



Australian Government

Department of the Environment and Energy

Assessment of the
Torres Strait Tropical Rock Lobster Fishery

December 2017

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This report should be attributed as '*Assessment of the Torres Strait Tropical Rock Lobster Fishery December 2017*, Commonwealth of Australia year'.

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 TORRES STRAIT TROPICAL ROCK LOBSTER FISHERY

On 12 April 2017, the Australian Fisheries Management Authority (AFMA) submitted an application on behalf of the Torres Strait Protected Zone Joint Authority (PZJA), for assessment of the Torres Strait Tropical Rock Lobster Fishery under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as a Wildlife Trade Operation (WTO).

The Department of the Environment and Energy assessed this application against the Australian Government 'Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition'. Public consultation on the application was undertaken 26 April to 31 May 2017. No comments were received.

The Torres Strait Tropical Rock Lobster Fishery targets a single species, *Panulirus ornatus*, using hand-collection methods in the Torres Strait Protected Zone. The target stock is not considered overfished and bycatch is negligible. While log books do not facilitate reporting of interactions with EPBC Act-listed species, the risk of interactions is considered to be low based on hand collection of the target stock.

The fishery is unlikely to have an unsustainable ecological impact during the period of the proposed approval (three years). The Department has proposed conditions, specified in Section 4 of this assessment, to ensure risks are managed.

The proposed conditions include the development and implementation of a harvest strategy and improvements to data collection and analysis protocols. A number of measures are already underway. Most notably, AFMA's capacity to monitor and manage catches has significantly improved since 1 December 2017 with the introduction of its fisher receiver system.

The Department recommends that, subject to the conditions specified in Section 4 of this report, the Torres Strait Tropical Rock Lobster Fishery be declared an approved Wildlife Trade Operation for a period of three years until 18 December 2020. Product derived from the fishery should be included on the List of Exempt Native Specimens while a declaration for an approved wildlife trade operation is in place.

Unless a specific time frame is provided, each condition must be addressed within the period of the approved wildlife trade operation declaration for the fishery.

SECTION 1: ASSESSMENT SUMMARY OF THE TORRES STRAIT TROPICAL ROCK LOBSTER FISHERY AGAINST THE GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT OF FISHERIES (2ND EDITION), CONSISTENT WITH THE EPBC ACT.

	Meets	Partially meets	Does not meet	Details
Guidelines				
Management regime	5 of 9 & 1 N/A	3 of 9	0 of 9	Improvements in management are occurring with actions being implemented. Capacity to monitor and manage catches has significantly improved since the last assessment. Further reforms are expected within the life of the recommended WTO.
Principle 1 (target stocks)	1 of 11 & 2 N/A	8 of 11	0 of 11	The species is not considered overfished or subject to overfishing. The fishery is seeking to manage uncertainty in a precautionary way. Accounting for all sources of mortality is expected to within the life of the recommended WTO.
Principle 2 (bycatch and TEPS)	5 of 12 & 5 N/A	1 of 12	1 of 12	Logbooks do not require reporting of TEP interactions. Collection methods used in this fishery are considered to be low risk.
Principle 2 (ecosystem impacts)	0 of 5	5 of 5	0 of 5	An ecological risk assessment of the fishery found no species, habitats or communities at high risk. The assessment is intended to be revised at least every four years, including during the life of the recommended WTO. Collection methods used in this fishery are considered to be low risk.
EPBC requirements				
Part 12				No marine bioregional plans apply to the area of the Torres Strait.
Part 13	Meets			Impact on EPBC listed species likely to be low. No interactions reported to date.
Part 13A	Meets			This assessment report recommends declaring the fishery a Wildlife Trade Operation for three years until 18 December 2020.
Part 16	Meets			The management regime and collection methods are sufficiently precautionary to prevent serious or irreversible environmental damage.

Assessment history:

- 1st assessment finalised November 2004 – WTO with 3 conditions; 10 recommendations
- 2nd assessment finalised November 2007 – WTO with 3 conditions; 5 recommendations
- 3rd assessment finalised November 2010 – WTO with 3 conditions; 5 recommendations
- 4th assessment finalised May 2014 – WTO with 3 conditions; 3 recommendations

Fishery reporting:

- Annual report – no reports have been provided.
- [AFMA Protected Species Interaction Reports](#)
- [Combined Torres Strait Protected Zone Joint Authority annual report 2011-2012, 2012-2013, 2013-2014](#)

Enforcing legislation:

- [Torres Strait Fisheries Act 1984](#)
- [Torres Strait Fisheries Regulations 1985](#)
- [Torres Strait Treaty \(Miscellaneous Amendments\) Act 1984](#)
- [Torres Strait Fisheries Management Instrument No. 9](#) (pdf copy on PZJA website)
- [Torres Strait Fisheries Logbook Instrument No. 1](#) (pdf copy marked as 'current' on PZJA website but repealed 26 August 2014. Replaced by [Torres Strait Fisheries Logbook Instrument 2015](#) (Registered 12 August 2015 and valid to 1 June 2018).
- [Catch Reporting Notice No. 13 - Requirement to furnish information relating to the delivery of tropical rock lobster](#) (not listed on PZJA website)
- [Fisheries Management Notice No. 47](#)
- Fisheries Management Notice No. 42 (Incomplete pdf copy on PZJA website. Full copy on [legislation.gov.au](#)).
- [Torres Strait Fisheries Act 1984 - Proclamation \(07/02/1985\)](#)
- [Community Fishing Notice No. 1](#) (pdf on PZJA website not legislation.gov.au)
- [Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two Countries, including the area known as the Torres Strait, and Related Matters](#)

Risk assessment and mitigation:

- [Ecological Risk Assessment for the Effects of Fishing: Report for the Torres Strait Rock Lobster Fishery \(April 2007\)](#)
- [Ecological Risk Management Report for the Torres Strait Tropical Rock Lobster Fishery, June 2009](#)

Stock assessment:

- [Refined Stock Assessment and TAC estimation for TS lobster fishery](#)
- [Revised 2010 Assessment of the Tropical Rock Lobster \(*Panulirus ornatus*\) Fishery in the Torres Straits](#)

Other:

- [Torres Strait Tropical Rock Lobster Fishery Traditional And Commercial Fishing In The Torres Strait Protected Zone. A brief guide to rules and regulations from 30th June 2004](#)
- [A guide to management arrangements for Torres Strait Fisheries, June 2004](#)

SECTION 2: DETAILED ANALYSIS OF THE TORRES STRAIT TROPICAL ROCK LOBSTER FISHERY AGAINST THE GUIDELINES FOR THE ECOLOGICALLY SUSTAINABLE MANAGEMENT OF FISHERIES (2ND EDITION)

	Comment
THE MANAGEMENT REGIME	
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	Partially meets While information is available on the PZJA website, some information is unavailable, inaccurate, inconsistent or difficult to locate. This makes it difficult to determine what arrangements apply to the fishery and could affect fisher's capacity to understand and comply with the arrangements. The Queensland Boating and Fisheries Patrol reported fisher's "lack of knowledge of relevant licensing conditions" as a compliance issue for this fishery (Combined PZJA 2011-2014 annual report). AFMA has committed to review the PZJA website by July 2018.
Be developed through a consultative process providing opportunity to all interested and affected parties, including the general public	Meets The management regime is developed through a consultative process. The PZJA established advisory bodies in 2003 and records of various meetings are published on the PZJA website . Traditional Inhabitant representatives are chosen by their communities, and together with industry and government representatives (Commonwealth and state), participate in the development of management arrangements. The PZJA is also advised by the Torres Strait Protected Zone Joint Authority Standing Committee, management advisory committees, the Torres Strait Scientific Advisory Committee, working groups, and resource assessment groups. The PZJA consults Australian traditional inhabitant fishers (commercial and traditional fishing), non-traditional inhabitant commercial fishers, Australian and Queensland government officials, and other technical experts, and conducts Native Title notification in accordance with the <i>Native Title Act 1993</i> .
Ensure that a range of expertise and community interests are involved in individual fishery management committees and during the stock assessment process	Meets Consultative groups include relevant expertise and community interest. Details are prescribed in the terms of reference for groups such as the Torres Strait Scientific Advisory Committee . The policy guiding membership, operation, administration and key decision making processes of the advisory bodies (other than the Torres Strait Protected Zone Joint Authority Standing Committee) is documented in Fisheries Management Paper No. 1 on the PZJA website.
Be strategic, containing objectives and performance criteria by which the effectiveness of the management arrangements are measured	Meets The fishery is managed in accordance with the "Interim Torres Strait Tropical Rock Lobster Fishery Harvest Strategy, 2008". This includes objectives and performance criteria to measure fishery performance. A revised harvest strategy, informed by a management strategy evaluation will also be implemented from December 2019.

<p>Be capable of controlling the level of harvest in the fishery using input and/or output controls</p>	<p>Partially meets</p> <p>A mix of input and output controls are used. There are a limited number of non-traditional (TVH) commercial licenses, but the number of traditional inhabitant (TIB) licenses is unlimited. Licensed vessels operate up to 14 tenders which are usually around five meters long and typically carry two divers (Plagányi et al 2010).</p> <p>Each year notional catch limits are set for the fishery based on pre-season surveys and recommendations from the fishery's resource assessment group. Catch is then allocated between Australian and Papua New Guineas fishers in accordance with catch sharing arrangements under the Torres Strait Treaty. There are no individual quota allocations; the notional catch limit applies to the fishery and is fished competitively.</p> <p>From 1 December 2017 all commercial fishers are required to unload their catches to licenced fish receivers, who must then report the catch to AFMA within three days. This measure provides AFMA with much greater capacity to monitor and manage fishing effort than was previously the case.</p> <p>The ecological risk management strategy for the fishery (AFMA 2009) anticipated introduction of a quota management system before 2011. AFMA is still pursuing these reforms but they have not yet occurred. AFMA also expects to implement a revised harvest strategy, which will be subject to a management strategy evaluation, from December 2019. When implemented these measures should improve AFMA's capacity to control the level of harvest in the fishery.</p> <p>The Minister responsible for the fishery can control fishing via legislative instrument (s16 <i>Torres Strait Fisheries Act 1984</i>), but this mechanism is likely to be reserved for emergency situations.</p>
<p>Contain the means of enforcing critical aspects of the management arrangements</p>	<p>Meets</p> <p>The <i>Torres Strait Fisheries Act 1984</i> outlines penalties for non-compliance with fisheries management arrangements and the Queensland Boating and Fisheries Patrol currently provide enforcement for Australian fishers in the Torres Strait.</p> <p>AFMA is responsible for foreign compliance in the Torres Strait and liaises closely with the Papua New Guinean National Fisheries Authority and Australian Border Force - Maritime Border Command in this process.</p> <p>AFMA and the Queensland Boating and Fisheries Patrol undertake an annual compliance risk assessment for the Torres Strait and in 2015 identified six moderate to high level risks, of which three are directly relevant to the Torres Strait Tropical Rock Lobster Fishery. During 2014–2015 fishing season the Queensland Boating and Fisheries Patrol referred four matters involving the Torres Strait Tropical Rock Lobster Fishery to the Commonwealth Director of Public Prosecutions. These included unlicensed fishing, breaches of licence conditions and commercial sale of no take species.</p>
<p>Provide for the periodic review of the performance of the fishery management arrangements and the management strategies, objectives and criteria</p>	<p>Meets</p> <p>The fishery is managed in accordance with the "Interim Torres Strait Tropical Rock Lobster Fishery Harvest Strategy, 2008". This includes objectives and performance criteria which are considered each year by the fishery's resource assessment group. A revised harvest strategy, informed by a Management Strategy Evaluation, is also expected to be implemented from December 2019. The Australian Government Bureau of Agricultural and Resource Economics and Sciences undertake annual assessments of the fishery based on available information.</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>Partially meets</p> <p>An ecological risk assessment of the fishery found no species, habitats or communities at high risk, and states that it will be revised at least every four years (Furlani et al. 2007). However, the ecological risk assessment has not been amended since 2007 (10 years) though it is scheduled to be reviewed in 2019–2020.</p> <p>At the end of each year, the fishery's management advisory committee considers changes in spatial distribution of effort, total fishing effort, and any expansion of new gear type or configuration, and if these changes occur, review the risk assessment.</p> <p>Although annual stock surveys (proposed to be triennial under a new harvest strategy) collect some information on habitats (e.g. sea grass beds and sand incursions), these observations do not appear to be driven by the ecological risk assessment and mitigation strategies. Notwithstanding, hand collection (including use of spears and scoop nets) is likely to have a minimal impact on the physical environment.</p> <p>The ecological risk management strategy (AFMA 2009) anticipated introduction of a quota management system before 2011, but this has still not occurred. Risk mitigation strategies are expected to be reviewed when the risk assessment is revised.</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>Not applicable</p> <p>There are no threat abatement plans, recovery plans, national bycatch policies or action strategies applicable to this fishery.</p>
PRINCIPLE 1 - 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.	
Objective 1 - 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.	
Information requirements	
1.1.1 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>Partially meets</p> <p>From 1 December 2017, all commercial fishers are required to unload their catch to a licenced fish receiver, who then must report this information to AFMA within three days.</p> <p>Reporting information, other than what the fish receivers report on their behalf, is entirely voluntary (ie. location, effort, discards). This applies to more than 96 per cent of licenses. AFMA is pursuing legislative changes to enable it to mandate reporting of fishery data by all fishers (including commercial Traditional Inhabitant fishers).</p> <p>AFMA considers Traditional (non-commercial) and recreational catch to be negligible, constant over time and does not consider them in fishery stock assessments.</p> <p>Fishery-independent monitoring of the Torres Strait tropical rock lobster population has been carried out since 1989. This program currently involves a pre-season dive survey to provide information on the relative abundance of recruiting lobsters and the likely stock biomass available to be fished each season. These surveys are expected to occur triennially under a new harvest strategy (in development).</p>
Assessment	
1.1.2 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>Partially meets</p> <p>Stock assessments are undertaken each year but do not attempt to identify any change in biological diversity or reproductive capacity. The 2015 stock assessment used catch and effort data as well as annual fishery-independent survey data. The fishery is characterised by highly variable annual recruitment and a small number of age classes. Estimates of maximum sustainable yield can be uncertain and annual yields tend to fluctuate widely around deterministically predicted estimates. On this basis, conservative, but non-binding total allowable catch limits are calculated each year, with the aim of keeping the biomass at roughly current levels. At the end of each year, the fishery's management advisory committee considers changes in spatial distribution of effort, total fishing effort, and any expansion of new gear type or configuration, and if these changes occur, review the risk assessment.</p>

<p>1.1.3 The distribution and spatial structure of the stock(s) has been established and factored into management responses.</p>	<p>Partially meets</p> <p>Tropical rock lobster populations in Torres Strait (managed under the PZJA), the Coral Sea (managed by the Commonwealth) and Queensland (managed by Queensland) are thought to comprise a single biological stock due to the mixing of larvae in the Coral Sea (Pitcher et al. 2005). However, unlike Coral Sea and Queensland stocks, Torres Strait lobsters are thought to migrate to Papua New Guinea to spawn, after which time they die. Stock assessments for the Torres Strait Tropical Rock Lobster Fishery therefore do not consider catch data from outside the Torres Strait.</p> <p>The pre-season stock surveys in the Torres Strait focus on areas of the Torres Strait Tropical Rock Lobster Fishery which are considered to be representative of the Torres Strait Tropical Rock Lobster Fishery as a whole. The surveys are undertaken as close to the start of the new season as possible, to give the best indication of fishable biomass.</p> <p>At the end of each year, the fishery's management advisory committee considers changes in spatial distribution of effort, total fishing effort, and if these changes occur, review the risk assessment.</p>
<p>1.1.4 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>Partially meets</p> <p>Reporting fishery data is not mandatory for the Traditional Inhabitant Boat (TIB) sector, or for any operator with a boat seven metres or less in length. However as of 1 December 2017, all commercial fishers are required to unload their catch to a licenced fish receiver, who then must report this information to AFMA within three days.</p> <p>Information other than landed catch volumes are reported on an almost entirely voluntary basis (more than 96 per cent of licenses), but generally at a coarse scale. AFMA is pursuing legislative changes to enable it to mandate reporting of fishery data by all fishers (including commercial Traditional Inhabitant fishers).</p> <p>Tropical rock lobsters are also caught as bycatch in the Torres Strait Prawn Fishery but, based on observer records from 2015, the majority are discarded alive (AFMA 2017).</p> <p>The extent of any traditional (non-commercial) or other catch in the area of the fishery is unknown.</p>
<p>1.1.5 There is a sound estimate of the potential productivity of the fished stock/s and the proportion that could be harvested.</p>	<p>Partially meets</p> <p>Estimates of potential productivity are uncertain due to highly variable annual recruitment and the limited number of age classes in the stock. However, annual yields can be expected to fluctuate widely around deterministically predicted estimates (Patterson et al. 2016).</p> <p>AFMA attempt to account for this uncertainty by undertaking pre-season stock surveys as close to the start of the new season as possible, to give the best indication of fishable biomass. The survey results are then used in conjunction with the interim harvest strategy (which includes biological reference points) to set the notional total allowable catch limits for the fishery. The catch limits are non-binding and not used to control harvest (AFMA 2017), but fishing can be controlled at any time by a Ministerial direction under section 16 of the <i>Torres Strait Fisheries Act 1984</i>.</p>
<p>Management responses</p>	
<p>1.1.6 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>Partially meets</p> <p>An interim harvest strategy is in place for the fishery and includes a number of reference points based on unfished biomass, but no decision rules. The interim harvest strategy is used to determine the nominal (non-binding) total allowable catch limit for the fishery, but this catch limit is not used to control harvest (Patterson et al. 2016).</p> <p>A revised harvest strategy is in development and expected to include fishery-specific target and limit reference points which will support the fishery's transition from effort-based to quota-based controls, and also contain a harvest control rule that reduces exploitation rate linearly to zero as the spawning biomass declines from trigger to limit reference points (Patterson et al. 2016). It is unclear when the transition to quota-based management will occur. This was initially forecast for 2007, then by 2011, and continues to receive opposition from some stakeholders. Fishing can however, be controlled at any time via a Ministerial direction under section 16 of the <i>Torres Strait Fisheries Act 1984</i>.</p>

1.1.7 There are management strategies in place capable of controlling the level of take.	<p>Partially meets</p> <p>An interim harvest strategy is in place for the fishery but this does not include decision rules. A new harvest strategy, informed by a management strategy evaluation is currently being developed and is expected to be implemented from December 2019.</p> <p>AFMA is also seeking to introduce quota management reforms which, if successful, will significantly improve the capacity to manage the level of take in the fishery. In lieu of these changes, fishing can be controlled via a Ministerial direction under section 16 of the <i>Torres Strait Fisheries Act 1984</i>, but this is unlikely to be used as a routine management tool.</p> <p>Other issues which affect capacity to control take in the fishery include the complex set of input and output controls, which differ for the Traditional Inhabitant Boat and non-traditional Transferable Vessel Holder sectors and contain various exceptions. For example persons are prohibited from taking, processing or carrying tropical rock lobsters unless they hold a licence; do so in the course of traditional fishing; or do so for private purposes with the use of an Australian boat.</p> <p>Not all of the arrangements are well communicated and only some are documented on the PZJA website. Information presented via the site is often incomplete, inconsistent or out of date. The PZJA website is expected to be updated by July 2018.</p>
1.1.8 Fishing is conducted in a manner that does not threaten stocks of byproduct species.	<p>Meets</p> <p>Hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising the risk of catching byproduct.</p>
(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.	<p>Partially meets</p> <p>The issues identified in items 1.1.1 to 1.1.7 above are likely to affect fisher's ability to understand and comply with the management requirements, and the various management and compliance agencies capacity to enforce the arrangements.</p>
<p>If overfished, go to Objective 2:</p> <p>If not overfished, go to PRINCIPLE 2:</p>	
Objective 2 - 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.	
Management responses	
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.	<p>Not applicable</p> <p>Species in the Torres Strait Tropical Rock Lobster Fishery are not currently considered overfished or subject to overfishing (Patterson et al. 2017).</p>
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.	<p>Not applicable</p> <p>Species in the Torres Strait Tropical Rock Lobster Fishery are not currently considered overfished or subject to overfishing (Patterson et al. 2017).</p>
PRINCIPLE 2 - Fishing operations should be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem.	
Objective 1 - The fishery is conducted in a manner that does not threaten bycatch species.	
Information requirements	
2.1.1 Reliable information, appropriate to the scale of the fishery, is collected on the composition and abundance of bycatch.	<p>Not applicable</p> <p>Hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising potential for interactions with bycatch.</p>

Assessments	
2.1.2 There is a risk analysis of the bycatch with respect to its vulnerability to fishing.	<p>Partially meets</p> <p>An ecological risk assessment of the fishery found no species, habitats or communities at high risk but committed to revise the assessment at least every four years. However, it has not been amended since 2007 (10 years) though it is scheduled to be reviewed in 2019–2020.</p> <p>While not a full ecological risk assessment, at the end of each year the fishery's management advisory committee considers changes in spatial distribution of effort, total fishing effort and gear. If changes are considered necessary, the committee reviews the fishery's risk assessment.</p>
Management responses	
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.	<p>Meets</p> <p>Hand collection methods (hand-held snares, spears and scoop nets) are highly selective, allowing bycatch to be avoided. In addition, AFMA's ecological risk management strategy for the fishery took this into account and concluded the risk to be negligible (AFMA 2009).</p>
2.1.4 An indicator group of bycatch species is monitored.	<p>Not applicable</p> <p>Hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising potential for interactions with bycatch.</p>
2.1.5 There are decision rules that trigger additional management measures when there are significant perturbations in the indicator species numbers.	<p>Not applicable</p> <p>Hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising potential for interactions with bycatch.</p>
2.1.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	<p>Meets</p> <p>Hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising potential for interactions with bycatch.</p>
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.	
Information requirements	
2.2.1 Reliable information is collected on the interaction with endangered, threatened or protected species and threatened ecological communities.	<p>Does not meet</p> <p>While there have been no reported interactions with endangered, threatened or protected species and threatened communities in this fishery, and the risks are low, there is no means to verify this.</p> <p>Existing reporting tools (Torres Strait Tropical Rock Lobster Daily Fishing Log and Torres Strait Seafood Buyers and Processors Docket Book) make no mention of protected species reporting obligations and do not facilitate reporting and it is unlikely that fishers are aware of their obligations under the EPBC Act.</p> <p>The Department has a memorandum of understanding with AFMA to allow fishers to report interactions via AFMA, but AFMA does not have the legislative capacity to mandate reporting by Traditional Inhabitant fishers (96% of licences in the fishery).</p> <p>AFMA is pursuing legislative changes in order to mandate reporting by all fishers (including commercial Traditional Inhabitant fishers), but this is unlikely to occur in the short term.</p>
Assessments	
2.2.2 There is an assessment of the impact of the fishery on endangered, threatened or protected species.	<p>Meets</p> <p>An ecological risk assessment considered 90 protected species, including 27 marine reptile, six seabird, six marine mammal and 51 teleost (bony fish) species (Furlani et al. 2007; AFMA 2009). None of these species were assessed to be above negligible or minor risk in the ecological risk assessment. This risk assessment is expected to be reviewed in 2019–2020.</p>

2.2.3 There is an assessment of the impact of the fishery on threatened ecological communities.	Not applicable There are no threatened ecological communities in the area of the fishery.
Management responses	
2.2.4 There are measures in place to avoid capture and/or mortality of endangered, threatened or protected species.	Meets An ecological risk mitigation strategy has been developed for the fishery but risk of interaction with or impacts on threatened species was considered negligible and therefore did not specify mitigation measures (AFMA 2009). The mitigation strategy defers to international plans of action (e.g. Recovery Plan for Marine Turtles in Australia) and commits to take all reasonable steps to minimise interactions with protected species. In addition, hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising potential for interactions with bycatch.
2.2.5 There are measures in place to avoid impact on threatened ecological communities.	Not applicable 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.	Meets While reporting information is not being facilitated through log books, various ecological risk assessments have concluded that the fishery is managed in a way to minimise impacts. This is further supported by the annual review of effort, area and gear undertaken by the fishery's advisory committee. In addition, hand collection methods (hand-held snares, spears and scoop nets) are highly selective, minimising potential for interactions with non-target species.
Objective 3 - The fishery is conducted, in a manner that minimises the impact of fishing operations on the ecosystem generally.	
Information requirements	
2.3.1 Information appropriate for the analysis in 2.3.2 is collated and/or collected covering the fisheries impact on the ecosystem and environment generally.	Partially meets While an ecological risk assessment of the fishery found no species, habitats or communities at high risk this has not been amended since 2007. This is scheduled to be reviewed in 2019–2020.
Assessment	
2.3.2 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. 1. Impacts on ecological communities <ul style="list-style-type: none"> • Benthic communities • Ecologically related, associated or dependent species • Water column communities 2. Impacts on food chains <ul style="list-style-type: none"> • Structure • Productivity/flows 3. Impacts on the physical environment <ul style="list-style-type: none"> • Physical habitat • Water quality 	Partially meets The ecological risk mitigation strategy for the fishery determined that there was little risk posed to ecosystem components from fishing (AFMA 2009). However, there is no established system to collect information on ecosystem components in the fishery. The ecological risk assessment for this fishery is scheduled to be reviewed in 2019–2020.
Management responses	
2.3.3 Management actions are in place to ensure significant damage to ecosystems does not arise from the impacts described in 2.3.1.	Partially meets There is no means to monitor ecosystem impacts, however these impacts are likely to be minimal based on the results of the ecological risk mitigation strategy (AFMA 2009).

<p>2.3.4 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>Partially meets Although the ecological risk assessment found little risk directly associated with the fishery, some risk was associated with external factors (e.g. coastal development, oil spills, line-fishing and Traditional Inhabitant catches of turtles and dugongs that may affect the same fish communities). The PZJA and AFMA do not have management responsibility for these external factors, but do have some capacity to respond via legislative instrument (s16 <i>Torres Strait Fisheries Act 1984</i>). This mechanism is likely to be reserved for emergency situations.</p>
<p>2.3.5 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.</p>	<p>Partially meets The risk posed by the fishery is relatively low. There is no apparent system to account for the impacts of external factors which were identified in the ecological risk assessment for the fishery.</p>

SECTION 3: ASSESSMENT OF THE TORRES STRAIT TROPICAL ROCK LOBSTER FISHERY AGAINST THE REQUIREMENTS OF PARTS 12, 13 (13A) AND 16 OF THE EPBC ACT

The table below is not a complete or exact representation of the EPBC Act. It is intended to show that the relevant sections and components of the EPBC Act have been taken into account in the formulation of advice on the fishery in relation to decisions under Part 13 and Part 13A.

Part 12

Section 176 Bioregional Plans	Comment
(5) Minister must have regard to relevant bioregional plans	Not applicable There is no marine bioregional plan in place for the Torres Strait.

Part 13

Accreditable plan, regime or policy (Division 1, Division 2, Division 3, Division 4)	Comment
s. 208A (1) (a-e) , s.222A (1) (a-e), s.245A (1) (a-e), s.265 (1) (a-e) Does the fishery have an accreditable plan of management, regime or policy?	Yes The "Torres Strait Tropical Rock Lobster Fishery management policy" was accredited in May 2014 . The management regime for the fishery is described in this assessment report and forms the basis for ongoing accreditation.
Division 1 Listed threatened species, Section 208A Minister may accredit plans or regimes	
(f) Will the plan, regime or policy require fishers 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?	Yes The ecological risk mitigation strategy acknowledges protected species and considers the risks posed by the fishery to be negligible. It commits the fishery to taking all reasonable steps to avoid interactions.
(g) And, is the fishery likely to adversely affect the survival or recovery in nature of the species.	No AFMA records show no reported interactions with listed protected species in the fishery during the period 1 January 2012 to 30 June 2017.
Division 2 Migratory species, Section 222A Minister may accredit plans or regimes	
(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that members of listed migratory species are not killed or injured as a result of the fishing?	Yes The ecological risk mitigation strategy acknowledges protected species and considers the risks posed by the fishery to be negligible. It commits the fishery to taking all reasonable steps to avoid interactions.
(g) And, is the fishery likely to adversely affect the conservation status of a listed migratory species or a population of that species?	No AFMA records show no reported interactions with listed migratory species in the fishery during the period 1 January 2012 to 30 June 2017.
Division 3 Whales and other cetaceans, Section 245 Minister may accredit plans or regimes	
(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that cetaceans are not killed or injured as a result of the fishing?	Yes The ecological risk mitigation strategy acknowledges protected species and considers the risks posed by the fishery to be negligible. It commits the fishery to taking all reasonable steps to avoid interactions.

(g) And is the fishery likely to adversely affect the conservation status of a species of cetacean or a population of that species?	No AFMA records show no reported interactions with cetaceans in the fishery during the period 1 January 2012 to 30 June 2017.
Division 4 Listed marine species, Section 265 Minister may accredit plans or regimes	
(f) Will the plan, regime or policy require fishers to take all reasonable steps to ensure that members of listed marine species are not killed or injured as a result of the fishing?	Yes The ecological risk mitigation strategy acknowledges listed species and considers the risks posed by the fishery to be negligible. It commits the fishery to taking all reasonable steps to avoid interactions.
(g) And is the fishery likely to adversely affect the conservation status of a listed marine species or a population of that species?	No AFMA records show no reported interactions with listed marine species in the fishery during the period 1 January 2012 to 30 June 2017.
Section 303AA Conditions relating to accreditation of plans, regimes and policies	
(1) This section applies to an accreditation of a plan, regime or policy under section 208A, 222A, 245 or 265.	Accreditation is recommended No interactions with protected species have been reported and the risk of interactions occurring is considered negligible under existing arrangements.
(2) The Minister may accredit a plan, regime or policy under that section even though he or she considers that the plan, regime or policy should be accredited only: (a) during a particular period; or (b) while certain circumstances exist; or (c) while a certain condition is complied with. In such a case, the instrument of accreditation is to specify the period, circumstances or condition.	No conditions required
(7) The Minister must, in writing, revoke an accreditation if he or she is satisfied that a condition of the accreditation has been contravened.	Not applicable

Part 13A

Section 303BA Objects of Part 13A	
<p>(1) The objects of this Part are as follows:</p> <ul style="list-style-type: none"> (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. 	
Section 303 CG Minister may issue permits (CITES species)	Comment
<p>(3) The Minister must not issue a permit unless the Minister is satisfied that:</p> <ul style="list-style-type: none"> (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"> i the survival of any taxon to which the specimen belongs; or ii. the recovery in nature of any taxon to which the specimen belongs; or iii any relevant ecosystem (for example, detriment to habitat or biodiversity). 	Not applicable
Section 303DC Minister may amend list (non CITES species)	
<p>(1) The Minister may, by legislative instrument, amend the list referred to in section 303DB [list of exempt native specimens] by:</p> <ul style="list-style-type: none"> (a) doing any of the following: <ul style="list-style-type: none"> (i) including items in the list; (ii) deleting items from the list; (iii) imposing a condition or restriction to which the inclusion of a specimen in the list is subject; (iv) varying or revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or (b) correcting an inaccuracy or updating the name of a species. 	The Department recommends that specimens derived from species harvested in the Torres Strait Tropical Rock Lobster Fishery, other than specimens that belong to species listed under Part 13 of the EPBC Act, be included in the list of exempt native specimens while the Torres Strait Tropical Rock Lobster Fishery is subject to a declaration as an approved wildlife trade operation.

<p>(1A) In deciding to amend the LENS, the Minister must rely primarily on outcomes of Part 10, Div 1 or 2 assessment</p>	<p>Meets The Torres Strait Tropical Rock Lobster Fishery was assessed under Part 10 of the EPBC Act in November 2004 and the management regime was accredited pursuant to section 33 of the EPBC Act on 10 May 2005. There have been no significant changes to the management regime since that time. The Department recommends that you amend the LENS under section 303DC(1)(a) to include product derived from the Torres Strait Tropical Rock Lobster Fishery while the specimens are covered by an approved wildlife trade operation declaration under section 303FN.</p>
<p>(1C) The above does not limit matters that may be considered when deciding to amend LENS.</p>	<p>Meets The Torres Strait Tropical Rock Lobster Fishery is consistent with Objects of Part 13A.</p>
<p>(3) Before amending the LENS, the Minister must consult:</p> <ul style="list-style-type: none"> (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. 	<p>Meets The Department considers that the consultation requirements have been met. The application for the Torres Strait Tropical Rock Lobster Fishery was released for public comment from 26 April 2017 to 31 May 2017. No comments were received.</p>
<p>Section 303FN Approved wildlife trade operation</p>	
<p>(2) The Minister may, by instrument published in the <i>Gazette</i>, declare that a specified wildlife trade operation is an approved wildlife trade operation for the purposes of this section.</p>	
<p>(3) The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is satisfied that:</p> <ul style="list-style-type: none"> (a) the operation is consistent with the objects of Part 13A of the Act; and 	<p>Meets Fishery is consistent with Objects of 13A – see above assessment.</p>
<ul style="list-style-type: none"> (b) the operation will not be detrimental to: <ul style="list-style-type: none"> 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 	<p>Meets 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 life of the WTO, given the management measures currently in place.</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	Not applicable. The Environment Protection and Biodiversity Conservation Regulations 2000 (EPBC Regulations) 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.	Not applicable 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 regard to: (a) the significance of the impact of the operation on an ecosystem (for example, an impact on habitat or biodiversity); and	Meets The Torres Strait Tropical Rock Lobster Fishery will not have a significant impact on any relevant ecosystem within the next three years, given the current management measures currently in place.
(b) the effectiveness of the management arrangements for the operation (including monitoring procedures).	Meets The management arrangements that will be employed for the Torres Strait Tropical Rock Lobster Fishery as outlined in this assessment are likely to be effective.
(5) In deciding whether to declare an operation as an approved wildlife trade operation the Minister must have regard 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.	Meets The Torres Strait Tropical Rock Lobster Fishery is managed in accordance with the <i>Torres Strait Fisheries Act 1984</i> and Torres Strait Fisheries Regulations 1985. The Torres Strait Fisheries Act applies throughout the Torres Strait Protected Zone. This legislation is likely 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.	Meets The Torres Strait Tropical Rock Lobster Fishery is a commercial fishery.
(10A) In deciding whether to declare that a commercial fishery is an approved wildlife trade operation for the purposes of this section, the Minister must rely primarily on the outcomes of any assessment in relation to the fishery carried out for the purposes of Division 1 or 2 of Part 10.	Meets The Torres Strait Tropical Rock Lobster Fishery was assessed under Part 10 of the EPBC Act in November 2004 and the management regime was accredited pursuant to section 33 of the EPBC Act on 10 May 2005. Actions taken under the management regime were considered unlikely to have an unacceptable or unsustainable impact on the environment in a Commonwealth marine area.
(10B) Subsection (10A) does not limit the matters that may be taken into account in deciding whether to declare that a fishery is an approved wildlife trade operation for the purposes of this section.	

Section 303FR Public consultation	
(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.	Meets A public notice, which set out the proposal to declare the Torres Strait Torres Strait Tropical Rock Lobster Fishery an approved wildlife trade operation and included the application from AFMA, was released for public comment on 26 April 2017 to 31 May 2017, a total of 26 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.	Not applicable No public comments about the proposal were received.
Section 303FT Additional provisions relating to declarations	
(1) This section applies to a declaration made under section 303FN, 303FO or 303FP.	A declaration for the Torres Strait Tropical Rock Lobster 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.	The standard conditions applied to commercial fishery wildlife trade operations include: <ul style="list-style-type: none"> • operation in accordance with the management regime • notifying the Department 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 Wildlife Trade Operation instrument for this fishery specifies these standard conditions and others in Section 4 of this report.
(8) A condition may relate to reporting or monitoring.	Conditions specified in Section 4 of this report include reporting requirements..
(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 Torres Strait Tropical Rock Lobster 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

Section 391 Minister must consider precautionary principle in making decisions	Comment
<p>(1) Minister must take account of precautionary principle.</p> <p>(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.</p>	<p>Meets</p> <p>The management regime is sufficiently precautionary to prevent serious or irreversible environmental damage being caused by this fishery.</p>

SECTION 4: TORRES STRAIT TROPICAL ROCK LOBSTER FISHERY – SUMMARY OF ISSUES REQUIRING CONDITIONS, DECEMBER 2017

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 of the Environment and Energy 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>Condition 1:</p> <p>Operation of the Torres Strait Tropical Rock Lobster Fishery will be carried out in accordance with management arrangements in force under the <i>Torres Strait Fisheries Act 1984</i>.</p> <p>Condition 2:</p> <p>The Torres Strait Protected Zone Joint Authority to inform the Department of the Environment and Energy of any intended material changes to the Torres Strait Tropical Rock Lobster 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 http://www.environment.gov.au/resource/guidelines-ecologically-sustainable-management-fisheries</p>	<p>Condition 3:</p> <p>The Torres Strait Protected Zone Joint Authority 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>

Issue	Condition
<p><u>Harvest controls</u></p> <p>Effective harvest controls are necessary to manage the ecological effects of fishing. The Torres Strait Tropical Rock Lobster Fishery includes various controls, and an interim harvest strategy. However the strategy is not publicly available and does not include decision rules. There are also a number of issues that affect the fishery's capacity to manage risk. These include:</p> <ul style="list-style-type: none"> • unconstrained effort. • problems with catch reporting and limited ability to respond quickly to catches. • complexity and exceptions to management controls. <p>The PZJA has committed to address these issues over the next two years.</p>	<p>Condition 4:</p> <p>The Torres Strait Protected Zone Joint Authority to implement a strategy to manage the risks of overfishing and localised depletion in the fishery.</p> <p>This may include data collection and analysis protocols to manage risks, triggers and/or limits for managing harvest, and should also account for all sources of stock mortality, including commercial, recreational, Traditional and illegal harvest.</p>

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