b>
(1) Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice: (a) setting out the proposal to make the declaration; and (b) setting out sufficient information to enable persons and organisations to consider adequately the merits of the proposal; and (c) inviting persons and organisations to give the Minister, within the period specified in the notice, written comments about the proposal.  (2) A period specified in the notice must not be shorter than 20 business days after the date on which the notice was published on the Internet.	<b>Meets</b> A public notice, which set out the proposal to declare the Marine Aquarium Fish Fishery an approved wildlife trade operation and included the application from QDAF, was released for public comment on 6 April and closed on 26 May 2017, a total of 34 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.	<b>N/a</b> - No public comments about the proposal were received.



Section 303FT Additional provisions relating to declarations	Comments
(1) This section applies to a declaration made under section 303FN, 303FO or 303FP.	<b>Meets</b> A declaration for the Marine Aquarium Fish Fishery will be made under section 303FN.
(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: (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 declaration is to specify the period, circumstances or condition.	<b>Meets</b> The standard conditions applied to commercial fishery wildlife trade operations include: <ul style="list-style-type: none"> <li>• operation in accordance with the management regime</li> <li>• notifying the Department of changes to the management regime, and</li> <li>• annual reporting in accordance with the requirements of the Australian Government <i>Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition</i>.</li> </ul> The wildlife trade operation instrument for the Marine Aquarium Fish Fishery specifies the standard and any additional conditions applied.
(8) A condition may relate to reporting or monitoring.	<b>Meets</b> 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.	<b>Meets</b> The instrument for the Queensland Marine Aquarium Fish Fishery made under sections 303FN and the conditions under section 303FT will be registered as a notifiable instrument and made available through the Department's website.

## Part 16

	Comment
<b>Section 391 Minister must consider precautionary principle in making decisions</b>	
(1) Minister must take account of precautionary principle	
(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.	<b>Meets</b> Given the controlled catch and effort in the fishery, the highly selective fishing method, the annual monitoring of harvest against historic catch and effort data, the industry stewardship action plan and the fishery-specific ERA, precautionary measures are in place to prevent serious or irreversible environmental damage being caused by this fishery. The precautionary principle is identified in the Queensland <i>Fisheries Act 1994</i> and the EPBC Act.

## SECTION 4: QUEENSLAND MARINE AQUARIUM FISH FISHERY – SUMMARY OF ISSUES REQUIRING CONDITIONS, MARCH 2018

Issue	Condition
<p><u>General Management</u></p> <p>Export decisions relate to the arrangements in force at the time of the decision. To ensure that these decisions remain valid and export approval continues uninterrupted, the Department 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, EPBC Act protected species or the ecosystem.</p>	<p><b>Condition 1:</b> Operation of the Queensland Marine Aquarium Fish Fishery will be carried out in accordance with the Queensland <i>Fisheries Act 1994</i> and the Queensland Fisheries Regulation 2008.</p> <p><b>Condition 2:</b> The Queensland Department of Agriculture and Fisheries to inform the Department of the Environment and Energy of any intended material changes to the Queensland Marine Aquarium Fish Fishery management arrangements that may affect the assessment against which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are made.</p>
<p><u>Annual Reporting</u></p> <p>It is important that reports be produced and presented to the Department annually in order for the performance of the fishery and progress in implementing the conditions 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 for the Ecologically Sustainable Management of Fisheries - 2nd Edition' 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 EPBC Act protected species, impacts of the fishery on the ecosystem in which it operates and progress in implementing the Department's conditions. Electronic copies of the guidelines are available from the Department's website at <a href="http://www.environment.gov.au/resource/guidelines-ecologically-sustainable-management-fisheries">http://www.environment.gov.au/resource/guidelines-ecologically-sustainable-management-fisheries</a></p>	<p><b>Condition 3:</b> The Queensland Department of Agriculture and Fisheries to produce and present reports to the Department of the Environment and Energy annually as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i>.</p>