

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
PRELIMINARIES Opening prayer, acknowledgement of Traditional Owners, welcome and apologies	Agenda Item 1.1 For NOTING

RECOMMENDATIONS

1. That the Working Group **note**:
 - a. an opening prayer;
 - b. an acknowledgement of Traditional Owners;
 - c. the Chairperson's welcome address; and
 - d. apologies received from members unable to attend.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
PRELIMINARIES Adoption of agenda	Agenda Item 1.2 For DECISION

RECOMMENDATIONS

1. That the Working Group consider and **adopt** the agenda (**Attachment 1.2a**).

BACKGROUND

2. A draft agenda was circulated to members and other participants on 25 May 2018. No comments were received.

13th MEETING OF THE TORRES STRAIT HAND COLLECTABLES WORKING GROUP

24 July 2018 (8:30 am – 5:00 pm)

Venue: TSRA Board Room, Lv 1, 46 Victoria Parade

DRAFT AGENDA

Followed by CSIRO HARVEST STRATEGY WORKSHOP

Day 1: 25 July 2018 (8:30 am – 5:00 pm)

Day 2: 26 July 2018 (8:30 am – 12:00 pm)

Venue: 25 July – Thursday Island Boat Shed

TSRA Board Room, Lv 1 46 Victoria Parade

Separate agenda to be provided

1. Preliminaries

- 1.1. Opening prayer, acknowledgement of Traditional Owners, welcome and apologies
- 1.2. Adoption of agenda
- 1.3. Declarations of interest
- 1.4. Action items from previous meetings
- 1.5. Out of session correspondence

2. Fishery Updates

- 2.1. Industry
- 2.2. Government (AFMA, TSRA, QDAF)
 - 2.2.1. Export approvals under the EPBC Act
 - 2.2.2. Fish receiver system
 - 2.2.3. Legislative amendments
- 2.3. Native Title
- 2.4. PNG National Fisheries Authority

3. Management

- 3.1. Research update and priorities

- 3.2. Catch data summary
- 3.3. Pearl and Trochus Shell Fisheries
- 3.4. Black teatfish
- 3.5. Prickly redfish
- 3.6. Future management priorities
- 3.7. Budget for 2018/19

4. Other business

5. Date and venue for next meeting

Individuals wishing to attend the meeting as an observer must contact the Executive Officer – Gabrielle Miller (gabrielle.miller@afma.gov.au)

Hand Collectables Working Group	Meeting 13 24 July 2018
Preliminaries Action items from HCWG 12 and previous meetings	Agenda Item 1.4 FOR NOTING

RECOMMENDATIONS

1. That the Working Group NOTE:

- a. the progress against actions arising from previous meetings, including the 12th meeting of the Hand Collectable Working Group (CWG12) held on 24 October 2017 (**Attachment 1.4a**)
- b. the final meeting record for HCWG 12, which was ratified out of session (**Attachment 1.4b**)

BACKGROUND

Actions arising

2. Updates are provided on the status of actions arising from the HCWG12 and previous meetings.

Minutes of the previous meeting

3. The meeting record for HWG 12 was ratified out of session.
4. A draft meeting record was circulated to all HCWG members on 4 December 2017 with comments closing on 14 December 2017.
5. After receiving comments back from HCWG members the meeting record was closed out of session and emailed to members on 23 January 2018.

Status of actions arising from previous HCWG meetings

#	Meeting #	Action item	Responsibility	Status
1	9 (20-21 June 2016)	AFMA to review the size limits set for the Torres Strait Beche-de-mer Fishery taking into consideration the size limits in place in Queensland and the Commonwealth Coral Sea Fishery.	AFMA	In progress To be addressed as part of the Bech-de-mer Harvest Strategy Project
2	11 (27 June 2017)	Consideration on whether or not changes should be made to the current size limit for Prickly Redfish be undertaken during the Harvest Strategy Workshop noting relevant data will be presented.	AFMA	In progress Refer to action item 1
3	11 (27 June 2017)	Industry members and observers to submit any outstanding catch reports to AFMA as a matter of priority.	Industry	Completed Industry provided the outstanding catch data out of session.
4	11 (27 June 2017)	AFMA to confirm out-of-session the commitment from Masig and Ugar communities to voluntary spatial closures and size limits for Prickly Redfish.	AFMA	Completed AFMA sought comment from industry out of session following HCWG 11.
5	12 (24 October 2017)	AFMA to recirculate details of proposed legislative amendments to the Act and Regulations and as a standing item, make a report on the progress of these legislative amendments at future Working Groups	AFMA	Completed AFMA circulated the proposed amendments and will provide an update under Item 2.2.3
6	12 (24 October 2017)	AFMA to circulate the final report from the Smartphone Data Collection project to the Working Group.	AFMA	Completed The report was circulated to HCWG members out-of-session on 23 January 2018.
7	12 (24 October 2017)	AFMA to circulate a copy of the Research Member's presentation to the Working Group.	AFMA	Completed The presentation was sent to members out-of-session on 23 January 2018
8	12 (24 October 2017)	Working Group Members and Observers acknowledged the serious risk that a lack of data and catch reporting poses to the sustainable management of the	Industry	Ongoing

		TSBDMF and agreed to submit any outstanding catch records and to assist AFMA in obtaining catch records from the BDM TIB licence holders and buyers within their respective communities.		AFMA received some catch records following the meeting.
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TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
PRELIMINARIES Declarations of interest	Agenda Item 1.3 For DECISION

RECOMMENDATIONS

1. That the Working Group members:
 - a. **DECLARE** all real or potential conflicts of interest in Torres Strait hand collectable fisheries at the commencement of the meeting (**Attachment 1.3a**);
 - b. **DETERMINE** whether the member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict;
 - c. **ABIDE** by decisions of the Working Group regarding the management of conflicts of interest.
 - d. **NOTE** that the record of the meeting must record the fact of any disclosure, and the determination of the Working Group as to whether the member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict.

BACKGROUND

2. Consistent with the Protected Zone Joint Authority (PZJA) Fisheries Management Paper No. 1 (FMP1), which guides the operation and administration of PZJA consultative forums, members are asked to declare any real or potential conflicts of interest.
3. Working Group members are asked to confirm the standing list of declared interests (**Attachment 1.3a**) is accurate and provide an update to be tabled if it is not.
4. FMP1 recognises that members are appointed to provide input based on their knowledge and expertise and as a consequence, may face potential or direct conflicts of interest. Where a member has a material personal interest in a matter being considered, including a direct or indirect financial or economic interest; the interest could conflict with the proper performance of the member's duties. Of greater concern is the specific conflict created where a member is in a position to derive direct benefit from a recommendation if it is implemented.
5. When a member recognises that a real or potential conflict of interest exists, the conflict must be disclosed as soon as possible. Where this relates to an issue on the agenda of a meeting this can normally wait until that meeting, but where the conflict relates to decisions already made, members must be informed immediately. Conflicts of interest should be dealt with at the start of each meeting. If members become aware of a potential conflict of interest during the meeting, they must immediately disclose the conflict of interest.
6. Where it is determined that a direct conflict of interest exists, the forum may allow the member to continue to participate in the discussions relating to the matter but not in any decision making process. They may also determine that, having made their contribution to the discussions, the member should retire from the meeting for the remainder of discussions on that issue. Declarations of interest, and subsequent decisions by the forum, must be recorded accurately in the meeting minutes.

Hand Collectables Working Group Declarations of Interest

Name	Position	Declaration of interest
Anne Clarke	Chairperson	Nil.
Georgia Langdon	Executive Officer	Nil.
Ian Butler	AFMA Member	Nil.
Mark Anderson	TSRA Member	Nil.
Tim Skewes	Research Member	CSIRO/Independent Consultant. Previous principal scientist for Torres Strait Scientific Advisory Committee (TSSAC) project to develop a harvest strategy for the Torres Strait Beche-de-mer Fishery. Previous CSIRO researcher for TSSAC project investigating traditional take of finfish in Torres Strait.
Maluwap Nona	Industry Member	TIB licence holder.
Patrick Mills	Industry Member	TIB licence holder. Chairperson of the Torres Strait Fisheries Association.
Francis Pearson	Industry Member	TIB licence holder.
Michael Passi	Industry Member	TIB licence holder.
Jerry Stephen	TSRA Board - Fisheries Portfolio	TIB licence holder. President of the Erub Fisheries Management Association.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
PRELIMINARIES Out of session correspondence	Agenda Item 1.5 For NOTING

RECOMMENDATIONS

1. That the Working Group **NOTE** the correspondence circulated out of session since the last meeting.

BACKGROUND

2. The following correspondence was circulated out of session since HCWG 12 held on 24 October 2018.

Date	Item
30 October 2017	Email to members and observers requesting outstanding catch records.
4 December 2017	Email to members and observers seeking comment on the draft HCWG 12 record.
23 January 2018	<p>Email to members and observers circulating:</p> <ul style="list-style-type: none"> - the final HCWG 12 record; - paper detailing legislative amendments currently being progressed; - final report from the Smartphone Data Collection project; - copy of the Research Member's presentation to HCWG 12. <p>Members and observers were:</p> <ul style="list-style-type: none"> - requested to submit outstanding catch records; - notified that the total allowable catch (TAC) for Prickly Redfish had been reduced to 15 tonnes, in line with recommendations from HCWG 11. A letter was sent to all licence holders on 22 December 2017 advising of this change.



Australian Government
Australian Fisheries Management Authority

12th Meeting of the Torres Strait Hand Collectables Working Group

24 October 2017

Minutes

Note all meeting papers and minutes
are available on the PZJA webpage:

www.pzja.gov.au

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1 Preliminaries

1.1 Opening prayer, acknowledgement of Traditional Owners, welcome and apologies

1. Mr Harry Ghee opened the meeting in prayer at 8:50 am.
2. The Working Group observed a minute of silence to commemorate the loss of six fishermen following the sinking of the fishing boat, Dianne, off the coast of Queensland.
3. The Chair welcomed attendees to the 12th meeting of the Torres Strait Hand Collectable Working Group (HCWG 12). The Chair acknowledged the Traditional Owners of the land on which the meeting was held and paid respect to Elders past and present. The Chair further acknowledged the value of the knowledge and experience attendees would impart at the meeting and thanked them for taking the time to attend. Meeting attendees were advised that the purpose of the meeting was to provide advice to the Protected Zone Joint Authority (PZJA) on the management of hand collectable fisheries.
4. Attendees at the Working Group are detailed in the table below.

Attendees	
Members	
Anne Clarke	Chair
Selina Stoute	Australian Fisheries Management Authority (AFMA) Member
John Ramsay	Torres Strait Regional Authority (TSRA) Member
Tim Skewes	Research Member
Maluwap Nona	Industry Member – Traditional Inhabitant representative for Gudumalulgal and Maluialgal
Michael Passi	Industry Member – Traditional Inhabitant representative for Kemer Meriam
Executive Officer	
Natalie Couchman	Executive Officer
Invited Participants	
Jerry Stephen	TSRA Board - Member for Ugar and Portfolio Member for Fisheries
Observers	
Allison Runck	TSRA
Eva Plagyani	Commonwealth Scientific and Industrial Research Organisation (CSIRO) – was present from Agenda Item 3.1.
Nicole Murphy	CSIRO
Patrick Bonner	Industry – Poruma Island
John Tabo	Industry – Mer Island
Pau Stephen	Industry, Kos and Abob Fishers Association – Ugar Island
William Stephen	Industry – Ugar Island
Harry Ghee	Industry – Erub Island
Rocky Stephen	Kos and Abob Fishers Association – Ugar Island

5. Apologies received are detailed in the table below.

Apologies	
Danielle Stewart	Queensland Department of Agriculture and Fisheries (QDAF) Member
Francis Pearson	Industry Member – Traditional Inhabitant representative for Kulkagal
Patrick Mills	Industry Member – Traditional Inhabitant representative for Kaiwalagal
Ian Liviko	PNG National Fisheries Authority (NFA) Invited Participant
Dennis Passi	Observer – Industry – Mer Island

1.2 Adoption of agenda

- The draft agenda was adopted with changes (**Attachment A**). An item concerning developments in beche-de-mer (BDM) ranching and aquaculture and how this may complement the wild caught Torres Strait BDM Fishery (TSBDMF) was discussed under Agenda Item 3.1. The Working Group also agreed to discuss Agenda Item 3.6 (Prickly Redfish) prior to Agenda Item 3.5 (Black Teatfish).
- The Working Group noted that the meeting record for the 11th meeting of the HCWG was ratified out of session and the final record provided to members on 5 September 2017.

1.3 Declarations of interest

- The Chair stated that as outlined in PZJA Fisheries Management Paper No. 1, all members of the Working Group must declare all real or potential conflicts of interest in Torres Strait hand collectable fisheries at the commencement of the meeting (see table below). The Working Group noted that if a member discloses an interest, the Working Group must make a decision as to whether, for the relevant agenda items, they can participate in the discussion and in the making of recommendations, or remain absent from the meeting.

Name	Position	Declaration of interest
Anne Clarke	Chair	Nil.
Selina Stoute	AFMA Member	Nil.
John Ramsay	TSRA Member	Nil.
Tim Skewes	Research Member	CSIRO/Independent Consultant. Previous principal scientist for Torres Strait Scientific Advisory Committee (TSSAC) project to develop a harvest strategy for the TSBDMF. Previous CSIRO researcher for TSSAC project investigating traditional take of finfish in Torres Strait.
Maluwap Nona	Industry Member	TIB licence holder.
Michael Passi	Industry Member	TIB licence holder.
Natalie Couchman	Executive Officer	Nil.

9. The Working Group determined that no member was required to be absent during discussion of or, decisions made on matters which are the subject of conflicts.

1.4 Action items from HCWG 11 and previous meetings

10. The Working Group noted the report provided by the Executive Officer advising of the status of actions arising from previous HCWG meetings (see table below).

#	Action Item	By	Status
Actions arising from the HCWG 9 held on 20-21 June 2016			
1	AFMA to review the size limits set for the Torres Strait Beche-de-mer Fishery taking into consideration the size limits in place in Queensland and the Commonwealth Coral Sea Fishery.	AFMA	In progress The Working Group noted this action is being addressed as part of the BDM Harvest Strategy project. A review of TSBDMF size limits has been undertaken by CSIRO and is to be presented at the CSIRO Harvest Strategy Workshop to be held on 25-26 October 2017.
Actions arising from the HCWG 11 held on 27 June 2017			
2	An industry observer requested that the historic black teatfish catch data from the early 1990s be made available to industry and the HCWG for consideration of how large catches impacted the fishery.	AFMA	Completed The Working Group noted that historical catch data for the TSBDMF from 1993 onwards has been provided under Agenda Item 3.2. The data from 1993 through 2004 was provided by Tim Skewes who sourced his data from the QDPI logbook database, AFMA docket book (TDB01) database and direct industry sources.
3	Consideration on whether or not changes should be made to the current size limit for Prickly Redfish be undertaken during the Harvest Strategy Workshop noting relevant data will be presented.	AFMA	In progress Refer to action item 1.
4	Industry members and observers to submit any outstanding catch reports to AFMA as a matter of priority.	Industry	In progress The Working Group noted that a reminder regarding this action was sent to members on 22 September 2017. Since that time, AFMA have received partial catch records from Ugar, Masig and Poruma industry. The AFMA member reiterated the importance of catch and effort data to support management decisions. The AFMA member also advised that data for Prickly Redfish is urgently needed to support a pending PZJA decision on the TAC for 2018 fishing

			season. An Industry Member from Mer Island advised that they would submit outstanding catch records immediately, and did so in a break in the meeting. This item was further discussed under Agenda Item 3.5.
5	AFMA to confirm out-of-session the commitment from Masig and Ugar communities to voluntary spatial closures and size limits for Prickly Redfish.	AFMA	<p>In progress</p> <p>The Working Group noted that AFMA sought further comment from industry on the proposed voluntary closures on 27 September 2017, including from Traditional Inhabitant representatives and relevant fishing associations. Industry Members advised that there had been no further developments concerning the proposed voluntary closures. It was further advised that any closure concerning Bramble Cay would need to be decided by Ugar and Erub industry.</p>

1.5 Out of session correspondence

11. The Working Group noted the correspondence circulated out of session since HCWG 11 held on 27 June 2017.

2 Fishery Updates

2.1 Industry update (to include Torres Strait fisheries strategic issues including economic trends)

12. The Working Group noted updates provided by Industry Members and Observers on the recent performance of hand collectable fisheries and strategic issues, including economic trends, affecting the management and development of these fisheries:
- An Industry Observer from Poruma Island advised that now the Tropical Rock Lobster (TRL) fishery seasonal closure is in effect, there has been a resurgence of fishers diving for BDM. Fishers are increasingly targeting Curryfish as they are abundant on the grounds and industry are working to adapt processing methods to accommodate the fragile nature of this species. The AFMA Member noted that given the targeting of this species, removing Curryfish species from the basket total allowable catch (TAC) is currently being considered under the BDM Harvest Strategy. This will enable more effective management and monitoring of these species and support industry by ensuring TACs are set at a sustainable level thus providing certainty for their operations and future investment.
 - Another Industry Observer and representative of the Kos and Abob Fisheries Association on Ugar Island noted that in order for the TSBDMF to have a future, industry needs to work within the set TACs and look at how they can value add through better processing and marketing. It was noted that the Association have been involved in the processing of BDM since its establishment in 2013. The current focus of operations is on salted product but there are plans to move to dried product. The Association has secured funding from the TSRA for drying facilities and an upgrade for the Ugar Island community freezer in 2018. These improvements will allow the industry to expand into finfish. It is hoped this will take pressure off BDM while diversifying operations and providing greater security. The Association have been keeping detailed catch records and these have been provided to AFMA.

- c. An Industry Observer from Erub Island observed that industry have been targeting Curryfish and finfish. Curryfish product is boiled then salted, not frozen. Finfish is sold through the Erub Island community freezer.
- d. Industry Members (and Traditional Inhabitant representatives for Gudumalulgal, Maluialgal and Kemer Miriam) residing on Mer Island advised they have two boats fishing for BDM targeting areas around East Cay. With the recent return of good weather, they are now looking to work the reefs further south. One operator on the island has also moved away from BDM, expanding into finfish which is showing good returns.
- e. These Industry Members also acknowledged the importance of data to support management and the future of the industry. Both Members advised that they meet regularly with fellow industry members to discuss their operations, improvements and how they can better work together. The AFMA Member explained that the implementation of the fish receiver system (FRS) is a key focus for management. AFMA will look at how fishery wide catch reports can be provided to industry to support their operations.
- f. Industry Members and Observers were heartened to see the next generation getting involved and investing in their own fisheries operations. It was noted that this next generation of fishers will need support to remain in the industry and grow. It was also noted that females are getting more involved in the industry and need to be empowered to take on greater roles and responsibilities.
- g. The Working Group discussed the challenge of having open access to the TSBDMF for Traditional Inhabitant Boat (TIB) licence holders and the detrimental impacts this may have on both stocks and the livelihoods of the Eastern communities' industry. Further details on these discussions are captured under Agenda Item 2.3.
- h. Industry Members and Observers raised alleged compliance concerns regarding illegal activities involving carrier boats and the illegal use of hookah in the TSBDMF. The AFMA Member advised that any information regarding suspected illegal fishing activities should be reported to the Queensland Boating and Fisheries Patrol (QBFP). AFMA will continue to work with QBFP to investigate all reports.

2.2 Government agencies update (AFMA, TSRA, QDAF)

- 13. The Working Group noted an update provided by the TSRA Member regarding TSRA activities relevant to the management of hand collectable fisheries:
 - a. Fisheries Business Growth Package – introduced in 2016/17, this package is available to all Traditional Inhabitant fishers. Its purpose is to support the establishment and development of commercial fishing operations in the Torres Strait and comprises a mix of financial (loan and grant funding), business and industry support services. This may include business mentoring, assistance in the development of business plans and training in a range of business skills. The TSRA can be contacted to discuss. Information is also available on the TSRA website.
 - b. Fisheries Infrastructure and Services Audit project – it is recognised that infrastructure necessary to support the growth of the Torres Strait fishing industry is lacking. TSRA have secured funding to address this issue. They have recently visited communities to identify infrastructure shortfalls across the region. A report will be provided to the TSRA Board in December 2017 and they will look to develop a funding plan at the start of 2018.
 - c. Feasibility study for the direct export of Torres Strait seafood and seafood branding – a consultant has been engaged to assess the economic feasibility, regulatory

- requirements and infrastructure needs to export seafood directly from the Torres Strait and the potential value derived from creating a brand for Torres Strait seafood
- d. Governance Capacity Building Initiative for Torres Strait Regional Fishers' Associations – the purpose of this initiative is to build the capacity of association members and improve the functioning of associations. The initiative is part of the TSRA Common Funding Round which happens twice a year. Assistance includes funds to hire bookkeepers and administrative staff to support association operations.
 - e. New Zealand (NZ) study –TSRA and industry representatives recently travelled to NZ to meet with government and industry to discuss the experience of the Maori in managing their share of ownership in NZ fisheries. It was noted that the Maori surrendered their TIB equivalent licences and traditional fishing rights in exchange for a share in commercial fisheries. Noting the aspirations of Traditional Inhabitants of the Torres Strait to pursue 100% ownership of fisheries, TSRA have funded a project to examine the NZ experience and how elements of the NZ model may be applied to the Torres Strait. A steering group has been formed to guide the project.
 - f. Fisheries Summit – planned for March/April 2018, more details to be provided closer to time.
 - g. Seafood Industry Leadership Program – the TSRA Member congratulated Charles David on completing the Program. The TSRA will also welcome their first Indigenous cadet shortly. On completion of the cadetship, they will be offered a position at the TSRA.
14. The Working Group noted an update provided by the TSRA Invited Participant and AFMA Member regarding their recent attendance at the Seafood Directions Conference:
- a. The TSRA Invited Participant presented on the Torres Strait Traditional Inhabitants' pursuit of 100% fisheries ownership.
 - b. Seafood Industry Australia was in attendance. This is a new national peak body bringing together wild caught fisheries and aquaculture. They are looking for a representative from the Torres Strait. An Industry Member stated the representative needs to be from industry not government.
 - c. Key messages included the success of industry associations in driving change, the importance of evidence/science based decision making and recognition of the importance of strong management frameworks in providing access to markets something which is applicable in the Torres Strait as export focussed fisheries.
15. The Working Group noted an update provided by the AFMA Member regarding management initiatives relevant to hand collectable fisheries:
- a. Legislative amendments – following PZJA and further Ministerial approval, AFMA is progressing amendments to the *Torres Strait Fisheries Act 1984* (the Act) and *Torres Strait Fisheries Regulations 1985* (the Regulations). The amendments will provide immediate improvements to the efficiency and effectiveness of fisheries administration in the Torres Strait. Most recently AFMA has been able to dedicate resources to progress this important piece of work. The TSRA Invited Participant requested that AFMA be mindful of policy changes being explored with regards to Native Title and that these may need to be reflected in legislation further down the track. AFMA agreed to work with the TSRA on this issue, recirculate details of the proposed amendments and, as a standing item, to make a report on the progress of this project at future Working Group meetings.

Action 1: AFMA to recirculate details of proposed legislative amendments to the Act and Regulations and as a standing item, make a report on the progress of these legislative amendments at future Working Group meetings.

- b. Public licence register – following support from all Torres Strait working groups, a register of fishing licences for Torres Strait fisheries is now publically available on the AFMA website. The register will provide important information to fishers as to the validity of their licences, quota holdings (where applicable) and support the implementation of the FRS.
 - c. FRS – AFMA will implement a mandatory FRS for all the Torres Strait fisheries (excluding the Torres Strait Prawn Fishery) on 1 December 2017. This will replace the current voluntary Torres Strait Seafood Buyers and Processors Docket Book system.
 - d. Compliance activities – AFMA have referred a number of domestic compliance matters to QBFP for investigation. There have been some successful prosecutions as a result. AFMA continues to work with the Australian Border Force and regional partners to combat illegal foreign fishing, noting there have been no foreign fishing boats apprehended in the 2017/18 financial year to date.
 - e. Indigenous cadet – AFMA have recently welcomed Neville Johnston from the Torres Strait for an 18 month cadetship. Amongst other work, he is assisting with a project on how AFMA can better engage with Indigenous communities on fisheries matters.
16. The Working Group noted an update provided by the AFMA Member on behalf of the QDAF Member regarding the Queensland government's fisheries reform program, including:
- a. Development of harvest strategies for all fisheries.
 - b. Implementation of vessel monitoring system (VMS) requirements.
 - c. Formation of a working group for the East Coast sea cucumber fishery. AFMA would like to see the two agencies attend the other's meetings to share lessons, experiences with a view to both benefitting in terms of improved and more consistent management.

2.3 Native Title update

17. The Chair of the Malu Lamar (Torres Strait Islanders) Corporation RNTBC (also Industry Member and Traditional Inhabitant representative for Gudumalulgal and Maluialgal) advised that following the High Court's decisions on 2 July 2010 and 7 August 2013 regarding Part A of the Torres Strait Regional Sea Claim, it is time that these decisions be reflected in the future management of Torres Strait fisheries. The Chair of Malu Lamar expressed concern that recent advice from the TSRA concerning Native Title rights over land and sea in the Torres Strait, was not consistent with their understanding of the High Court's decisions. The TSRA Member advised that no such advice has been provided. The Malu Lamar (Torres Strait Islanders) Corporation RNTBC has sent a letter to the TSRA detailing their concerns. The TSRA Invited Participant agreed to look into the matter and resolve with the concerned parties outside of the Working Group.
18. The Chair noted that the Working Group was not the forum to try to resolve Native Title issues.
19. Industry Members and Observers advised that the customary rights of communities over their island waters (e.g. 10 nm radial claims) and the cultural protocols relating to how these waters are accessed and by whom needs to be to be agreed between communities and reflected in the fisheries management rules.
20. Industry Observers explained that currently Traditional Inhabitants have a common right to access all fisheries in the region under a Traditional Inhabitant Boat (TIB) licence. This is making it difficult to control fishing effort particularly for vulnerable stocks with relatively low TACs. The livelihoods of the eastern communities are also being impacted. The eastern communities do not have the proximity to high value fisheries such as TRL which

are concentrated in the western Torres Strait. Instead, they rely on lower value fisheries such as those for BDM and finfish. Any effort from the western communities in the eastern Torres Strait has more of an impact than if the reverse was the case.

21. The AFMA Member noted that there is no clear pathway to move to a management framework whereby fisheries resources are allocated. It was explained that for progress to be made on this complex issue, it needs to be driven and informed by the Traditional Inhabitants themselves. Industry Members and Observers advised that government would need to talk to groups of fishers community by community, before bringing them together either fishery by fishery or in one group. Although this will prolong consultations, it will be difficult to make progress without taking the extra time to talk to communities separately. It was also advised that an independent body should facilitate all consultations.
22. The TSRA Invited Participant thanked Industry Members and Observers for their advice, noting he would provide as information to the TSRA Board. The Participant also noted that future legislative changes will require the TSRA to work closely with AFMA to put these into effect.

2.4 PNG National Fisheries Authority update

23. This item was not discussed as the PNG NFA Invited Participant was not in attendance.

3 Management

3.1 Research update and priorities

24. The Working Group noted an update from the AFMA Member on current research projects. The AFMA Member advised that the harvest strategy currently in development for the TSBDMF is a priority and will provide guidance on future research needs in the fishery including surveys and stock assessments.
25. The AFMA Member also advised that there is currently a call for tactical research projects for TSSAC funding for the 2018/19 financial year. The AFMA Member sought advice from the Working Group on research priorities for 2018/19, noting that additional funding was could be used to hold an additional workshop to assist in finalising the BDM Harvest Strategy. The Working Group agreed the BDM Harvest Strategy project remains a priority and recommended the additional workshop be funded through the TSSAC.

Recommendation 1: The Working Group agreed the BDM Harvest Strategy project remains a priority and recommended the additional workshop be funded through the TSSAC.

26. The AFMA Member noted the Smartphone Data Collection project that was completed in 2015/16. The AFMA Member noted that select fishers from the Torres Strait were involved and agreed to circulate a copy of the final report to the Working Group. The Working Group noted that electronic reporting and monitoring systems have been trialled in other fisheries and jurisdictions but that the use of such technologies can be expensive in terms of capital costs, repairs and maintenance, data review and business integration and needs to be weighed against the value of the fishery in question.

Action 2: AFMA to circulate the final report from the Smartphone Data Collection project to the Working Group.

27. The Working Group noted a presentation from the Research Member on recent research concerning BDM biology, ecology, markets, Australian and global production and aquaculture, including:
- a. Findings of recent studies concerning the growth, age at maturity (Black Teatfish five years and Sandfish two years), mortality rates (Black Teatfish $M < 0.4$ and Sandfish $M > 0.6$), movement (remain with a reef/bank – less than four hectares in two years), daily and seasonal feeding and burying cycles (buried in winter, emerge more in summer and emerge more in the afternoon and at night) and ecosystem roles (sediment mixing and negative correlation with seagrass production). Industry Members and Observers confirmed many of the studies' findings from their own experiences.
 - b. Market price information. China have been the largest buyer of BDM. The Japanese sea cucumber comprises the majority of product, with only a small component coming from tropical fisheries including the Torres Strait. Prices are higher in Hong Kong than on mainland China (e.g. for Sandfish \$310/kg in Hong Kong vs. \$140/kg on the mainland). Branding is very important, with nearly all tropical BDM product labelled as Australian whether it is or not.
 - c. In terms of the desired characteristics of product which determine value, in order of importance: dryness; cuts; saltiness (less salty the better); size; shape (straight and symmetrical); minimal damage; country of origin.
 - d. World production of species other than Japanese sea cucumber (which has remained relatively static in comparison) has increased over time, but has resulted in overfishing and depleted stocks. In Australia, the Queensland East Coast BDM Fishery comprises the majority of wild catch. This fishery is managed under a rotational harvest strategy designed by industry and introduced in 2004. There are 156 zones of approximately 100-150 nm. Each zone is allowed to be fished once every three years for a maximum of 15 days.
 - e. The International Union for Conservation of Nature (IUCN) Red List details ten BDM species as Vulnerable or Endangered, many of these being targeted in the Torres Strait. Should these species be subsequently listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), more stringent requirements will be imposed on exported product and this poses a significant operating risk to the TSBDMF.
 - f. Previous research conducted by CSIRO Marine and Atmospheric Research in the Torres Strait include surveys of abundance, conversion ratios, ecology, biology and bioprospecting. A summary of the survey findings was presented.
 - g. Future research needs:
 - i. Stock status (density, size, catch, areas fished, collaboration with PNG on shared stocks).
 - ii. Conversion ratios (Curryfish boiled and salted).
 - iii. Biology (growth, mortality, size and seasonality of breeding).
 - iv. Value adding, best practice processing and drying (particularly for lower value species).
 - v. Requirements for harvest strategy implementation.
 - h. Developments in BDM aquaculture:
 - i. *Astichopus japonicas* – far outstrips global wild sea cucumber production. However, there has been overinvestment in this sector and there are significant issues with disease and slow growth.
 - ii. Sandfish – there have been numerous trials and pilot operations including: Hervey Bay (Bluefin Seafood) hatchery in 2003 (failed venture); Darwin Aquaculture

Centre (Tas Seafoods) in indigenous communities in the NT (some success); James Cook University (JCU) culture and ranching in Fiji (limited success); Vietnam (commercial production).

- i. In order to move forward with BDM aquaculture there is a need to review existing knowledge (culture of juveniles, release strategies and husbandry, potential environmental impacts), seek expert advice, determine local attitudes to reseedling/ranching, identify species for reseedling/ranching and develop a viable business model.
28. The Working Group noted an update provided by Industry Observers of a recent visit to aquaculture facilities at Bribie Island, where the species under culture include prawns and salmon. It was noted that aquaculture may be a way to supplement earnings for those fishers reliant on the TSBDMF. Reseeding and ranching may also support the future of the fishery. It was advised that aquaculture operations need to be tailored to the operating environment the smartest approach to any new venture would be to start small and grow operations over time.
29. The Research Member agreed with this noting that there are big risks associated with aquaculture, given the technology and techniques are still evolving (particularly in relation to BDM), the high capital expense in setting up and maintaining an operation and disease risks.
30. The TSRA Member noted that the TSRA has programs to support industry in such ventures, including grant funding, assistance in developing business plans, training and mentoring.
31. Industry Members and Observers requested a copy of the Research Member's presentation be circulated to the Working Group.

Action 3: AFMA to circulate a copy of the Research Member's presentation to the Working Group.

3.2 Catch data summary

32. The Working Group noted a summary provided by the Executive Officer of catch and effort data for hand collection fisheries, as recorded in logbooks, docket books and from other sources. As noted earlier in the meeting, the Executive Officer advised that AFMA have only received partial catch records from Ugar, Masig, Poruma and Mer industry for the 2015-2017 fishing seasons.
33. The Working Group noted that existing catch and effort data for BDM is currently under review and the figures presented were likely to change. In particular, with regards to Prickly Redfish, AFMA is assessing additional logbook returns received which contain 2015 Prickly Redfish catches. If the catches from these logbooks are not duplicated by docket books received, the amount of the overcatch may further increase. The AFMA member reiterated the importance of catch and effort data to support management decisions.
34. An Industry Observer sought clarification on what is being done with the TVH licence for BDM currently held in trust by the TSRA. The TSRA Member advised that as there is currently no capacity in the fishery to accommodate a TVH operator, the licence is currently inactive. An Industry Member and Observer suggested the licence should be extinguished. The Working Group noted advice from the AFMA Member that the TVH licence is conditioned on a decision being made by the PZJA in order for it to be activated.

3.3 Pearl Shell Fishery update

35. The Working Group noted an update provided by the Executive Officer regarding preliminary findings of the review undertaken into the PZJA's granting of developmental permits in 2015 for the Torres Strait Pearl Shell Fishery (TSPSF):
- a. Developmental permits were issued in November 2015 for a 12 month period to eight licence holders with commercial pearl shell endorsements (four TIB fishers, two TVH fishers and two pearl aquaculture farmers).
 - b. The permits allowed the total take of up to 2,000 gold-lipped pearl oyster (*Pinctada maxima*) between the sizes of 100-130 mm (the regulation size for commercial fishing in the TSPSF is 130-230 mm). The objective of the permits was to support revitalisation of the Torres Strait pearl farming industry, by conducting a commercial trial using smaller shell for seeding and culture to determine whether this can increase the overall productivity of pearl farming.
 - c. Through interviews with permit holders and buyers:
 - i. Approximately 800 pearl shell was reported to have been harvested during the permit period, with roughly 15-20% comprised of shell between 100-130 mm.
 - ii. The pearl shells harvested were used for seeding in aquaculture but due to the low level of undersize pearl shell harvested, any benefits to the aquaculture sector in relation to any improvement in profitability could not be determined.
 - iii. The primary reason as to why there is little interest in fishing the TSPSF by both TIB and TVH fishers is due to more lucrative opportunities in other Torres Strait fisheries (e.g. TRL).
 - d. AFMA will present the findings of the review to the next Working Group with further work in this fishery being subject to competing priorities in other Torres Strait fisheries.

3.4 Implementation of a fish receiver system

36. The Working Group noted an update provided by the AFMA Member regarding the implementation of a Torres Strait FRS, in particular:
- a. The FRS will become mandatory for all Torres Strait Fisheries, excluding the Torres Strait Prawn Fishery, on 1 December 2017. Under this new system licensed fishers will only be able to land their fish to licensed fish receivers and licensed fish receivers will only be able to receive catch from licensed fishers.
 - b. Catch and effort information obtained through the FRS will be used to inform the management of all Torres Strait fisheries. It will be of greatest value in the TSBDMF given the current low level of catch reporting and relatively low volume TACs. It will be a mandatory requirement for any future opening of fishing for Black Teatfish. However, to provide for effective monitoring of an opening for Black Teatfish, it will likely require modification to require daily reporting at a minimum.
 - c. Community visits are currently being conducted with all Torres Strait Island and Northern Peninsula Area (NPA) communities, to discuss and receive feedback on the FRS. General feedback received at these visits has been very positive.
 - d. A total of \$40,000 (\$4,000 per association/organisation) in funding support is available to help fishing industry associations and organisations support their local fishers and fish receivers in meeting the new FRS requirements. Applications for this funding are due by 30 October 2017.
 - e. AFMA will continue to provide education and support to industry to comply with the FRS moving into 2018.

- f. AFMA will review the performance of the FRS following initial implementation.
37. The TSRA Invited Participant thanked all industry representatives that contributed to the earlier workshops and community visits.

3.5 Prickly Redfish

38. The Working Group noted a summary provided by the AFMA Member regarding concerns around the status of Prickly Redfish (*Thelenota ananas*). At HCWG 11 held on 27 June 2017, it was discussed:
- The TAC was over caught by 8 tonne in 2015. Total harvest may be in the range of ~40-50 tonnes. Three future biomass scenarios based on different harvest levels presented by CSIRO, simulated depletion of the stock at harvest levels greater than 20 tonne.
 - Available science and industry advice on stock availability across the fishing grounds, indicates the stock is likely being depleted at an unsustainable rate.
 - The PZJA and industry remain concerned over the amount of unreported catch. Setting TACs is based on knowledge of stock availability which is reliant on the provision and review of reliable fishery data. The availability of reliable fishery information remains poor.
39. The AFMA Member advised that the advice provided at HCWG 11 will shortly be provided to the PZJA for consideration. The AFMA Member further advised that AFMA have only received partial catch records from Ugar, Masig, Poruma and Mer industry for the 2015-2017 fishing seasons. The AFMA Member reiterated that there is an immediate and urgent need for data on the recent catch of Prickly Redfish. While the FRS will assist in providing catch data in the future, there remains a need for this data in the interim to support decisions about management of the fishery. The result may be, that without reliable catch data, the PZJA will consider the risks to the Prickly Redfish stock to be too high and make a decision to close fishing for this species.
40. Further to this, the AFMA Member explained that certainty around the status and management of stocks is needed to support viable businesses and future investment. When fisheries are closed, industry lose out on their investment and this is not a good outcome for any involved. A CSIRO Observer also noted that it is a lot harder to meet the requirements to reopen a fishery than to decrease a TAC to allow depleted stocks to recover. Depleted stocks are also slower to bounce back from fishing pressure than healthy ones.
41. The AFMA Member sought advice from the Working Group on how to obtain catch records from those fishers that had yet to provide them. Industry Members and Observers advised:
- Mer Island – the Industry Members from Mer Island advised that they will provide their own catch records and will follow up with their community's fishers and buyers to do the same.
 - Ugar – outstanding catch records have been provided.
 - Poruma – the Invited Participant from Poruma advised that they would provide their own catch records but that they were not the only buyer in the community. An Industry Member advised they would follow up with the other buyer. It was also suggested that the Industry Member and Traditional Inhabitant representative for Kulkalgal, who was an apology to the meeting, be tasked with following up with the Poruma community's fishers and buyers to provide outstanding catch records.
 - Masig – the Traditional Inhabitant representative for Kulkalgal was not present at the meeting to advise.

e. Erub – no advice provided.

Action 4: Working Group Members and Observers acknowledged the serious risk that a lack of data and catch reporting poses to the sustainable management of the TSBDMF and agreed to submit any outstanding catch records and to assist AFMA in obtaining catch records from the BDM TIB licence holders and buyers within their respective communities.

42. The AFMA Member clarified that AFMA is seeking catch records on all BDM species, not just Prickly Redfish. The TSBDMF is a multi-species fishery and as such AFMA needs to monitor every species harvested.
43. An Industry Member observed that voluntary catch reporting is a historical legacy and will require an amendment to the *Torres Strait Fisheries Act 1984* (the Act) in order to resolve this. The Member noted legal advice will need to be provided to Traditional Owners to understand what amendments are being made to the Act and what implications the amendments will have for TIB licence holders.
44. Industry Members and Observers provided an update with regards to the voluntary spatial closures for Prickly Redfish proposed by Mer and Erub Industry Members and Observers at HCWG 11. The AFMA Member noted AFMA had sought further comment out of session from industry, including with Ugar and Masig Island representatives, but no responses have been received.
45. An Industry Member from Mer advised that they continue to support closures around Mer Island, Little Mary Reef and Big Mary Reef. The Member noted that the only time they customarily fish within 10 nm of Mer Island is in rough weather, otherwise it is understood by fishers to be closed – this has been the practice for ten years. The closures around the other islands, Brown reef, Laxton Reef and Bramble Cay need to be decided by the relevant communities (e.g. Ugar and Erub Islands), noting however that Ugar only fish a small area. As the Mer and Erub Island fishers taking most of the catch, it is the closures around these islands that will have the biggest impact. An Industry Observer from Ugar observed they do not fish around Bramble Cay and noted fishers could switch to finfish to supplement their income should the closures come into effect.
46. Industry Members and Observers again raised alleged compliance concerns regarding illegal activities involving carrier boats and the illegal use of hookah in the TSBDMF and expressed frustration at the perceived lack of compliance response. The AFMA Member acknowledged the importance of effective compliance and the impact illegal activities on legitimate fishers and their communities. The AFMA Member advised that AFMA will continue to work with the QBFP to investigate all reports. The AFMA Member also noted that there is some work to do to tighten rules around carrier boats and the carriage of hookah. Proposed changes were put forward at HCWG 11, and will be tabled again at the next Working Group meeting.

3.6 Black Teatfish

47. The Working Group noted an update provided by the AFMA Member regarding the current closure of fishing for Black Teatfish (*Holothuria whitmaei*). The AFMA Member advised that the PZJA has agreed that fishing for Black Teatfish will remain closed until the risk of exceeding the TAC set for the species is substantially reduced through cost-effective management tools. The AFMA Member advised that the FRS is one such tool and will be a mandatory requirement for any opening of fishing for Black Teatfish. However, to provide for effective monitoring, the FRS will require modification to require daily reporting at a minimum.

48. The AFMA Member explained that any recommendation to open fishing for Black Teatfish will need to clearly explain how the risk of exceeding the TAC will be reduced compared to the arrangements from the previous trial openings. While the FRS will be an important tool, other arrangements will need to be implemented to effectively control, monitor and enforce any opening.
49. The Working Group discussed the implementation of community-based management arrangements to address many of the challenges of an opening. The arrangements would involve community catch share allocations, community economic zones and the documentation and observation of cultural protocols.
50. Industry Members and Observers explained that open access to the TSBDMF for TIB licence holders is the biggest challenges of an opening. Fishers that normally have no interest in the fishery, will fish during an opening attracted by the money to be made. The AFMA Member acknowledged these concerns and noted that while community-based management arrangements may be a solution to this issue, the PZJA has a current policy objective of equal and open access. It was noted that while the open access policy provides for greater industry participation, this comes with a trade-off in terms of the economic performance of the fishery. Industry were urged to reflect on how they may be engaged in resolving these complex issues.
51. The TSRA Member advised that redefining fisheries access and allocation in the Torres Strait will be a complex and lengthy process, noting it took NZ 20 years to move to a quota management system whereby the Maori now have defined fishing rights over a substantial portion of NZ's fisheries resources. The Member further advised that the TSRA have a project underway that will look at how to progress similar reforms in the Torres Strait but that this is a long term project and won't provide immediate solutions for a Black Teatfish opening.
52. The AFMA Member queried whether the upcoming Fisheries Summit might be an opportunity to discuss these issues around access and allocation. The TSRA Member advised the summit is not the right forum to resolve these issues as it is not a PZJA forum and will have a different focus.
53. The Working Group discussed other arrangements that could be implemented to effectively control, monitor and enforce an opening, including:
- a. Centralised landing and reporting by restricting landings to specified communities (e.g. to the five eastern communities of Mer, Ugar, Erub, Masig and Poruma) and/or specified fish receivers within a community. The AFMA Member supported the need to better control and monitor where all boats land their catch, particularly when landing to carrier boats.
 - b. Only allow the retention of Black Teatfish during the opening. This would make compliance easier and protects other species from the temporary increase in effort. The CSIRO Member advised that from a scientific basis, the single species targeting would provide valuable data.
 - c. Time the opening to coincide with when the TRL fishery catch and prices peak – March or April were suggested. Previous openings happened in November which is when the TRL fishery is closed.
 - d. Set a daily catch limit to slow the rush to fish by limiting the profit any one fisher can take in a day.
 - e. Community visits to discuss and educate fishers on the conditions of the opening. Industry Members and Observers agreed that they also had a role in educating fishers in their own and other communities.
54. The Working Group agreed that obtaining reliable catch data and limiting effort were the key challenges for an opening. The AFMA Member urged Industry Members and Observers to start discussions with their communities as to how cultural protocols could

be applied to an opening and advise the Working Group accordingly. AFMA agreed to provide further advice at the next meeting as to the process and timeframes for getting approval from the PZJA to conduct an opening.

3.7 White Teatfish

55. The Working Group noted an update provided by the AFMA Member regarding the proposal put forward at HCWG 11 by Mer Island industry to use hookah in Mer waters to fish for White Teatfish (*Holothuria fuscogilva*). The AFMA Member advised that following advice provided at HCWG 11, the PZJA will shortly be asked to consider the recommendation from HCWG 11 to commence formal consultation on this proposal. It was noted that there are some complex implementation issues that will need to be resolved before such a proposal could go ahead. There is also a need to set out a business case for the proposal including its objectives and a cost-benefit analysis in order to enable an informed management decision to be made. An update on progress will be provided at the next meeting.

4 Other business

56. An item concerning developments in BDM ranching and aquaculture and how this may complement the wild caught TSBDMF was discussed under Agenda Item 3.1.

5 Date and venue for next meeting

57. The Working Group noted that the next meeting is tentatively scheduled for April 2018, with a date to be decided out of session. The AFMA Member advised that the reason for more frequent Working Group meetings is to progress the BDM Harvest Strategy.

58. Mr Harry Ghee closed the meeting in prayer at 5:15 pm.

**12th MEETING OF THE TORRES STRAIT HAND COLLECTABLES
WORKING GROUP**

Tuesday 24 October 2017 (8:30 am – 5:00 pm)

Thursday Island (Port Kennedy Association Hall, 64-66 Douglas Street)

DRAFT AGENDA

Followed by CSIRO HARVEST STRATEGY WORKSHOP

Day 1: Wednesday 25 October 2017 (8:30 am – 5:00 pm)

Day 2: Thursday 26 October 2017 (8:30 am – 12:00 pm)

Thursday Island (Port Kennedy Association Hall, 64-66 Douglas Street)

Separate agenda to be provided

1. Preliminaries

- 1.1. Opening prayer, acknowledgement of Traditional Owners, welcome and apologies
- 1.2. Adoption of agenda
- 1.3. Declarations of interest
- 1.4. Action items from HCWG 11 and previous meetings
- 1.5. Out of session correspondence

2. Fishery Updates

- 2.1. Industry update (to include Torres Strait fisheries strategic issues including economic trends)
- 2.2. Government agencies update (AFMA, TSRA, QDAF)
- 2.3. Native Title update
- 2.4. PNG National Fisheries Authority update

3. Management

- 3.1. Research update and priorities
- 3.2. Catch data summary
- 3.3. Pearl Shell Fishery update
- 3.4. Implementation of a fish receiver system
- 3.5. Prickly redfish – update on management actions
- 3.6. Black teatfish
- 3.7. White teatfish – update on management actions
- 3.8. Future management priorities

4. Other business

5. Date and venue for next meeting

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
FISHERY UPDATES Industry update	Agenda Item 2.1 For DISCUSSION

RECOMMENDATIONS

1. That the Working Group:
 - a. **NOTE** updates provided by industry members;
 - b. **DISCUSS** strategic issues, including economic trends, affecting the management and development of Torres Strait fisheries.

BACKGROUND

2. Verbal reports will be provided by industry members under this item.
3. It is important that the Working Group develops a common understanding of any relevant matters within adjacent jurisdictions and what issues if any, are having the greatest impact on industry and the management of fisheries. Such understanding will ensure proceedings of the Working Group are focused and may more effectively address each issue.
4. Working group members are asked to provide any updates on trends and opportunities in global markets, processing and value adding. Industry is also asked to contribute advice on economic and market trends where possible. Scientific members are asked to contribute advice on any broader strategic research projects or issues that may be of interest to the Torres Strait in future.
5. At the previous meetings of the Working Group, members discussed a range of strategic issues affecting the management and development of Torres Strait fisheries.
6. At HCWG 12 noted updates including:
 - a. Following the end of the TRL fishing season on 30 September 2017, there was increased levels of fishing activity in the beche de mer fishery as operators shifted their focus from TRL to beche de mer.
 - b. Curryfish is becoming a target species for operators due to its abundance on fishing grounds. Industry noted that they are having to learn different processing methods to cope with the fragile nature of this species. Curryfish are not dried, but boiled and then salted. Due to its increase in popularity, discussions are being had as part of the Harvest Strategy project as to whether Curryfish should be removed from the basket TAC.
 - c. Industry is working to value add within its operations, with some processors working to move from salted product to dried product. Funding from the TSRA has been secured for drying facilities and upgrades to the community freezer on Ugar in 2018. These improvements will allow industry to value add to the beche de mer harvest and to diversify, specifically to expand into finfish.
 - d. The expansion into finfish, and diversification of target species, is common across the industry. Industry members on Mer and Erub reported that they have expanded into finfish, which was showing good returns.
 - e. Industry recognised the importance of good fishery and catch data to support management decisions and the future of the industry.

Hand Collectibles Working Group	Meeting 13 24 July 2018
Fishery updates Export approval under the EPBC Act	Agenda Item 2.2.1 FOR NOTING

RECOMMENDATIONS

1. That the Hand Collectible Working Group **NOTE** the update provided regarding the export approval granted under the *Environmental Protections and Biodiversity Conservation Act 1999* for the Beche de Mer and Trochus fisheries.

KEY ISSUES

2. The Torres Strait Beche de Mer and Trochus fisheries have been declared approved Wildlife Trade Operations (WTO) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) until 18 December 2020 and 9 October 2026 respectively (**Attachment A and B**).
3. Approval under the EPBC Act is:
 - a. necessary to legally export commercially wild caught seafood from Australia; and
 - b. subject to conditions which require ongoing work by the PZJA.
4. The Working Group will need to consider the conditions when developing management advice for the Fisheries.
5. The Beche de Mer Fishery has six conditions attached to the approval (**Table 1**).
6. The Trochus Fishery has no conditions on the basis that the fishery is inactive. Any activity within the Trochus Fishery will need to be reported to the Department of the Environment and Energy (DoEE).
7. The Torres Strait Pearly Shell Fishery is not currently exporting.

BACKGROUND

8. The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires the Australian Government to assess the environmental performance of fisheries and promote ecologically sustainable fisheries management.
9. The Minister for the DoEE is responsible for the assessment of fisheries managed under Commonwealth legislation and state export fisheries in accordance with the EPBC Act.
10. Several separate assessments are undertaken under the EPBC Act:
 - the strategic assessment of fisheries under Part 10 of the EPBC Act;
 - assessments relating to impacts on protected marine species under Part 13; and,
 - assessments for the purpose of export approval under Part 13A.
11. In assessing a management plan under Part 10 of the EPBC Act the Minister for the Environment is assessing the framework for managing the fishery and declaring that actions approved in accordance with the accredited plan do not require approval under Part 9 for impact on the environment (approval of actions relating to matters of national environmental significance).

12. In assessing a management plan under Part 13 of the EPBC Act the Minister for the Environment is determining that all reasonable steps are being taken to avoid killing or injuring protected species and that the fishery to which the plan relates does not, or is not likely to, adversely affect the survival or recovery in nature of any listed threatened species or the conservation status of a listed migratory species, cetacean, or listed marine species or a population of that species.
13. In assessing a management plan under Part 13A of the EPBC Act the Minister for the Environment is determining whether species taken in the fishery should be included on the list of exempt native specimens (LENS) and therefore allowed to be exported. For each specimen on the list there is to be a notation that states whether the inclusion of the specimen in the list is subject to restrictions or conditions and, if so, the nature of those restrictions or conditions.
14. The Torres Strait Beche de Mer Fishery was first assessed 2004 under Parts 10, 13 and 13 A of the EPBC Act. Export approval was granted through amending the LENS and declaring the Beche de Mer Fishery a Wildlife Trade Operation (WTO) for a period of three years, valid until 20 June 2008. A further three WTO approvals were granted with the last valid until 15 June 2017.
15. In April 2017, AFMA submitted an application on behalf of the PZJA, for reassessment of the Torres Strait Beche de Mer and Trochus Fisheries under the EPBC Act as a wildlife trade operation (**Attachment A and B**).
16. 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 was undertaken on the application between 26 April and 31 May 2017. No comments were received.
17. The Department of the Environment and Energy assessments are at **Attachment C and D**.
18. The Delegate of the Minister for the Environment and Energy wrote to AFMA and Senator the Hon Anne Ruston, Assistant Minister for Agriculture and Water Resources on 20 December 2017 advising of her decision in relation to the reassessment of seven Commonwealth-managed fisheries including the Torres Strait Beche de Mer and Trochus Fisheries (**Attachment E**).

Attachments:

- A: Torres Strait Beche de Mer Fishery Application 2017
- B: Torres Strait Trochus Fishery Application 2017
- C: Assessment report for Torres Strait Beche de Mer fishery 2017
- D: Assessment report for Torres Strait Trochus Fishery 2017
- E: Letter of assessment to Assistant Minister Ruston

Table 1 – Conditions applied to Beche de Mer fishery as an approved Wildlife Trade Operation (WTO)

Number	Condition	Comparison to previous WTO	Relevant management actions
1.	Operation of the Torres Strait Beche-de-Mer Fishery will be carried out in accordance with the management regime in force under the <i>Torres Strait Fisheries Act 1984</i> .	Carry over	Condition adhered to
2.	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 Beche-de-Mer Fishery management arrangements that may affect the assessment against which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are made.	Standard condition	Amendments to management arrangements are reported to DoEE through scheduled Strategic Assessment Reports.
3.	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>Guideline for the Ecologically Sustainable Management of Fisheries – 2nd Edition</i> .	Standard condition	Reports are presented to DoEE when applying for renewal of WTO accreditation.
4.	<p>The Torres Strait Protected Zone Joint Authority to implement a strategy to manage the risks of overfishing and localised depletion for all species harvest 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>	New condition	<p>The PZJA is working to implement a harvest strategy for the Fishery that will include decision rules that promote sustainable management of the stock.</p> <p>The ability to collect fishery dependent data within Torres Strait fisheries increased with the implementation of the fish receiver system on 1 December 2017. AFMA will continue to work with stakeholders to increase the quality</p>

			of data being received and the efficiency of the system.
5.	The Torres Strait Protected Zone Joint Authority to complete an ecological risk assessment and implement an ecological risk mitigation strategy to ensure all environmental and ecological risks are appropriately managed.	New condition	An ecological risk assessment will be included as part of the Fishery Management Strategy, due to be developed in 2019/2020
6.	The Torres Strait Protected Zone Joint Authority to continue to pursue the changes necessary to facilitate reporting of interactions with species listed in Part 13 of the <i>Environmental Protection and Biodiversity Act 1999</i> .	New condition	There is a section in the voluntary HC01 logbook for fishers to report interactions with threatened, endangered and protected species. AFMA will continue to promote the use of daily fishing logbooks.

Application for reassessment under the EPBC Act of the TORRES STRAIT SEA CUCUMBER (BECHE-DE-MER) FISHERY

GENERAL INFORMATION	
Area of the fishery	The Torres Strait Sea Cucumber (Beche-de-mer) (TSBDMF) Fishery comprises tidal waters within the Torres Strait Protected Zone (TSPZ) and the area declared under the TSF Act to be ' <i>outside but near</i> ' the TSPZ for commercial fishing for sea cucumber (Figure 1). For the TSBDMF, the outside but near area extends to waters just south of Prince of Wales Island to the west and to due east of Cape York Peninsula (Attachment 1).
Gear used	Fishing for Beche-de-mer in the Torres Strait is by hand collection, mainly by free diving from dinghies crewed by two or three fishers, or by walking along reefs tops and edges at low tide. The depth ranges of the most frequently sought species occur in a range of 0 - 20m. Combined with the hookah/SCUBA ban it is estimated that most fishing occurs within 0 - 10m.
Information page	Information on the TSBDMF can be found on the Protected Zone Joint Authority (PZJA) website: http://pzja.gov.au/the-fisheries/torres-strait-beche-de-mer-fishery/
MANAGEMENT ARRANGEMENTS	
Legislation	<p>The TSBDMF is managed by the PZJA that consists of the Australian Government (represented by the Minister responsible for fisheries, as the Chair of the PZJA), the Queensland Government (represented by the Minister responsible for fisheries) and the Torres Strait Regional Authority (TSRA) (represented by the TSRA Chair). The Australian Fisheries Management Authority (AFMA) coordinates and delivers fisheries management, while the Queensland Department of Agriculture and Fisheries (QDAF) delivers compliance programs in the Torres Strait on behalf of the PZJA and in accordance with the <i>Torres Strait Fisheries Act 1984</i> (TSF Act).</p> <p>Management objectives for the fishery, with regard to the the rights and obligations conferred on Australia by the <i>Torres Strait Treaty 1984</i> (the Treaty) and the objectives to be pursued under the and TSF Act, are:</p> <ul style="list-style-type: none"> a) to acknowledge and protect the traditional way of life and livelihood of traditional inhabitants, including their rights in relation to traditional fishing¹; b) to protect and preserve the marine environment and indigenous fauna and flora in and in the vicinity of the Protected Zone;

¹ Traditional fishing means non-commercial fishing as defined in the TSF Act.

	<p>c) to adopt conservation measures necessary for the conservation of a species in such a way as to minimise any restrictive effects of the measures on traditional fishing;</p> <p>d) to manage the fishery for optimum utilisation;</p> <p>e) to have regard, in developing and implementing licensing policy, to the desirability of promoting economic development in the Torres Strait area and employment opportunities for traditional inhabitants.</p> <p>Licences are granted under either subsection 19(2) or 19(3) of the TSF Act that entitles that person to take, process or carry trochus.</p> <p>https://www.legislation.gov.au/Details/C2016C00677</p>
<p>Regulations, exemptions and/or licence designations</p>	<p>1. Fisheries Management Instruments (FMIs) and Fisheries Management Notices (FMNs) are issued under the TSF Act and give effect to the regulations in place for each of the Torres Strait fisheries.</p> <p><u>Torres Strait Fisheries Management Instrument No. 15 (Torres Strait Sea Cucumber Fishery)</u></p> <p>Prohibitions:</p> <ul style="list-style-type: none"> • Prohibition on the taking, processing or carrying of Beche-de-mer. <p>Exemptions from the prohibitions:</p> <ul style="list-style-type: none"> • A person holding a licence to take, process or carry Beche-de-mer ; • where a person takes or carries sea cucumbers without the use of a boat – the number of sea cucumber in that person’s possession does not exceed three; or • where a person takes or carries sea cucumbers with the use of a boat, or by diving from a boat, and no other person is in the boat – the number of sea cucumbers in the boat does not exceed three; or • where the person takes or carries sea cucumbers with the use of a boat, or by diving from a boat, and there is at least one other person in the boat – the number of sea cucumber in the boat does not exceed six; and • A person who takes, processes or carries Beche-de-mer in the course of traditional fishing. <p>Size Limit:</p> <ul style="list-style-type: none"> • minimum size limits apply. <p>Gear restrictions:</p> <ul style="list-style-type: none"> • the taking of sea cucumber in the area of the Torres Strait Sea Cucumber Fishery with the use of any underwater breathing apparatus or by any method other than collection by hand, is prohibited. . • https://www.legislation.gov.au/Details/F2017L00370 <p><u>Fisheries Management Notice No. 47 – Torres Strait Fisheries (restriction on size of boats)</u></p> <ul style="list-style-type: none"> • prohibits the use of boats longer than 20 m in the fishery <p>https://www.legislation.gov.au/Details/F2008B00528</p> <p>2. Licensing arrangements</p> <p>Fishing is limited to traditional inhabitants only in the commercial trochus fishery. Traditional inhabitants can enter this fishery by obtaining a Traditional Inhabitant Boat (TIB) fishing licence with a Beche-de-mer (BD)</p>

	<p>endorsement. The Australian Fisheries Management Authority (AFMA) assesses and issues licences on behalf of the PZJA.</p> <p>3. Licence conditions</p> <p>Implemented by way of licence conditions, boat sizes are limited to a maximum of seven metres in length in the fishery (this does not apply to processor/carrier.</p>
Management plan	N/A
Other management documents	A harvest strategy is currently being developed for the fishery.

FISHERY STATUS

Annual report	<p>PZJA Annual Report 2011-2014: http://pzja.gov.au/wp-content/uploads/2016/02/8125-AFMA-PZJA-Annual-Report-20112014_Accessible-updated.pdf</p> <p>ABARES Fishery Status Report 2016: http://data.daff.gov.au/data/warehouse/9aam/fsrXXd9abm_/fsr16d9abm_20160930/19_FishStatus2016TorresStraitBeche-de-merTrochus_1.0.0.pdf</p>
Stock assessment	<p>The <i>Torres Strait Hand Collectables, 2009 survey: Sea cucumber</i> (Skewes <i>et al.</i> 2010) completed in March 2009 was not by definition a stock assessment analysis, however, provided some insight as to stock status. The small gross value of the fishery means regular stock assessments are difficult to justify.</p> <p>Formal analysis of stock recovery strategies (prohibition of the take of overfished species and increased foreign compliance capabilities) has not been undertaken for the fishery. However, results from the 2009 and 2010 surveys indicate recovery for some species as a result of a zero TAC since 2003.</p> <p>http://pzja.gov.au/wp-content/uploads/2011/06/tshcwg-meeting-4-27-28-july-2010_attachment-2.2a-torres-strat.pdf</p>
Ecological risk assessment	An ERA has not been developed for the fishery. Because Bech-de-mer are caught by hand collection the ecological impact on the benthos from harvesting these species is negligible.

SPECIES

Target species	Commercial value	Common name	Scientific name	Total Allowable Catch (TAC) Tonne
	High	Sandfish	<i>Holothuria scabra</i>	0
		White teatfish	<i>Holothuria fuscogilva</i>	15
		Pacific black teatfish*	<i>Holothuria whitmaei</i>	0
	Medium	Surf redfish	<i>Actinopyga mauritiana</i>	0
		Deepwater redfish	<i>Actinopyga echinites</i>	Combined TAC
		Blackfish	<i>Actinopyga miliaris</i>	Combined TAC

		Prickly redfish	<i>Thelenota ananas</i>	20
	Low	Stonefish	<i>Actinopyga lecanora</i>	Combined TAC
		Lollyfish	<i>Holothuria atra</i>	Combined TAC
		Elephant's trunkfish	<i>Holothuria fuscopunctata</i>	Combined TAC
		Greenfish	<i>Stichopus chloronotus</i>	Combined TAC
		Curryfish**	<i>Stichopus hermanni</i>	Combined TAC
		Amberfish	<i>Thelenota anax</i>	Combined TAC
		Brown sandfish	<i>Bohadschia vitiensis</i>	Combined TAC
		Leopardfish***	<i>Bohadschia argus</i>	Combined TAC
		Pinkfish	<i>Holothuria edulis</i>	Combined TAC
*the combined TAC is 80 tonnes.				
Byproduct species (retained)	Due to the high selectivity of fishing methods used to catch Beche-de-mer (i.e. hand collection) there is no byproduct retained.			
Bycatch species (non-retained)	N/A			
Protected species	Due to the non-destructive nature of fishing methods employed in the Beche-de-mer fishery, interactions with other protected species is highly unlikely. AFMA requires interactions with Threatened, Endangered or Protected (TEP) species to be recorded in logbooks. There have been no interactions with TEP species reported in this fishery to date.			
PROGRESS AGAINST PREVIOUS EPBC CONDITIONS (DELETE IF NOT APPLICABLE)				
Condition 1: Operation of the fishery will be carried out in accordance with the Torres Strait Beche-de-mer Fishery management regime in force under the <i>Torres Strait Fisheries Act 1984</i> and the <i>Torres Strait Fisheries Regulations 1985</i> .	The fishery has been managed in accordance with the statement of management arrangements.			
Condition 2: The Protected Zone Joint Authority to inform the Department of the Environment of any intended amendments to the management arrangements that	Not yet required. The fishery has continued to operate under existing management arrangements			

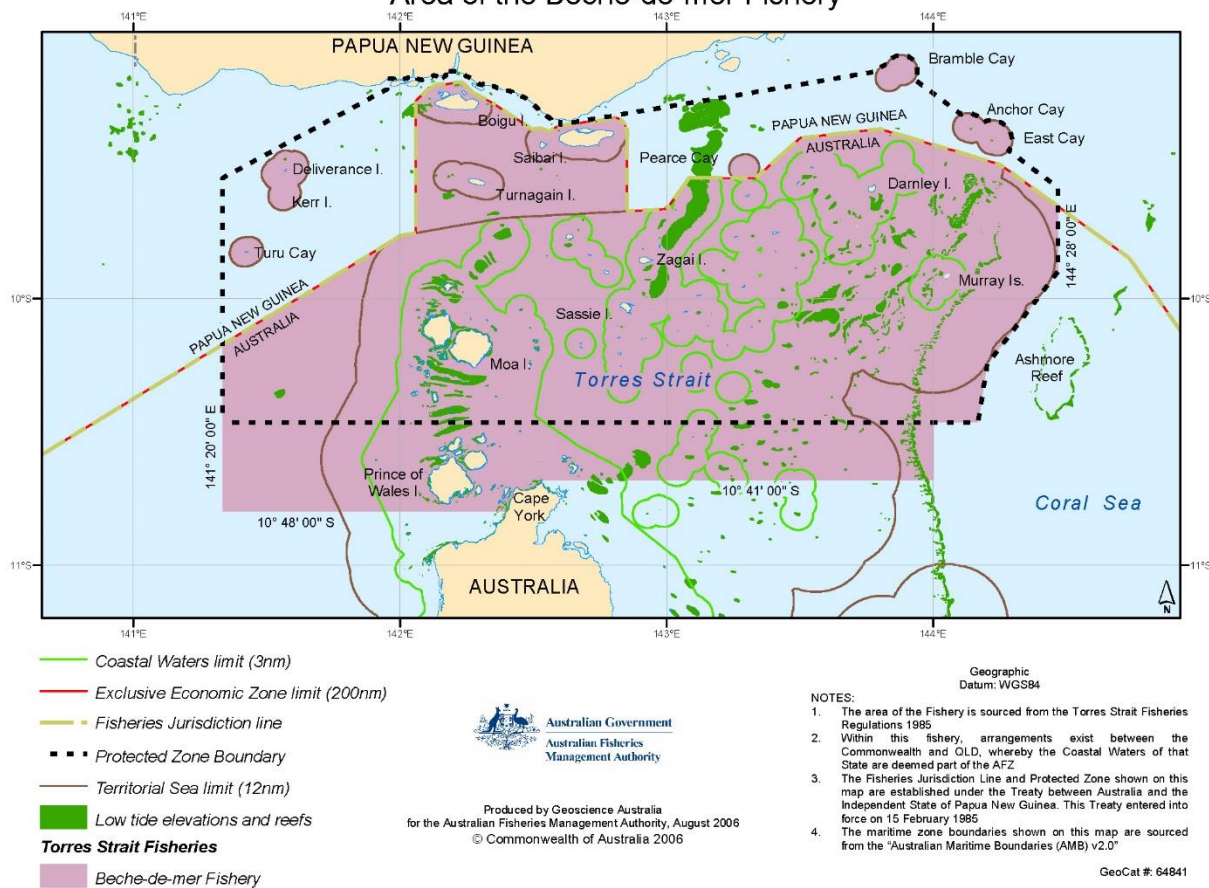
may affect the criteria on which EPBC Act decisions are based.	
Condition 3: The PZJA to produce and present reports to the Department of the Environment and Energy as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i> .	<p>This submission, as requested by the Department of the Environment and Energy, adheres to the Guidelines as the 'Standard' level of information required for assessment outlined under 'Option 1'.</p> <p>This report contains all the information required for assessment as described within Appendix B of the Guidelines.</p>
PROGRESS AGAINST PREVIOUS EPBC RECOMMENDATIONS (DELETE IF NOT APPLICABLE)	
<p>Recommendation 1: The Protected Zone Joint Authority to:</p> <p>a) implement strategies to improve estimates of commercial (community) harvest from the Torres Strait Bêche-de-mer Fishery; and</p> <p>b) develop and implement appropriate strategies to obtain improved estimates of all removals from sea cucumber stocks.</p>	<p>AFMA continues to monitor catch levels of Beche de mer harvested in Torres Strait through docket books and through talking to fishers and processors about current levels of activity.</p> <p>CSIRO has developed draft harvest strategies for Beche de mer and trochus with two communities (Erub and Warraber) These harvest strategies include developing objectives and performance measures.</p> <p>The Torres Strait Scientific Advisory Committee has recently approved a project utilising smart-phone technology to collect fine-scale catch and effort data from fishers operating within the Torres strait Finfish Fishery. It is expected that the outputs from this project will have positive implications for the betterment of catch monitoring processes in Torres Strait fisheries management.</p> <p>AFMA is also planning to formalise fish receiver licenses throughout the Torres Strait which due to be implemented for the start of the 2018 season.</p>
<p>Recommendation 2: The Protected Zone Joint Authority to:</p> <p>a) develop strategies for implementing the existing draft community based harvest strategies to include meaningful performance indicators,</p>	<p>CSIRO has developed draft harvest strategies for Beche de mer and trochus with two communities (Erub and Warraber) These harvest strategies include developing objectives and performance measures.</p> <p>The harvest strategies will now be considered for measures of sustainability using a decision support tool developed by CSIRO and recent stock abundance estimates. PZJA agencies are now looking to efficient ways of implementing these harvest strategies.</p> <p>A fishery-wide harvest strategy is currently being developed and is due for completion in late 2017.</p>

<p>performance measures and responses;</p> <p>b) extend the development of harvest strategies to other communities in the area of the Torres Strait Bêche-de-mer Fishery as appropriate; and</p> <p>c) consider formalising performance indicators, performance measures and responses for those areas of the fishery not covered by community based harvest strategies.</p>	<p>The HCWG has discussed the draft harvest in question and have noted concerns on legislating responses to performance measures and indicators as defined under the community based harvest strategies.</p> <p>A fishery-wide harvest strategy is currently being developed and is due for completion in late 2017.</p>
<p>The Protected Zone Joint Authority to continue to identify and pursue opportunities for research relevant to species harvested in the Torres Strait Bêche-de-mer Fishery.</p>	<p>A report from the 2010 surveys of sandfish on and around Warrior Reef indicate that sandfish are showing some signs of recovery, in particular with good size frequency distribution. Researchers, however, have indicated that there may be some imprecision in the stock estimates due to the burrowing behaviour of Sandfish. An experimental catch survey Sandfish at Warrior Reef was conducted in 2012 that allowed impacts of burrowing on stock estimates to be investigated further. Catch was conducted by community members and allowed for greater levels of community involvement in research and monitoring of the fishery. The experimental fishing survey showed further signs of recovery but substantial enough to deem increasing the current sandfish TAC from 0.</p>
<p>The Protected Zone Joint Authority and the Australian Fisheries Management Authority to continue and encourage further co-operation with other relevant jurisdictions to pursue increased knowledge and complementary management of sea</p>	<p>The PZJA continues to engage PNG including issues related to illegal PNG fishing of stocks on Warrior Reef.</p> <p>The PZJA has been supportive of the closure to the Beche-de-mer fishery in PNG since 2009 and has continued to encourage PNG to continuing the moratorium. However, the PNG Government's recent decision to lift the Beche-de-mer moratorium is cause for concern in relation to the management of Australian stocks and risks of illegal fishing by PNG licenced boats.</p> <p>Australia has offered assistance in conducting surveys of Beche de Mer stocks on the PNG area of Warrior Reef to assist PNG in monitoring the impact of the fishery closure. PNG NFA are members of the Torres Strait Scientific Advisory Committee. The aim of this forum is to improve on a collaborative approach to research.</p>

cucumber resources across fisheries and across jurisdictions.	
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Torres Strait Fisheries

Area of the Beche-de-mer Fishery



Application for reassessment under the EPBC Act of the

TORRES STRAIT TROCHUS FISHERY

GENERAL INFORMATION	
Area of the fishery	The Torres Strait Trochus Fishery (TSTF) comprises tidal waters within the Torres Strait Protected Zone (TSPZ) and the area declared under the TSF Act to be 'outside but near' the TSPZ for commercial fishing for trochus (Attachment 1). For the TSTF, the outside but near area extends to waters just south of Prince of Wales Island to the west and to due east of Cape York Peninsula.
Gear used	Trochus (<i>T. niloticus</i>) are collected by hand, either by walking on reef tops as tides permit or by diving on reef tops and reef edges. The depth ranges of the most frequently sought species occur in a range of 0-20m. It is estimated that most fishing occurs within 0-10m.
Information page	Information on the TSTF can be found on the Protected Zone Joint Authority (PZJA) website: http://pzja.gov.au/the-fisheries/torres-strait-trochus-fishery/
MANAGEMENT ARRANGEMENTS	
Legislation	<p>Management objectives for the fishery, with regard to the the rights and obligations conferred on Australia by the <i>Torres Strait Treaty 1984</i> (the Treaty) and the objectives to be pursued under the and <i>Torres Strait Fisheries Act 1984</i> (TSF Act), are:</p> <ul style="list-style-type: none"> a) to acknowledge and protect the traditional way of life and livelihood of traditional inhabitants, including their rights in relation to traditional fishing¹; b) to protect and preserve the marine environment and indigenous fauna and flora in and in the vicinity of the Protected Zone; c) to adopt conservation measures necessary for the conservation of a species in such a way as to minimise any restrictive effects of the measures on traditional fishing; d) to manage the fishery for optimum utilisation; e) to have regard, in developing and implementing licensing policy, to the desirability of promoting economic development in the Torres Strait area and employment opportunities for traditional inhabitants. <p>Licences are granted under either subsection 19(2) or 19(3) of the TSF Act that entitles that person to take, process or carry trochus.</p>

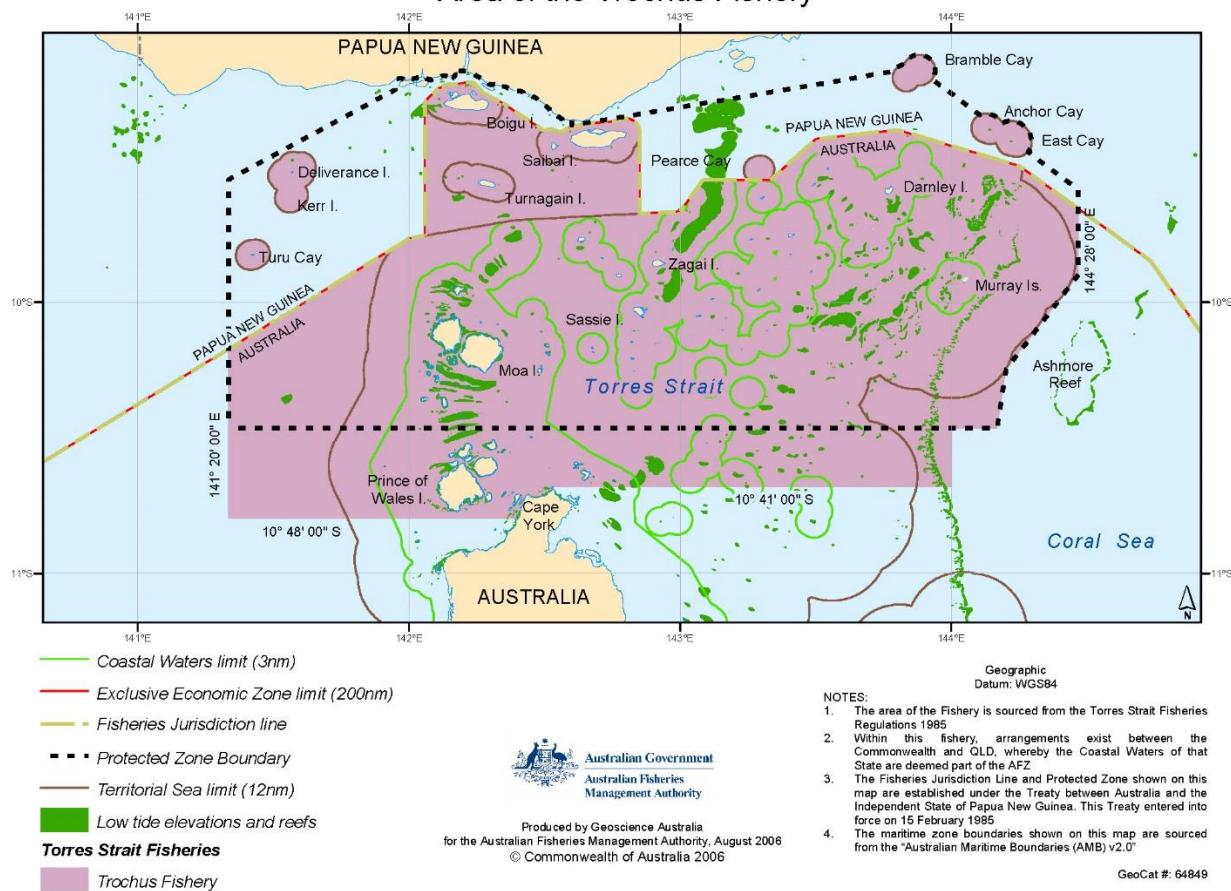
¹ Traditional fishing means non-commercial fishing as defined in the TSF Act.

	https://www.legislation.gov.au/Details/C2016C00677
Regulations, exemptions and/or licence designations	<p>1. Fisheries Management Instruments (FMIs) and Fisheries Management Notices (FMNs) are issued under the TSF Act and give effect to the regulations in place for each of the Torres Strait fisheries.</p> <p><u>Torres Strait Fisheries Management Instrument No. 13</u></p> <p>Prohibitions:</p> <ul style="list-style-type: none"> • Prohibition on the taking, processing or carrying of trochus <p>Exemptions from the prohibitions:</p> <ul style="list-style-type: none"> • A person holding a licence to take, process or carry trochus; • A person who takes, processes or carries trochus in the course of traditional fishing. <p>Gear restrictions:</p> <ul style="list-style-type: none"> • the taking of trochus is prohibited except if collected by hand and without the use of any underwater breathing apparatus. <p>Size Limit:</p> <ul style="list-style-type: none"> • the taking of trochus is prohibited if the trochus, when measured in their original form as fished, are less than 80 millimetres or more than 125 millimetres, at the widest part of the base of the shell. <p>Exemption from size limit</p> <ul style="list-style-type: none"> • A person is exempt from the prohibition in Clause 8 if that person is engaged in traditional fishing. <p>https://www.legislation.gov.au/Details/F2016L01393</p> <p><u>Fisheries Management Notice No. 47 – Torres Strait Fisheries (restriction on size of boats) includes –</u></p> <ul style="list-style-type: none"> • prohibits the use of boats longer than 20 m in the fishery <p>https://www.legislation.gov.au/Details/F2008B00528</p> <p>2. Licensing arrangements</p> <p>Fishing is limited to traditional inhabitants only in the commercial trochus fishery. Traditional inhabitants can enter this fishery by obtaining a Traditional Inhabitant Boat (TIB) fishing licence with a trochus (TR) endorsement. The Australian Fisheries Management Authority (AFMA) assesses and issues licences on behalf of the PZJA.</p> <p>3. Licence conditions</p> <p>Implemented by way of licence conditions, a competitive <i>Total Allowable Catch (TAC) (measured in tonnes with animal in shell)</i> of 150 tonnes exists in the fishery.</p>
Management plan	N/A
Other management documents	N/A

FISHERY STATUS	
Annual report	http://pzja.gov.au/wp-content/uploads/2016/02/8125-AFMA-PZJA-Annual-Report-20112014_Accessible-updated.pdf
Stock assessment	There have been no reports of trochus being harvested since 2010. The low level of catch and effort is thought to be due to low market demand rather than a decline in stocks. While there is no activity in the fishery, 71 trochus endorsements are currently issued to traditional inhabitant boat licence holders.
Ecological risk assessment	An ERA has not been developed for the fishery. Because trochus are collected by hand the the ecological impact from harvesting this species is negligible.
SPECIES	
Target species	The Torres Strait Trochus (<i>Trochus niloticus</i>) Fishery is a small, single-species commercial fishery. Trochus are a tropical marine gastropod of the order Archeogastropoda. Trochus inhabit reef flats made of coral rubble, and as juveniles are generally found low on the intertidal reef flat (Castell et al. 1996). Juveniles are extremely cryptic because of their small size, similar shell colour to their habitat and tendency to bury themselves a short distance under the surface (Crowe et al. 2001). As they grow, trochus move out towards the reef slope. Most are found at depths to 10 m but may be found as deep as 24 m (Sant 1995).
Byproduct species (retained)	N/A
Bycatch species (non-retained)	N/A
Protected species	N/A
PROGRESS AGAINST PREVIOUS EPBC CONDITIONS (DELETE IF NOT APPLICABLE)	
Condition 1: Operation of the fishery will be carried out in accordance with the management regime in force under the <i>Torres Strait Fisheries Act 1984</i> and <i>Torres Strait Fisheries Regulations 1985</i> .	Met
Condition 2: The PZJA to inform the Department of the Environment and Energy of any intended material changes to the TSTF management	Met

arrangements that may affect the assessment against which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are made.	
Condition 3: The PZJA 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>Unmet – Noting that There have been no reports of trochus being harvested since the last approval in 2012.</p> <p>An application seeking extension of the WTO approval was provided to the .Department of the Environment and Energy in June 2015 (Attachment 2)</p>
PROGRESS AGAINST PREVIOUS EPBC RECOMMENDATIONS (DELETE IF NOT APPLICABLE)	
Recommendation 1: The PZJA to: a) implement strategies to improve estimates of all fishery-related removals from the Torres Strait Trochus Fishery; and b) review fishery dependent data collection processes on a regular basis.	There have been no reports of trochus being harvested since the last approval in 2012.
Recommendation 2: The PZJA to review and consider implementing management measures proposed in the CSIRO survey report by Murphy <i>et al.</i> (2010).	There have been no reports of trochus being harvested since the last approval in 2012. Therefore, implementation of further management measures has not been warranted.
Recommendation 3: The PZJA to: a) continue to investigate methods to improve the reliability of stock estimates to be used in management decision; and b) continue to review stock assessments on a regular basis.	There have been no reports of trochus being harvested since the last approval in 2012. Therefore, not warranting the need undertake or review stock assessments.

Torres Strait Fisheries Area of the Trochus Fishery





Queensland
Government



TORRES STRAIT
PZJA
PROTECTED ZONE
JOINT AUTHORITY

Torres Strait Trochus Fishery Export Accreditation Application

June 2015

This report has been prepared by AFMA for consideration by the Department of the Environment in relation to the exemption of the Torres Strait Trochus Fishery from export controls under the *Environment Protection and Biodiversity Conservation Act 1999*.

www.afma.gov.au

 Protecting **our** fishing future

Box 7051, Canberra Business Centre, ACT 2610 Tel **(02) 6225 5555** Fax (02) 6225 5500

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Purpose

This document has been developed by the Australian Fisheries Management Authority (AFMA) on behalf of the Protected Zone Joint Authority (PZJA) to apply for the exemption of the Torres Strait Trochus Fishery (TSTF) from export controls under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The TSTF was strategically assessed in 2012 under Parts 10, 13 and 13A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Export approval was granted through declaring the TSTF a Wildlife Trade Operation for a period of three years, valid until 16 October 2015. This document is to be submitted to the Department of the Environment in support of renewing WTO export accreditation for the TSTF.

Description of the Fishery

Governing legislation

The TSTF is managed by the PZJA considering advice from its consultative bodies. This Authority consists of the Australian Government (represented by the Minister responsible for fisheries), the Queensland Government (represented by the Minister responsible for fisheries) and the Torres Strait Regional Authority (represented by the Chair). The Australian Fisheries Management Authority coordinates and delivers fisheries management, while the Queensland Department of Agriculture and Fisheries delivers compliance programs in the Torres Strait on behalf of the PZJA and in accordance with the *Torres Strait Fisheries Act 1984* (TSF Act). Aquaculture and recreational fishing, including charter fishing, are managed under Queensland law.

Since 1999, when management of the fishery was transferred from the Queensland Government to the PZJA, the fishery has been managed under the TSF Act. The management regime is legislated through Fisheries Management Notices (FMNs) under the TSF Act and conditions on fishing permits. FMNs are issued under the TSF Act and give effect to the fisheries responsibilities of the *Torres Strait Treaty 1985* (the Treaty) and related management arrangements between Australia and Papua New Guinea. Under Section 16 of the TSF Act amendments regulating fishing activities require the Minister to issue a legislative instrument published in such a manner as is prescribed. The Minister or his/her delegate also has the power to add, vary or revoke conditions listed on fishing licenses.

Target species

- The Torres Strait Trochus (*Trochus niloticus*) Fishery is a small, single-species commercial fishery. Trochus are a tropical marine gastropod of the order Archeogastropoda. Trochus inhabit reef flats made of coral rubble, and as juveniles are generally found low on the intertidal reef flat (Castell *et al.* 1996). Juveniles are extremely cryptic because of their small size, similar shell colour to their habitat and tendency to bury themselves a short distance under the surface (Crowe *et al.* 2001). As they grow, trochus move out towards the reef slope. Most are found at depths to 10 m but may be found as deep as 24 m (Sant 1995).
- The commercial fishery is largely based on the trochus' nacreous (mother of pearl) shell, which is used for making buttons and jewellery and can be ground down for use in floor tiles, metallic paints and shampoo. The majority of commercial product is exported to Asia and Europe. Trochus meat is edible and the shell has been collected for

subsistence purposes by the traditional occupants of the Torres Strait for centuries (Murphy *et al.*, 2010).

Management arrangements

• Management objectives for the fishery as described in the 2013 PZJA Annual Operational Plan, in accordance with the Treaty and the TSF Act are:

- i) to manage the resource so as to achieve optimum utilisation;
- ii) to maximise opportunities for Traditional Inhabitants of Australia; and
- iii) to encourage Traditional Inhabitants of the Torres Strait to participate in the Trochus Fishery.

AFMA issues licences on behalf of the PZJA since 1 July 2015. Fishing is limited to traditional inhabitants only in the commercial trochus fishery. Traditional inhabitants can enter this fishery by obtaining a Traditional Inhabitant Boat (TIB) fishing licence with a trochus (TR) endorsement. As at 22 June 2015 there were 48 TIB licenses with a trochus endorsement.

Management arrangements currently in place for the Australian area of the TSTF include:

1. Fisheries Management Notices

Torres Strait Fisheries Management Notice No. 47 – Torres Strait Fisheries (restriction on size of boats) includes –

- prohibits the use of boats longer than 20 m in the fishery

Torres Strait Fisheries Management Notice No. 76 – Prohibition on taking trochus (gear and size restrictions) includes -

- limiting the method of taking trochus shell to either hand or hand held non-mechanical implements;
- the use of underwater breathing apparatus is not permitted; and
- a minimum size limit of 80 mm and maximum size limit of 125 mm basal length (widest part of the shell base) applies to all fishing, except traditional fishing².

Community Fishing Notice No. 1 – Prohibits taking fish in the course of community fishing without a licence

2. Total Allowable Catch (TAC)

- Implemented by way of licence condition, a competitive TAC (*measured in tonnes with animal in shell*) of 150 tonnes exists in the fishery.

3. Licensing arrangements

- The issue of licences is restricted to boats wholly owned and operated by traditional inhabitants.

4. Recreational Fishing

- A minimum size limit of 80 mm and maximum size limit of 125 mm basal length (widest part of the shell base) , and a possession limit of 50, applies to all fishing, except traditional fishing.

² Traditional fishing means non-commercial fishing as defined in the TSF Act.

Fishing methods

Trochus are collected by walking on reef tops as tides permit or by diving on reef tops and reef edges. The depth ranges of the most frequently sought species occur in a range of 0-20m. It is estimated that most fishing occurs within 0-10m (Murphy *et al.* 2010).

Fishing area

The TSTF comprises tidal waters within the Torres Strait Protected Zone (TSPZ) and the area declared under the TSF Act to be '*outside but near*' the TSPZ for commercial fishing for trochus (Figure 1). For the TSTF, the outside but near area extends to waters just south of Prince of Wales Island to the west and to due east of Cape York Peninsula.

Data collected from Torres Strait seafood buyers and processors docket books show that the majority of trochus during 2005 were harvested from the central and eastern Torres Strait regions comprising of the Great North East Channel (Area 14), Darnley and Warraber regions (Fig. 2). There has been little activity in the fishery since 2005.

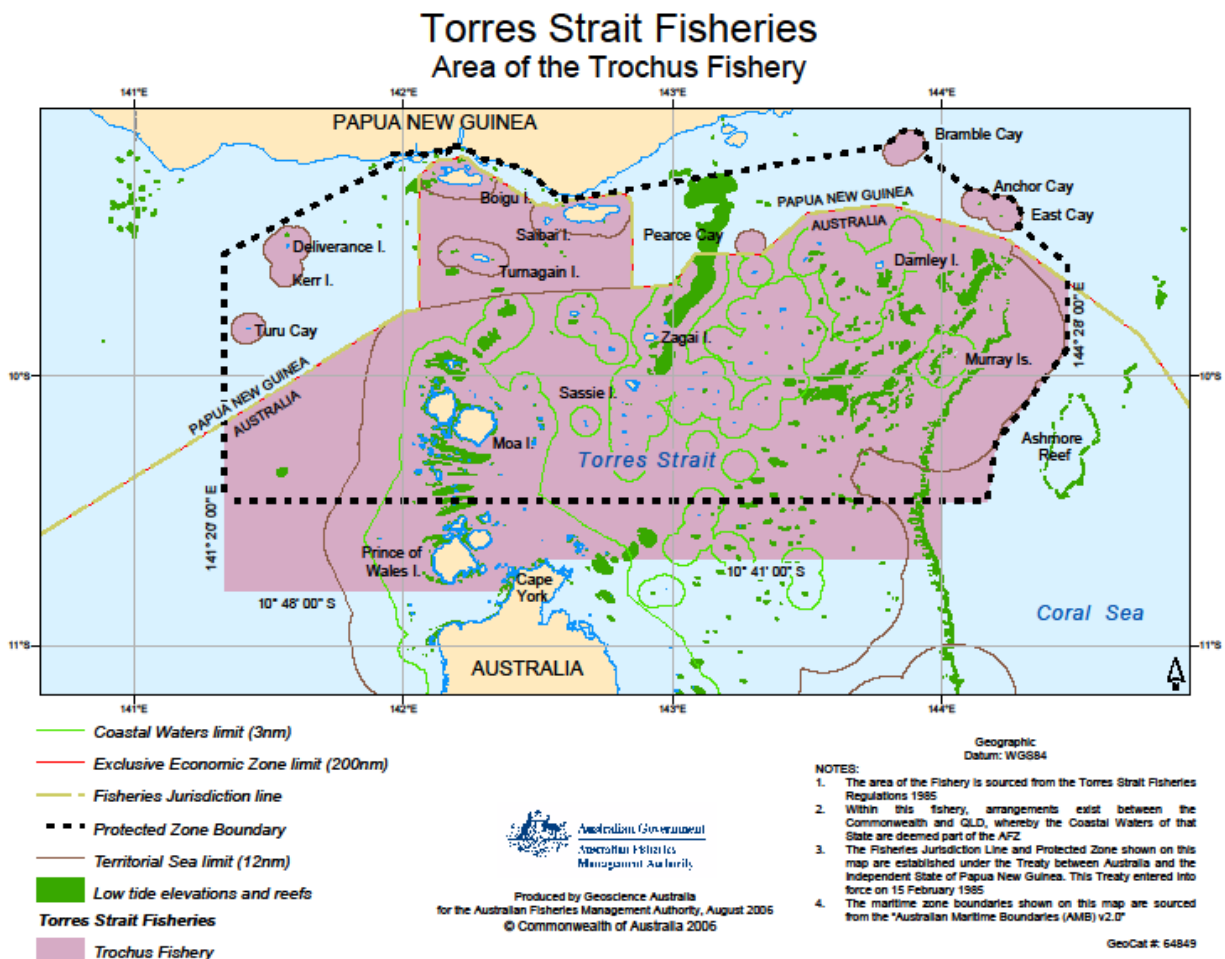


Figure 1: Area of the TSTF.

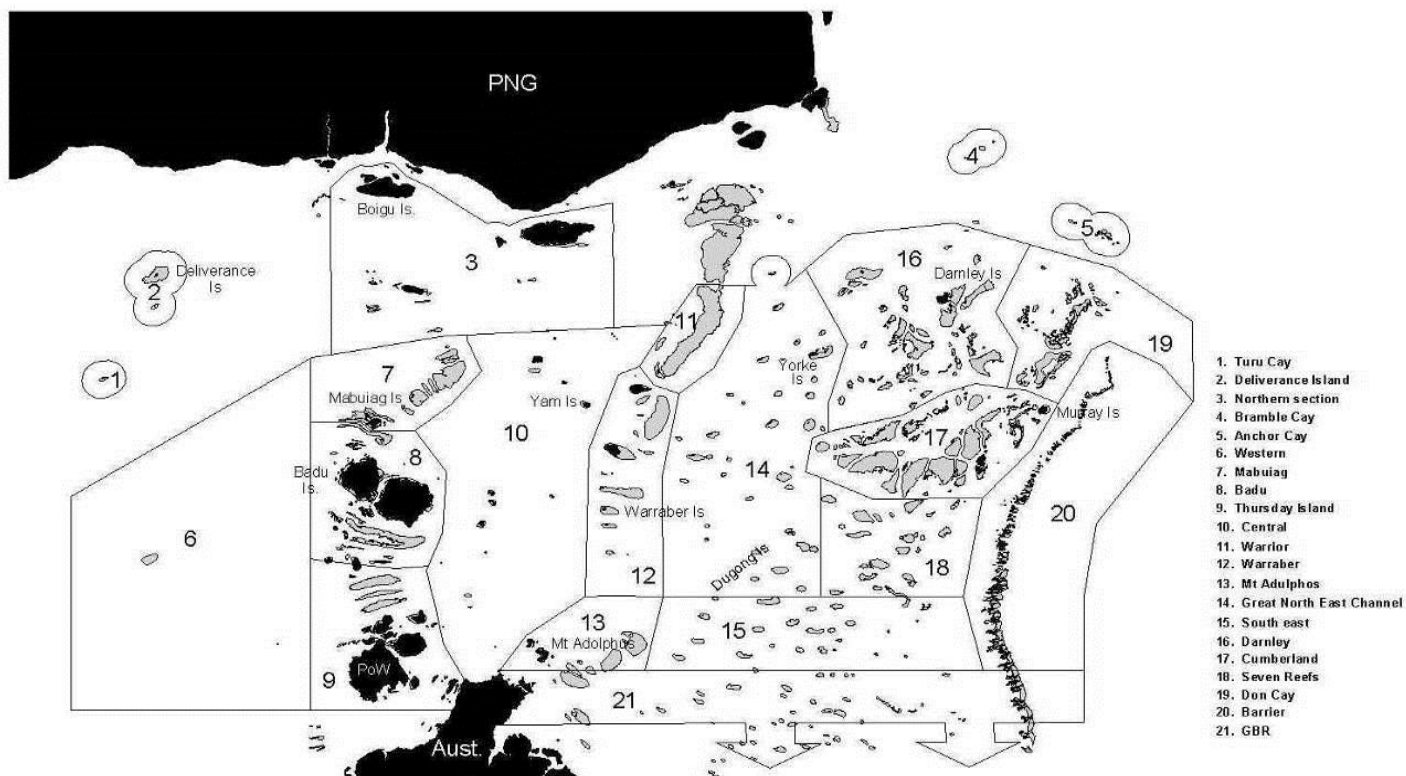


Figure 2 Torres Strait Bioregions.

Allocation between sectors

Fishing is limited to traditional inhabitants only in the commercial trochus fishery.

Management

Statement of performance of the fishery against objectives, performance indicators and measures

The TSTF is managed in accordance with the objectives specified in the TSF Act. The performance of the fishery is reported in the PZJA annual report. Currently the fishery is not active.

Compliance risks present in the fishery and actions taken to reduce these risks

- Queensland Boating and Fisheries Patrol (QB&FP) enforcement officers check for compliance with regulations such as gear restrictions and size limits, as well as any unlicensed fishing for commercial purposes for domestic fishers. The TSF Act outlines the penalties associated with non-compliance. There have been no reported breaches of regulations in the TSTF in 2015.
- Compliance in the TSTF is difficult as much of the fishing occurs in remote areas amongst many boats that are spread over a vast area. The current compliance program is restricted by the costs of implementing a program in these circumstances.

Foreign illegal fishing is not considered a risk for the TSTF due to the low market value of trochus product. Despite this AFMA, one of Border Protection Command's partner agencies, maintains a high level of compliance presence in the Torres Strait to ensure the risk of incursions by foreign fishing vessels is kept to a minimum. This is achieved with the co-operation of other Commonwealth government agencies and in particular Australian Customs and Border Protection. There has been no reported foreign non-compliance targeting the Trochus Fishery in 2015. Some minor incidental catch by foreign IUU fishers targeting beche de mer has been recorded.

Consultation processes

- The PZJA established its consultative structure of advisory bodies in 2003. Traditional Inhabitant representatives for these forums are chosen by their communities in an independent process. Traditional Inhabitant representatives, together with industry and government representatives, actively participate in the development of management arrangements (Figure 3). The PZJA at its April 2008 meeting created the Hand Collectibles Working Group to advise on management of hand collectables fisheries, including trochus. The PZJA conducts Native Title notification in accordance with the *Native Title Act 1993*.

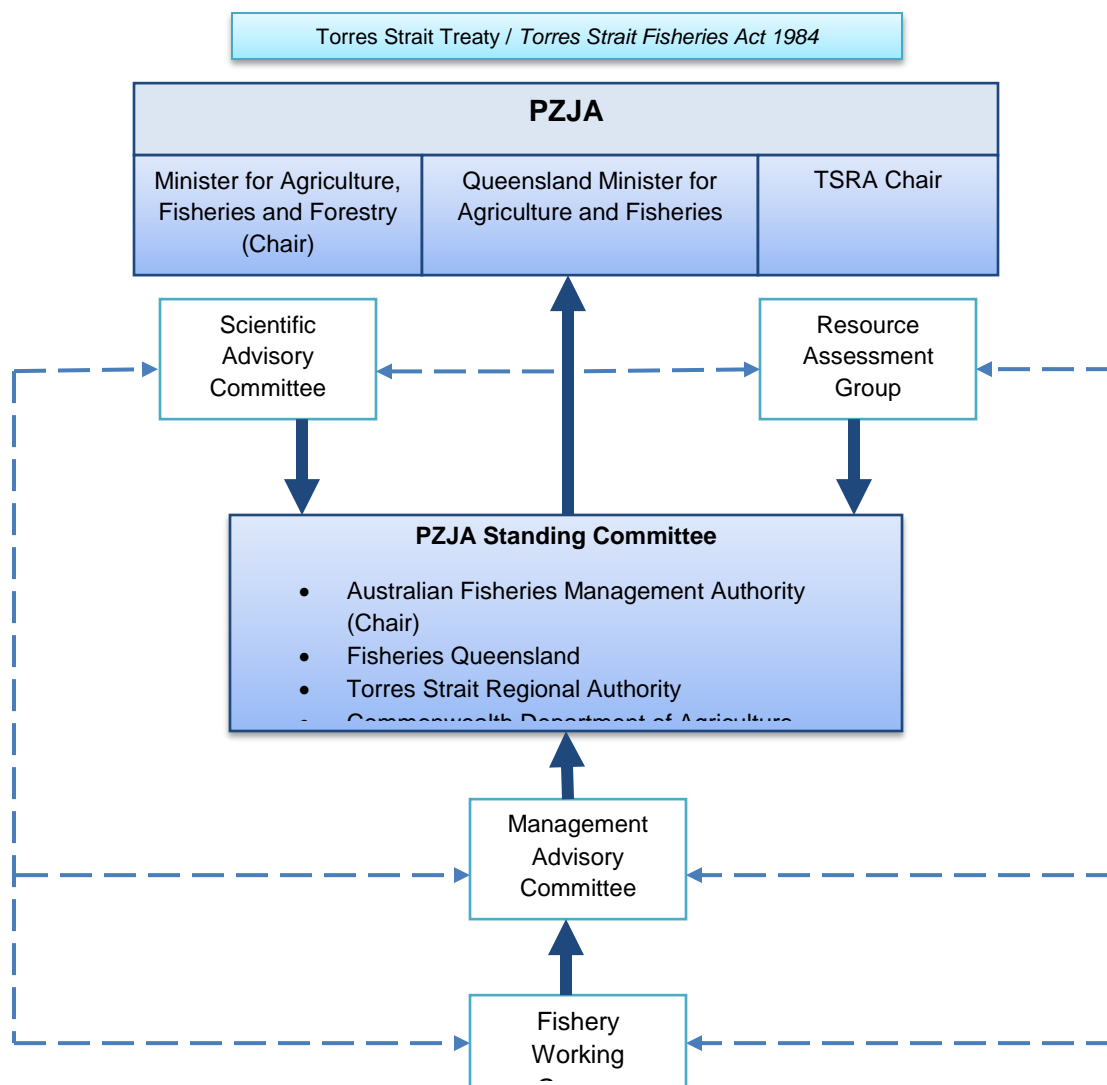


Figure 3: Flow chart outlining the consultative structure of the PZJA.

- AFMA consults as widely as practicable to develop sound fisheries management arrangements. Before management arrangements are changed, stakeholders are invited to discuss issues relevant to the fishery at regular stakeholder meetings. This allows the PZJA to take into account any representations received when making management decisions.
- AFMA also consults with the Department of the Environment in regard to proposed management arrangements.

Description of cross-jurisdictional management arrangements

- Australia and Papua New Guinea entered into the Treaty in 1985. The Treaty is concerned with sovereignty and maritime boundaries in the area between the two countries and the protection of the traditional way of life and livelihood of traditional inhabitants and of the marine environment. The Treaty also establishes the TSPZ in which each country exercises sovereign jurisdiction for swimming fish and sedentary species on

the respective sides of the agreed jurisdiction lines. The lines are known as the Fisheries Jurisdiction Line and Seabed Jurisdiction Line (Figure 1).

- The Commonwealth parliament passed the TSF Act to give effect to the fisheries provisions of the Treaty. The PZJA has regard to the rights and obligations conferred on Australia by the Treaty, in particular the protection of the traditional way of life and livelihood of the traditional inhabitants, including their traditional fishing.
- Australia and PNG hold annual fisheries bilateral discussions, to agree on annual catch sharing arrangements in relevant fisheries in accordance with the Treaty (Prawn, Tropical Rock Lobster, Finfish, and pearl shell). Trochus is not considered an article 22 fishery and is therefore not managed in conjunction with PNG.

Outcomes of review processes

- The suitability of community based harvest strategies as part of an effective management regime for the TSTF was investigated in 2011. As a result, harvest strategies were developed with the Warraber and Erub communities. Interest in developing community based harvest strategies was expressed by the Mer and Lama communities following this process. In the following years no further progress has eventuated as the fishery is inactive. Participants at the Hand Collectables Working Group meeting in April 2015 noted that there were no reports of trochus harvest for 2014. Industry members advised that there was no market for trochus at present, much of the east coast (QLD) quota was for sale, and activity has significantly declined since the 2007-2008 season.

Compliance with threat abatement and recovery plans and relevant domestic and international agreements

Due to the TSTF being restricted to hand collection and the small scale of the fishery there are no relevant threat abatement plans, recovery plans, or domestic and international agreements to comply with.

Research and Monitoring

Results of any research completed relevant to the fishery, including how results will be incorporated into management of the fishery

2009 surveys of trochus in eastern Torres Strait indicates that the population appeared to be stable compared to historic data with densities similar to 1995 and healthy populations elsewhere (Murphy *et al.* 2010). However, the research noted that due to the highly cryptic nature of trochus there was low precision and therefore low reliability to detect even large changes in trochus densities. The research raised concern regarding the appropriateness of the trochus Total Allowable Catch (TAC) and recommended introducing a trigger catch level of 100t (whole weight) with agreed management actions if this level is reached (Murphy *et al.* 2010) to mitigate risk of overfishing. Due to inactivity in the fishery the TAC has not been altered.

Description of monitoring programs used to gather information on the fishery (such as observer programs, long term monitoring programs etc) and results of these

Monitoring of the TSTF is ongoing by analysis of Torres Strait docket book data. Low levels of effort in the fishery mean that more extensive monitoring programs are not required.

Results of any collaborative research undertaken for the fishery

AFMA will keep the Department of the Environment informed of potential collaborative research.

Catch data

Total catch of target species (including retained and discarded catch)

The last reported catch of trochus was in 2010, and was 0.65 t. Since 2004, trochus catches have been derived from docket book returns, ranging from 0.65 t in 2010 to 82 t in 2005 (Fig. 3). Variation in catch has been linked to the international market price for mother of pearl product. Prices for mother of pearl peaked in 2005 and have declined since. Records of trochus catch prior to 2004 have been derived from other sources including freezer records (Figure 4).

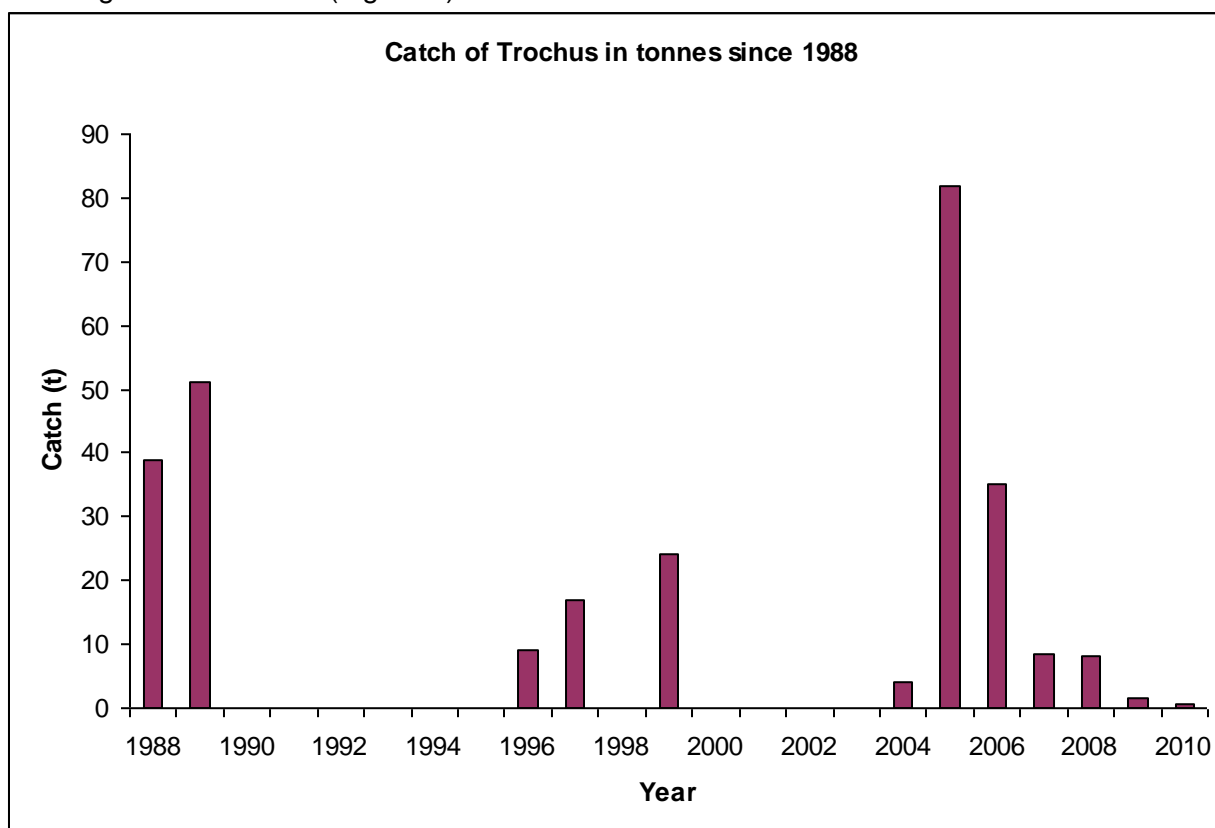


Figure 4: Catches of trochus as reported through the docket book database (post 2004) and other sources such as freezer/ processor records (pre 2004).

Total catch of target species taken in other fisheries

Zero.

Catch of by-product species (reported by species)

Not applicable.

Total catch of bycatch species (reported by species if possible)

Not applicable.

Harvest by each sector (commercial, recreational, indigenous and illegal)

The total harvest is based on records from the indigenous commercial fishery. Recreational and traditional harvest (subsistence) are unknown but are considered to be small. Illegal take is assumed to be minimal and opportunistic related to targeting beche-de-mer, due to the low value of mother of pearl.

Effort data including information on any trends

There has been no reported effort in the Torres Strait Trochus fishery since 2010. Effort in the Torres Strait Trochus fishery was low in 2010 with fewer fishers reporting catch of trochus than in previous years, however, it should be noted that it is difficult to detect trends from the data due to the low level of effort (Table 1). Current effort data is limited to docket book data returned to AFMA. Under the TIB endorsement it is not mandatory to provide catch and effort details and the docket books kept by buyers are voluntary only. There is, therefore, little data entered into the log books to provide effort information for the fishery. Numbers of days fished is assumed from the number of records of trochus catch, but is likely to be inaccurate.

Table 1: Torres Strait trochus fishery catch and effort (source: AFMA docket book database).

Year	2007	2008	2009	2010	2011	2012	2013	2014
Trochus catch (kg)	8537	8046	1526	650	0	0	0	0
Number of fishers	14	16	7	5	0	0	0	0

Spatial issues/trends

Due to the low amount of catch and fishers there were no clear spatial patterns to catch and effort in 2010 to be reported, however, due to the low numbers of records it is difficult to detect trends. The greatest catch obtained by trochus sellers during 2007 was from Torres Strait docket book region of Darnley Is (5186.5kg) during 2008 the greatest catch was obtained from the region of York Is (4925.3kg) whilst during 2009 the greatest catch was from the region of York (719kg).

Status of target stock

Resource concerns

Due to the nature of fisher behaviour, localised depletion of trochus shells is an area of potential concern. Localised depletion to levels at which breeding success may be impaired is a risk unless effort can be distributed and measures are in place that provide effective protection for a proportion of the breeding stock (Murphy *et al.* 2010). These measures may include, but should not be limited to, closed areas, move on rules or rotational zoning.

Fisheries activity is closely linked to the international demand for trochus. The fishery has appeared to operate in a boom and bust fashion, with increased catches occurring when high prices of trochus can be obtained. Whilst this has allowed the fishery to recover from potential over harvesting in the past there is a risk that if high prices are sustained for an extended period stocks may not be able to recover. The TAC for the fishery is based on surveys conducted in 2009 in the eastern Torres Strait, which indicated that the population

appeared to be stable compared to historic data, with densities similar to 1995 and healthy populations elsewhere (Murphy *et al.*, 2010). The research noted that due to the highly cryptic nature of trochus there was low precision and therefore low reliability to detect even large changes in trochus densities. The research raised concern regarding the appropriateness of the trochus TAC and recommended introducing a trigger catch level of 100t (whole weight) with agreed management actions if this level is reached (Murphy *et al.* 2010) to mitigate risk of overfishing.

Results of any stock assessments

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), taking into consideration the latest surveys along with the current catch levels of trochus, classify the fishery as not being subject to overfishing, but uncertain with respect to the overfished stock status classification (Woodhams *et al.* 2014).

Results of any stock recovery strategies (if applicable)

As the fishery is not considered overfished, stock recovery strategies are not applicable.

Interactions with protected species

Frequency and nature of interactions

Due to the fishery being restricted to hand collection only, no interactions with protected species have been recorded or are considered likely.

Management action taken to reduce interactions and results of such action

Not applicable

Impacts of the fishery on the ecosystem in which it operates

Results of any Ecological Risk Assessments

Due to the low level of effort in the fishery an Ecological Risk Assessment (ERA) has not been conducted.

Nature of impacts on the ecosystem

Although an ERA has not been conducted for the fishery it could be envisaged that impacts on the ecosystem would be restricted to:

- Concerns about exploitation levels of target species;
- Concerns about translocation of species via hull and anchor fouling; and
- Anchoring/mooring and other anthropogenic activities such as treading on reef top habitat.

Management action taken to reduce impacts and results of such action

As there has not been an ERA conducted for this fishery to date, there have been no formal management actions taken. A proposed Harvest Strategy for the fishery was investigated further in 2011/2012. Community consultation resulted in agreed approaches to harvest rules in the communities of Erub and Warraber. The communities of Iama, Poruma, and Mer agreed to develop their own community monitored harvest strategies, in the interest of supporting the ongoing development of a regional harvest strategy. This process is ongoing.

Progress against recommendations and conditions from Department of Environment's previous accreditation of the fishery

Description of progress in implementing each recommendation and condition

1 Recommendation	2 Explanation of progress
<p>Recommendation 1:</p> <p>The Protected Zone Joint Authority to:</p> <ul style="list-style-type: none"> a) implement strategies to improve estimates of all fishery-related removals from the Torres Strait Trochus Fishery, and b) review fishery dependent data collection processes on a regular basis. 	<p>AFMA continues to collect catch information through the docket book system.</p> <p>AFMA continues to promote catch reporting with industry across all fisheries. The importance of catch reporting is discussed in all consultative forums and community consultations.</p> <p>Due to the low level of effort in the fishery (nil catch reported since 2010) and subsequent low levels of risk, implementing additional monitoring of the fishery above that currently reported it is considered unnecessary.</p>

<p>Recommendation 2:</p> <p>The Protected Zone Joint Authority to:</p> <p>review and consider implementing management measures proposed in the CSIRO survey report by Murphy et al. (2010) including:</p> <p>TAC/catch trigger management strategies:</p> <ul style="list-style-type: none"> -Catch below 75 t in a year: current management arrangements (minimum and maximum size limits), stock assessment every 3-5 years. -Catch exceeds 75 t in year: trigger TAC re assessment and robust stock assessment. -TAC above 150 t in a year: prohibitions (increase in minimum size restriction), yearly stock assessment, reduction in fishing effort, shortening of harvest season, closing depleted reefs, restocking. -TAC above 150 t in a year: closure of fishery until following year. <p>Other potential management strategies (for localised depletion in particular)</p> <ul style="list-style-type: none"> -Closing depleted reefs: overharvested reefs closed to fishing, not opened for 3-5 years to allow recruitment of trochus and growth to maturity. -Increase in minimum size limit where over harvesting has occurred -Close seasons: fishing banned during summer months (Dec-Feb) when trochus spawn. The trochus harvest could also be restricted to a short period e.g. 2-3 months of the year. - Marine sanctuaries: source reefs closed to fishing; sink reefs (down current of source reefs) open to fishing. This protects mature trochus on source reefs. -Translocation of brood stock: introduction of mature trochus to depleted areas. -Restocking: development of aquaculture and re-seeding initiatives. 	<p>Murphy et al. (2010) is the latest survey of trochus in the Torres strait. This survey indicated that the population appeared to be stable compared to historic data with densities similar to 1995 and healthy populations elsewhere.</p> <p>Draft harvest strategies were developed with two communities (Waraber and Erub) in 2010. Further work to finalise these strategies will be done in the future, and will consider the recommendations from Murphy et al. (2010), in conjunction with community and industry consultation. Given the low levels of effort in the fishery there is little risk to the stock, and therefore no urgency to develop further strategies.</p> <p>The current TAC is 150 tonnes. The low level of current effort in the fishery (no activity in the fishery between 2010 and 2015) negates the necessity to implement further management arrangements at this time.</p>
<p>Recommendation 3:</p> <p>The Protected Zone Joint Authority to:</p> <ul style="list-style-type: none"> a) continue to investigate methods to improve the reliability of stock estimates to be used in management decisions, and b) continue to review stock assessments on a regular basis 	<p>Further investment in stock assessment will be contingent on increased participation in the fishery. At current effort levels the fishery poses little risk to stock, and research investment is currently prioritised in other more active Torres Strait fisheries.</p>

Condition	Explanation of progress
1: Operation of the fishery will be carried out in accordance with the management regime in force under the TSF Act and <i>Torres Strait Fisheries Regulations 1985</i>.	Condition adhered to. Refer to section 1 'Description of the Fishery'.
2: The Protected Zone Joint Authority (PZJA) to inform the Department of the Environment, Water, heritage and the arts (DEWHA) of any intended amendments to the management arrangements that may affect the assessment of the TSTF against the criteria on which EPBC Act decisions are based.	There have been no amendments to the management regime for the TSTF since the last Strategic and Export Reassessment report.
3: The PZJA to produce and present reports to DEWHA annually as per Appendix B to the <i>Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition</i>.	This submission, as requested by the Department of the Environment, adheres to the Guidelines as the 'Standard' level of information required for assessment outlined under 'Option 1'. This report contains all the information required for assessment as described within Appendix B of the Guidelines.

How the measures implemented to address the recommendations and/or conditions have improved management of the fishery

Measures to implement the Department of Environment's recommendations have improved management of the fishery by encouraging stakeholder participation and data available for management of the fishery.

List of References

- Castell, L.L. 1997. Population studies of juvenile *Trochus niloticus* on a reef flat on the north-eastern Queensland coast, Australia. *Marine and Freshwater Research* 48: 211-217.
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- Murphy, N.E., McLeod, I., Skewes, T.D., Dovers, E., Burridge, C., Rochester, W. 2010. *Torres Strait Hand Collectables, 2009 Survey: Trochus*. CSIRO. Cleveland. 58pp.
- Woodhams, J, Viera, S and Stobutzki, I (eds) 2014. *Fishery status reports 2013-14*, Australian Bureau of Agricultural and Resource Economics and Sciences – Department of Agriculture, Canberra.



Australian Government

Department of the Environment and Energy

Assessment of the
Torres Strait Bêche-de-mer Fishery

December 2017

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This report should be attributed as '*Assessment of the Torres Strait Bêche-de-mer Fishery December 2017*, Commonwealth of Australia 2017'.

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.

While reasonable efforts have been made to ensure that the contents of this report are factually correct, the Australian Government does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this report. You should not rely solely on the information presented in the report when making a commercial or other decision.

EXECUTIVE SUMMARY OF THE ASSESSMENT OF THE TORRES STRAIT BÊCHE-DE-MER 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 Trochus Fishery under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as a Wildlife Trade Operation.

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 between 26 April and 31 May 2017. No submissions were received.

The Torres Strait Bêche-de-mer Fishery operates in the Torres Strait Protected Zone using hand collection, including diving, to target various bêche-de-mer species. A number of these species are either overfished or have uncertain stock status, and one species may be subject to overfishing (uncertain status due to illegal fishing). Overfished species are now subject to zero catch limits.

Although the Department's assessment identified a number of risks, 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 continue to be managed. These proposed conditions include implementing strategies to manage the risk of overfishing and localised depletion for all species harvested in the fishery, ecological risk assessment and risk mitigation to ensure all environmental and ecological risks are appropriately managed; and ongoing efforts to facilitate reporting of interactions with species listed in Part 13 of the EPBC Act.

The Department considers that, subject to the conditions specified in Section 4 of this assessment, the Torres Strait Bêche-de-mer Fishery should be declared an approved Wildlife Trade Operation for 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 BÊCHE-DE-MER 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	3 of 9 & 1 N/A	5 of 9	0 of 9	The management regime is poorly defined. Actions are underway to address this. No systems are in place to measure the effectiveness of fishery arrangements, or assess ecological or management risk.
Principle 1 (target stocks)	2 of 11	9 of 11	0 of 11	Competitive catch limits are in place for all species. However, many are not species-specific or based on the biology of the species. Recommendations to address risks, including those associated with external factors such as climate change, have not been addressed. These issues are expected to be addressed when a harvest strategy is introduced for the fishery within the next two years.
Principle 2 (bycatch and TEPS)	2 of 12 & 6 N/A	3 of 12	1 of 12	No ecological risk assessment has been undertaken for TEP species and there is no provision for reporting interactions. No bycatch usually occurs in hand collection fisheries and risks are likely to be low.
Principle 2 (ecosystem impacts)	0 of 5	5 of 5	0 of 5	No ecological risk assessment has been undertaken and no risk mitigation, monitoring or data collection for ecological impacts is in place. Notwithstanding, risks are likely to be relatively low.
EPBC requirements				
Part 12				Not applicable. There are no marine bioregional plans applicable to the Torres Strait.
Part 13	Meets			No interactions with EPBC Act listed species based on available records (1 January 2012 – 30 September 2017).
Part 13A	Meets			The fishery is consistent with the Objects of Part 13A. Declaration of the fishery as a Wildlife Trade Operation for three years, until 18 December 2020 is recommended, subject to conditions detailed in Section 4 of this report.
Part 16	Meets			Precautionary measures are in place to prevent serious or irreversible environmental damage by the fishery.

Assessment history:

- 1st assessment finalised 2005 – 3 conditions and 11 recommendations.
- 2nd assessment finalised 2008 – 3 conditions and 4 recommendations.
- 3rd assessment finalised 2011 – 3 conditions and 4 recommendations.
- 4th assessment finalised 2014 – 3 conditions and 4 recommendations.

Fishery reporting:

Annual reports have not been provided to the Department, however the PZJA has published the following which provides some information on the fishery: [Combined Torres Strait Protected Zone Joint Authority annual report 2011-2012, 2012-2013, 2013-2014](#)

Fishery Status Reports Torres Strait Bêche -de-mer and Trochus Fisheries - [2016](#) and [2017](#).

Key links:

Fishery information page on agency website – <http://pzja.gov.au/the-fisheries/torres-strait-beche-de-mer-fishery/#.Wi89jP6pUy8>

Management plan:

There is no formal management plan, but management arrangements are outlined in the following:

- [A guide to management arrangements for Torres Strait Fisheries, June 2004](#),
- [Community Fishing Notice No. 1](#) (pdf copy on PZJA website but not found on legislation.gov.au)
- [Torres Strait Fisheries Management Instrument No. 15](#)
- [Fisheries Management Notice No. 47](#)

Enforcing legislation:

- [Torres Strait Fisheries Act 1984](#)
- [Torres Strait Fisheries Regulations 1985](#)
- [Torres Strait Treaty \(Miscellaneous Amendments\) Act 1984](#)
- [Torres Strait Fisheries Act 1984 - Proclamation \(17/03/1999\)](#)

Harvest strategy or document that articulates control rules – No harvest strategy for the fishery.

Ecological Risk Assessment – No ERA for the fishery.

SECTION 2: DETAILED ANALYSIS OF TORRES STRAIT BÊCHE-DE-MER 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 Some information is publicly available on the PZJA website. However, important information is unavailable, inaccurate, inconsistent or difficult to locate. This makes it difficult to determine what arrangements apply to the fishery and could affect fishers' ability to understand and comply with requirements. AFMA is currently reviewing the website and expects to address these issues in 2018.
Be developed through a consultative process providing opportunity to all interested and affected parties, including the general public	Meets The management regime was developed through a consultative process. The PZJA established advisory bodies in 2003, and meeting records are published on the PZJA website . Proposed agendas for these meetings are published on the PZJA website in advance, and members of the public are provided the opportunity to attend as observers. 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. Significant management changes are typically subject to a public consultation process.
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 interests. 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. The Hand Collectables Working Group includes an independent Chair, one member from each PZJA agency (QDAF, AFMA, TSRA), scientific members, Traditional Inhabitant industry members and an Executive Officer. The working group provides advice on management issues concerning hand collection fisheries to the PZJA for decision.
Be strategic, containing objectives and performance criteria by which the effectiveness of the management arrangements are measured	Partially meets There are no documented criteria against which management effectiveness is measured. Catches are assessed against the total allowable catch limits each year by the Hand Collectables Working Group. More strategic performance measures are expected to be included in the harvest strategy for the fishery which is being developed in 2018.

Be capable of controlling the level of harvest in the fishery using input and/or output controls

Partially meets

The fishery is currently subject to the following input and output controls:

- Total allowable catch limits for all species (some limits applied at species-level while others are applied as a multi-species catch limit).
- Minimum size limits for key target species
- Boat size limit (≤ 7 m)
- Gear restrictions – hand collection only, no breathing apparatus
- Recreational bag limits
- Licences issues to Traditional Inhabitants only (though the number of licenses is unlimited).

Traditional fishing is subject to a bag limit of three bêche-de-mer per person or six bêche-de-mer per boat, but exempt from size limits. Given traditional fishing and commercial fishing can occur on the same boat at the same time, this may affect capacity to enforce commercial limits.

On 1 December 2017, AFMA introduced a requirement for all commercial fishers to unload their catch to licensed fish receivers. Fish receivers can only receive catch from licenced fishers and are required to weigh all catch and return the associated paperwork to AFMA within three days of receiving the catch. This allows AFMA to better monitor and manage catches than was possible under the voluntary reporting arrangements.

Additional measures have also been identified in Management Strategy Evaluation, stock assessment and other management reviews ([Skewes et al 2010](#); [Haddon 2012](#); [Plaganyi et al 2013](#)) which are being considered as part of the harvest strategy being developed in 2018.

These measures include control rules to manage localised depletion, increases to certain minimum size limits, establishment of more species-specific catch limits and/or triggers, and measures to limit effort pulses and collect fishery independent data. These input and output controls are applied through the *Torres Strait Fisheries Act 1984* and associated instruments, and some are also included in fishing permit conditions. Existing management arrangements are not always clear, based on a review of the PZJA website, and various exceptions exist which may make enforcement difficult. For example, under the *Torres Strait Fisheries Act 1984*, persons are prohibited from taking, processing or carrying bêche-de-mer 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. Commercial-licenced fishing boats can be used for traditional fishing, including during commercial fishing operations. While this traditional fishing is subject to bag limits, size limits do not apply. Recreational fishing is also allowed, subject to recreational rules and regulations. It is likely to be difficult to determine what catch is commercial and what is traditional, recreational or for private purposes.

Contain the means of enforcing critical aspects of the management arrangements	<p>Meets</p> <p>The <i>Torres Strait Fisheries Act 1984</i> outlines penalties for non-compliance with management arrangements and the Queensland Boating and Fisheries Patrol currently enforces these arrangements for Australian fishers in the Torres Strait. AFMA, in co-operation with the Papua New Guinean National Fisheries Authority and Australian Border Force - Maritime Border Command, maintain a compliance presence in the Torres Strait to minimise the risk of incursions by foreign fishing vessels. The enforcement program is cost constrained and made difficult as most fishing occurs in remote areas, amongst many boats spread over a vast area (Patterson et al. 2016).</p> <p>AFMA and the Queensland Boating and Fisheries Patrol undertake an annual compliance risk assessment for the Torres Strait. Recent compliance priorities have included enforcement of zero-catch limits for sandfish, black teatfish and surf redfish as well as unlicensed fishing.</p> <p>Skewes et al (2010) reported significant illegal fishing activity having occurred in Torres Strait by Papua New Guinean fishers over the decade to 2010. Relatively small quantities of sandfish have been taken illegally by Papua New Guinean Nationals in 2014, 2015 and 2016 (Patterson et al. 2016; Patterson et al. 2017). It is not clear whether the quantity of illegal catch detected represents the full extent of illegal, unreported and unauthorised fishing, or if these catches will impair the recovery of the stock (Patterson et al. 2017).</p>
Provide for the periodic review of the performance of the fishery management arrangements and the management strategies, objectives and criteria	<p>Partially meets</p> <p>There do not appear to be any performance reviews built into the management arrangements. The Australian Government Bureau of Agricultural and Resource Economics and Sciences undertakes annual assessments of the fishery using available information (Patterson et al. 2016; Patterson et al. 2017).</p> <p>A Management Strategy Evaluation was undertaken in 2012 (Haddon 2012). AFMA intends to use the Management Strategy Evaluation to assess the likely performance of the proposed harvest strategy, for completion in 2018.</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>The risks associated with hand-collection fisheries are likely to be relatively low. However there has been no ecological risk assessment, and there is no independent monitoring or data collection to assess potential impacts or emerging issues. AFMA anticipates completing an ecological risk assessment for the fishery in 2018-2019.</p> <p>Stock surveys undertaken in the fishery provide some limited information on habitats (e.g. changes to seagrass and sand incursions), but are not designed to collect information on impacts associated with fishing.</p> <p>On 1 December 2017, AFMA introduced a requirement for all commercial fishers to unload their catch to licensed fish receivers. AFMA is also developing a harvest strategy which should facilitate better monitoring and management of catches and the effects of fishing on target species. Development of the harvest strategy will also consider risk of localised depletion as identified by Haddon 2012 and Pagyani et al 2013).</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, the National Policy on Fisheries Bycatch, and bycatch 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>On 1 December 2017 AFMA introduced a requirement for all commercial fishers to unload their catch to licensed fish receivers. However fishers are not required to report information on their fishing activity. Mandating this reporting would require legislative amendment to remove the current exemptions for Traditional Inhabitant fishers. Information is therefore limited to quantities of species landed.</p> <p>Catch is processed in various ways prior to being unloaded to fish receivers and where necessary AFMA applies conversion factors to reconcile the processed weights reported by fish receivers, against catch limits which are in gutted wet weights.</p> <p>Plagyan et al (2013), evaluated risk management tools under changing climate and recommended harvest control rules with triggers and spatial management, as well as data collection protocols and simple analyses to manage the risk of overall and localised stock depletion and significant changes in species composition. These recommendations are expected to be considered in development of the harvest strategy for the fishery in 2018.</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>Assessment and review is intended to occur triennially, however, with the exception of a limited survey for sandfish at Warrior Reef in 2012, has not occurred since 2009. Previous assessments occurred in 1995, 2002, and 2005.</p> <p>Frequency of assessment was based on growth rates and biology of bêche-de-mer, but assessment has been deferred until the harvest strategy is developed.</p> <p>The surveys are used to inform the setting of annual catch limits, including zero catch limits for three species which were found to be overfished (Skewes et al. 2010).</p> <p>The 2009 stock survey estimates of catch for most years between 1996 and 2005 but little data analysis is presented in the report (Skewes et al. 2010).</p> <p>The Australian Bureau of Resource Economics and Sciences reviews the estimates of fishery catch and any stock survey results each year to determine fishery status (Patterson et al. 2016; Patterson et al. 2017).</p>
1.1.3 The distribution and spatial structure of the stock(s) has been established and factored into management responses.	<p>Partially meets</p> <p>Stock surveys, most recently undertaken in 2009, are designed around the known geographical distribution of stocks and focus on particular areas of the fishery. Distribution and spatial structure of the stocks is not reflected in the fishery's management arrangements.</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>Meets</p> <p>Participation in the fishery is restricted to traditional inhabitants and (as of 1 December 2017) all commercial fishers are required to unload their catch to licensed fish receivers. Bêche-de-mer are not caught by any other commercial or non-commercial fishers in the area.</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>Partially meets</p> <p>Productivity is not well understood. Stock surveys have considered abundance and size distribution to infer relative stock status. The last survey occurred in 2009.</p>

Management responses

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.

Partially meets

No target or limit reference points exist for this fishery. AFMA intend to complete a fishery-wide harvest strategy in 2018. This harvest strategy is expected to include biological reference points and be subject to a Management Strategy Evaluation.

Competitive species-level total allowable catch limits are in place for five species, and a multi-species total allowable catch limit exists for the remaining species. The limits are however poorly communicated and the multi-species catch limit has been identified as a potential risk ([Haddon 2012](#); [Patterson et al. 2017](#)). The harvest strategy is also expected to address these issues.

Setting and monitoring catches against precautionary reference points would likely assist in managing catches and avoiding overfishing, as well as determining when total allowable catches should be increased and decreased.

1.1.7 There are management strategies in place capable of controlling the level of take.

Partially meets

The fishery is currently subject to the following input and output controls:

- Total allowable catch limits for all species (some limits applied at species-level while others are applied as a multi-species catch limit).
- Minimum size limits for key target species
- Boat size limit (≤ 7 m)
- Gear restrictions – hand collection only, no breathing apparatus
- Recreational bag limits
- Licences issues to Traditional Inhabitants only (though the number of licenses is unlimited).

Traditional fishing is subject to a bag limit of three bêche-de-mer per person or six bêche-de-mer per boat, but exempt from size limits. Given traditional fishing and commercial fishing can occur on the same boat at the same time, this may affect capacity to enforce commercial limits.

On 1 December 2017 AFMA introduced a requirement for all commercial fishers to unload their catch to licensed fish receivers. Fish receivers can only receive catch from licenced fishers and are required to weigh all catch and return the associated paperwork to AFMA within three days of receiving the catch. This allows AFMA to better monitor and manage catches than was possible under the voluntary reporting arrangements.

Additional measures have also been identified in Management Strategy Evaluation, stock assessment and other management reviews ([Skewes et al 2010](#); [Haddon 2012](#); [Plaganyi et al 2013](#)) which are being considered as part of the harvest strategy being developed in 2018.

These measures include control rules to manage localised depletion, increases to certain minimum size limits, establishment of more species-specific catch limits and/or triggers, and measures to limit effort pulses and collect fishery independent data.

These input and output controls are applied through the *Torres Strait Fisheries Act 1984* and associated instruments, and some are also included in fishing permit conditions. Existing management arrangements are not always clear, based on a review of the PZJA website, and various exceptions exist which may make enforcement difficult. For example, under the *Torres Strait Fisheries Act 1984*, persons are prohibited from taking, processing or carrying bêche-de-mer 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. Commercial-licenced fishing boats can be used for traditional fishing, including during commercial fishing operations. While this traditional fishing is subject to bag limits, size limits do not apply. Recreational fishing is also allowed, subject to recreational rules and regulations. It is likely to be difficult to determine what catch is commercial and what is traditional, recreational or for private purposes.

1.1.8 Fishing is conducted in a manner that does not threaten stocks of byproduct species.	Meets Hand collection methods are highly selective allowing all byproduct to be avoided.
(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.	Partially meets An evaluation of risk management tools under changing climate concluded that current management would result in half of the species falling below target levels, moderate risks of overall and local depletion, and significant changes in species composition (Plagyan et al 2013). The evaluation recommends harvest control rules with triggers and spatial management, as well as data collection protocols and simple analyses to better manage these risks. AFMA is considering these recommendations in developing and testing a harvest strategy for the fishery in 2018. Notwithstanding the issues identified in items 1.1.1 to 1.1.7 of this report, the management regime is likely to achieve the objective of maintaining ecologically viable stock levels.
If overfished, go to Objective 2: If not overfished, go to PRINCIPLE 2:	
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.	Partially meets One species is currently overfished and possibly also subject to overfishing. Species that are overfished have been closed to commercial fishing (zero total allowable catch), but there is no documented recovery strategy, staged management, reference points or timeframe for recovery of any species. Another 18 species may also be overfished (uncertain status) but are unlikely to be subject to overfishing (Patterson et al. 2017). These species have a cumulative total allowable catch limit which is significantly higher than any individual species' catch limit in the fishery, is not based on individual species' biology, and is unable to control catches of individual species (Patterson et al. 2016 ; Patterson et al. 2017). It has been recommended that more species-specific catch limits or trigger limits be introduced to manage risks to these species (Haddon 2012 ; Patterson et al. 2016). Stock surveys are infrequent (last full survey in 2009, Sandfish survey 2012) and monitoring of stock recovery is limited. AFMA expect to complete a fishery-wide harvest strategy in 2018. This will be subject to a Management Strategy Evaluation and is expected to include a biological target and limit reference points. The last Management Strategy Evaluation (Haddon 2012) considered that sandfish may not recover from their overfished state in the short term, even in the absence of fishing. Haddon (2012) recommended increases to the size limit for sandfish, as well as deepwater redfish, if fishing was to recommence. This will be considered as part of the harvest strategy development in 2018.
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.	Partially meets While there are no biological or effort-based thresholds specified for any of the species in the fishery, some species have been determined to be overfished and have had zero-catch limits imposed (at least 18 species have uncertain status). Total allowable catch limits are communicated via permit conditions on licences. A Management Strategy Evaluation (Haddon 2012) considered that sandfish may not recover in the short term, even in the absence of fishing, but recommended increases to size limits for this species as well as deepwater redfish if fishing was to occur.

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.	Not applicable There is no bycatch associated with hand collection fisheries.
Assessments	
2.1.2 There is a risk analysis of the bycatch with respect to its vulnerability to fishing.	Not applicable Although no formal risk analysis has been undertaken, hand collection methods are highly selective and allow all bycatch to be avoided.
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.	Meets Hand collection methods are highly selective and allow bycatch to be avoided.
2.1.4 An indicator group of bycatch species is monitored.	Not applicable Hand collection methods are highly selective and allow bycatch to be avoided.
2.1.5 There are decision rules that trigger additional management measures when there are significant perturbations in the indicator species numbers.	Not applicable Hand collection methods are highly selective and allow bycatch to be avoided.
2.1.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	Meets Hand collection methods are highly selective and allow bycatch to be avoided.
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.	Does not meet AFMA has an approved daily fishing logbook available for this fishery, which includes provision to report interactions with endangered, threatened or protected species. Reporting is voluntary. Due to problems with reporting accuracy, fishers are no longer encouraged to use the logbooks. Legislative amendments are required to mandate reporting by Traditional Inhabitant fishers. While there have been no reported interactions with endangered, threatened or protected species and threatened communities in this fishery, and the risks are likely to be relatively low, there is no means to monitor or respond to any changes should they occur.

Assessments	
2.2.2 There is an assessment of the impact of the fishery on endangered, threatened or protected species.	<p>Partially meets</p> <p>No ecological risk assessment has been completed for this fishery. Reports on dugong and turtles in the area provide some insight into potential risks to these species.</p> <p>The fishing methods used (free diving and hand collection with or without the use of a boat) mean that risks to protected species are likely to be relatively low, but may include impacts such as boat strikes, anchoring or trampling.</p> <p>A number of endangered, threatened and protected species occur in the region and assessment and mitigation is recommended as part of any precautionary management regime. Dugongs and turtles are amongst these species. Dugongs spend much of their time in depths of five to 20 meters so may be less at risk of boat strike than turtles which spend more time around reef habitats in waters less than five meters. The large mother-ships from which the tender boats operate, typically anchor in sheltered areas and not over reef. Anchoring of large commercial boats in channels adjacent to dugong feeding grounds was identified as a potential concern in a study on Western and Central Torres Strait (Hagihara et al. 2016).</p> <p>AFMA intends to complete an ecological risk assessment for this fishery by July 2019.</p>
2.2.3 There is an assessment of the impact of the fishery on threatened ecological communities.	<p>Not applicable</p> <p>There are no threatened ecological communities in the area of the fishery.</p>
Management responses	
2.2.4 There are measures in place to avoid capture and/or mortality of endangered, threatened or protected species.	<p>Partially meets</p> <p>The risks associated with hand-collection fisheries are likely to be relatively low. However, there has been no formal risk assessment and there is no means to report, monitor or respond to emerging issues.</p> <p>AFMA intends to complete an ecological risk assessment for this fishery by July 2019. An ecological risk management strategy will then be developed.</p>
2.2.5 There are measures in place to avoid impact on threatened ecological communities.	<p>Not applicable</p> <p>No threatened ecological communities have been identified in the area of the fishery.</p>
2.2.6 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 risks associated with hand-collection fisheries are likely to be relatively low and unlikely to have significant impact on endangered, threatened or protected species. An assessment would provide greater confidence and allow any potential issues to be monitored and responded to as necessary.</p> <p>AFMA intends to complete an ecological risk assessment for this fishery by July 2019. An ecological risk management strategy will then be developed.</p>
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.	<p>Partially meets</p> <p>The risks associated with hand-collection fisheries are likely to be relatively low. However, no ecological risk assessment has been undertaken and there is no system for collecting information on the impact of the fishery on the ecosystem and environment generally.</p> <p>AFMA intends to complete an ecological risk assessment for this fishery by July 2019. An ecological risk management strategy will then be developed.</p>

Assessment	
<p>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.</p> <ol style="list-style-type: none"> Impacts on ecological communities <ul style="list-style-type: none"> Benthic communities Ecologically related, associated or dependent species Water column communities Impacts on food chains <ul style="list-style-type: none"> Structure Productivity/flows Impacts on the physical environment <ul style="list-style-type: none"> Physical habitat Water quality 	<p>Partially meets</p> <p>Information on potential impacts of the fishery on the ecosystem is not collected and there has been no ecological risk assessment conducted for the Torres Strait Bêche-de-mer Fishery.</p> <p>The Department's previous assessment of the fishery noted that AFMA considered that impacts of the fishery on the ecosystem may include: over-exploitation of target species; translocation of species via hull and anchor fouling; and impacts of anchoring/mooring and other anthropogenic activities such as treading on reef top habitat.</p> <p>Hand collection is likely to have a relatively small impact on the physical environment. However, bêche-de-mer are believed to play an important role in the nutrient cycling pathways of benthic environments. Overfishing (including localised depletion) may therefore have an impact on this function.</p> <p>Dugong may also be impacted by the presence of large vessels (mother-ships from which the tender boats operate) anchoring in channels adjacent to dugong feeding grounds (Hagihara et al. 2016). AFMA has advised that these vessels anchor in a small number of areas that provide shelter and access to fishing areas. It is unknown whether these areas correspond to the channels frequented by dugong.</p> <p>Undertaking a risk assessment would provide greater confidence in these assumptions and allow any identified issues to be monitored and responded to as necessary.</p> <p>AFMA intends to complete an ecological risk assessment and ecological risk mitigation strategy for this fishery by July 2019.</p>
Management responses	
<p>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.</p>	<p>Partially meets</p> <p>The risks associated with hand-collection fisheries are likely to be relatively low and unlikely to have significant impact on ecosystems, provided stocks are managed sustainably. AFMA intends to complete an ecological risk assessment for this fishery by July 2019. An ecological risk management strategy will then be developed.</p>
<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</p> <p>While there has been no ecological risk assessment to identify the risk to the ecosystem, the scale and nature of the fishery suggests any impact is likely to be low.</p> <p>There is no means to monitor interactions, and no plan to manage any current or emerging issues. Undertaking a risk assessment would provide greater confidence in this assumption and allow any identified issues to be monitored and responded to as necessary. AFMA intends to complete an ecological risk assessment for this fishery by July 2019. An ecological risk management strategy will then be developed.</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</p> <p>The risks associated with hand-collection fisheries are likely to be relatively low. Undertaking a risk assessment would provide greater confidence in this assumption and allow any identified issues to be monitored and responded to as necessary. AFMA intends to complete an ecological risk assessment for this fishery by July 2019. An ecological risk management strategy will then be developed.</p>

SECTION 3: ASSESSMENT OF THE TORRES STRAIT BÊCHE-DE-MER 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	There are no marine bioregional plans relevant to the Torres Strait Bêche-de-mer Fishery.

Part 13

Accreditable plan, regime or policy (Divisions 1, 2, 3 and 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 Bêche-de-mer Fishery management policy” was accredited in June 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 No formal risk assessment has been undertaken, however the risks associated with the fishery are likely to be very low. No interactions with listed threatened species have been reported.
(g) And, is the fishery likely to adversely affect the survival or recovery in nature of the species.	No Records show no reported interactions with listed threatened 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 No formal risk assessment has been undertaken, however the risks associated with the fishery are likely to be very low. No interactions with listed migratory species have been reported.
(g) And, is the fishery likely to adversely affect the conservation status of a listed migratory species or a population of that species?	No 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 No formal risk assessment has been undertaken, however the risks associated with the fishery are likely to be very low. No interactions with cetaceans have been reported.

(g) And is the fishery likely to adversely affect the conservation status of a species of cetacean or a population of that species?	No No interactions with cetaceans have been reported between 1 January 2012 and 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 No formal risk assessment has been undertaken, however the risks associated with the fishery are likely to be very low. No interactions with listed marine species have been reported.
(g) And is the fishery likely to adversely affect the conservation status of a listed marine species or a population of that species?	No No interactions with listed marine species have been reported between 1 January 2012 and 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 Interactions with protected species are 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: <ul style="list-style-type: none"> (a) during a particular period; or (b) while certain circumstances exist; or (c) while a certain condition is complied with. In such a case, the instrument of accreditation is to specify the period, circumstances or condition.	No 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
(3) The Minister must not issue a permit unless the Minister is satisfied that: (a) the action or actions specified in the permit will not be detrimental to, or contribute to trade which is detrimental to: i the survival of any taxon to which the specimen belongs; or ii. the recovery in nature of any taxon to which the specimen belongs; or iii any relevant ecosystem (for example, detriment to habitat or biodiversity).	Not applicable
Section 303DC Minister may amend list (non CITES species)	
(1) The Minister may, by legislative instrument, amend the list referred to in section 303DB [list of exempt native specimens] by: (a) doing any of the following: (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 Bêche-de-mer 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 Bêche-de-mer Fishery is subject to a declaration as an approved wildlife trade operation.
(1A) In deciding to amend the LENS, the Minister must rely primarily on outcomes of Part 10, Div 1 or 2 assessment	Meets The Torres Strait Bêche-de-mer Fishery was assessed under Part 10 of the EPBC Act in June 2005. As a result of the assessment, the Department considered that actions taken in the fishery would not have an unacceptable or unsustainable impact on the environment in a Commonwealth marine area. The management regime was most recently accredited under section 33 of the EPBC Act in June 2014 . There have been no significant changes to the management regime since that time. The Department recommends that the LENS is amended under section 303DC(1)(a) to include product derived from the Torres Strait Bêche-de-mer Fishery while the specimens are covered by an approved wildlife trade operation declaration under section 303FN.
(1C) The above does not limit matters that may be considered when deciding to amend LENS.	Meets The management arrangements for the Torres Strait Bêche-de-mer Fishery are consistent with Objects of 13A – see assessment above.
(3) Before amending the LENS, the 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.	Meets The submission for assessment was available for public comment on the Department's website from 26 April 2017 to 31 May 2017 (26 business days). No comments were received.
Section 303FN Approved wildlife trade operation	
(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.	

(3) The Minister must not declare an operation as an approved wildlife trade operation unless the Minister is satisfied that: (a) the operation is consistent with the objects of Part 13A of the Act; and	Meets The Torres Strait Bêche-de-mer Fishery is consistent with the Objects of Part 13A – refer assessment 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	Meets Subject to the conditions specified in Section 4 of this report, the Torres Strait Bêche-de-mer 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 three years , given the management measures in place.
(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 Bêche-de-mer Fishery will not have a significant impact on any relevant ecosystem within the next three years , given the management measures 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 Bêche-de-mer Fishery as outlined in the assessment above, 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 fishery will be managed in accordance with the <i>Torres Strait Fisheries Act 1984</i> which applies throughout the area of the Torres Strait Protected Zone. The legislation is likely to be effective.
(10) For the purposes of section 303FN, an operation is a wildlife trade operation if, an only if, the operation is an operation for the taking of specimens and: (a) the operation is a commercial fishery.	Meets The Torres Strait Bêche-de-mer 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 Bêche-de-mer Fishery was assessed under Part 10 of the EPBC Act in June 2005 and the management regime most recently accredited pursuant to section 33 of the EPBC Act in June 2014 . The Department considered that actions taken in the fishery would not 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	
<p>(1) Before making a declaration under section 303FN, the Minister must cause to be published on the Internet a notice:</p> <ul style="list-style-type: none"> (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. <p>(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.</p>	<p>Meets</p> <p>A public notice, which set out the proposal to declare the Torres Strait Bêche-de-mer Fishery an approved wildlife trade operation and included the application from AFMA, was released for public comment between 26 April and 31 May 2017, a total of 26 business days.</p>
<p>(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.</p>	<p>Not applicable</p> <p>No public comments about the proposal were received.</p>
Section 303FT Additional provisions relating to declarations	
<p>(1) This section applies to a declaration made under section 303FN, 303FO or 303FP.</p>	<p>A declaration for the Torres Strait Bêche-de-mer Fishery will be made under section 303FN.</p>
<p>(4) The Minister may make a declaration about a plan or operation even though he or she considers that the plan or operation should be the subject of the declaration only:</p> <ul style="list-style-type: none"> (a) during a particular period; or (b) while certain circumstances exist; or (c) while a certain condition is complied with. <p>In such a case, the instrument of declaration is to specify the period, circumstances or condition.</p>	<p>The standard conditions applied to commercial fishery wildlife trade operations include:</p> <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>. <p>The wildlife trade operation instrument for the Torres Strait Bêche-de-mer Fishery specifies these standard conditions and others specified in Section 4 of this report.</p>
<p>(8) A condition may relate to reporting or monitoring.</p>	<p>Conditions specified in Section 4 of this report include reporting requirements.</p>
<p>(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.</p>	
<p>(11) A copy of an instrument under section 303FN, or this section is to be made available for inspection on the internet.</p>	<p>The instrument for the Torres Strait Bêche-de-mer 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.</p>

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>Precautionary measures are considered to be in place to prevent serious or irreversible environmental damage being caused by this fishery.</p>

SECTION 4: TORRES STRAIT BÊCHE-DE-MER 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 Bêche-de-mer Fishery will be carried out in accordance with the management regime 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 Bêche-de-mer 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>

Harvest controls

Effective harvest controls are necessary to manage the ecological effects of fishing. The Torres Strait Bêche-de-mer Fishery includes various controls, but these have not always been effective in limiting harvest and avoiding overfishing.

Some catch limits are informed by stock surveys and are applied to individual species. Other catch limits are set much higher and apply to a group of species. These multi-species limits do not reflect the harvest potential of individual species but cater for small catches of the many constituent species. Overfishing can occur if particular species are targeted more than others.

In addition to total catch, it is also important that harvest controls consider the distribution of stocks and spatial distribution of fishing effort. This seeks to manage the effects of localised depletion. Spatial management is used to manage bêche-de-mer in adjacent fisheries (Commonwealth Coral Sea Fishery and Queensland state-managed fisheries), but not in the Torres Strait.

Harvest controls must also be enforceable. Controls in the Torres Strait are complex and subject to numerous exceptions. They are also poorly communicated via the PZJA website and this may make it difficult for people to understand and comply, and for authorities to enforce the arrangements.

The Torres Strait Protected Zone Joint Authority is in the process of implementing a suite of changes that are expected to address these issues over the coming years. These include:

- requirement for vessels to operate Vessel Monitoring Systems (1 July 2017)
- introduction of a public Torres Strait fisheries licence register (12 October 2017)
- requirement for all commercial fishers to unload catch to licensed fish receivers (1 December 2017)
- development of a harvest strategy, including a review of minimum size limits and conversion ratios describing framework for setting future catch limits (end 2018)

Condition 4:

The Torres Strait Protected Zone Joint Authority to implement a strategy to manage the risks of overfishing and localised depletion for all species harvested in the fishery.

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.

Issue	Condition
<ul style="list-style-type: none"> development of an ecological risk assessment (July 2019) and subsequent development of ecological risk management strategy (TBA). legislative amendments to provide the capacity to require mandatory reporting and issue fishery infringement notices (TBA but likely outside the timeframe of the approval proposed by this assessment report). 	
<p><u>Ecological risk assessment and mitigation</u></p> <p>Fisheries can have a range of impacts on the environment and ecosystems. Ecological risk assessments are used to inform the fishery's data collection, monitoring and management systems.</p> <p>A number of endangered, threatened and protected species occur in the region, and assessment and mitigation is recommended as part of any precautionary management regime.</p> <p>AFMA intends to complete an ecological risk assessment for this fishery by July 2019.</p> <p>While the risks are likely to be relatively low, undertaking a risk assessment would provide greater confidence in these assumptions and allow any identified issues to be monitored and responded to as necessary.</p> <p>The Torres Strait Protected Zone Joint Authority has committed to develop an ecological risk assessment by July 2019 and to subsequently develop and implement an ecological risk management strategy.</p>	<p>Condition 5:</p> <p>The Torres Strait Protected Zone Joint Authority to complete an ecological risk assessment and implement an ecological risk mitigation strategy to ensure all environmental and ecological risks are appropriately managed.</p> <p>Condition 6:</p> <p>The Torres Strait Protected Zone Joint Authority to continue to pursue the changes necessary to facilitate reporting of interactions with species listed in Part 13 of the <i>Environment Protection and Biodiversity Act 1999</i>.</p>

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Australian Government

Department of the Environment and Energy

Assessment of the
Torres Strait Trochus Fishery

December 2017

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

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.

While reasonable efforts have been made to ensure that the contents of this report are factually correct, the Australian Government does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this report. You should not rely solely on the information presented in the report when making a commercial or other decision.

EXECUTIVE SUMMARY OF THE TORRES STRAIT TROCHUS FISHERY ASSESSMENT

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 Trochus 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 between 26 April to 31 May 2017. No comments were received.

The Torres Strait Trochus Fishery targets a single trochus species, *Tectus niloticus*, using hand-collection and diving in the Torres Strait Protected Zone. Historically this fishery has been declared as a WTO. However, there has been no commercial fishing activity in this fishery since 2010. While there is no effort in the fishery, it does not pose any ecological risks.

The Department recommends that the fishery be exempt from the export requirements of the EPBC Act and product derived from the fishery be included on the List of Exempt Native Specimens until 9 October 2026. Should fishing effort increase in the Torres Strait Trochus Fishery, the Department will reassess the fishery.

SECTION 1: ASSESSMENT SUMMARY OF THE TORRES STRAIT TROCHUS 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	4 of 9 & 1 N/A	3 of 9	1 of 9	The management regime is poorly defined but actions are underway to address this. There are no systems to measure the effectiveness of the fishery arrangements and no formal ecological risk assessment or risk management system in place.
Principle 1 (target stocks)	2 of 11 & 2 N/A	3 of 11	4 of 11	Capacity to collect fishery data has been significantly improved but is limited to information on commercial catch volumes. Information on non-commercial catches remains uncertain and fishers are not required to report any information. Understanding of stock dynamics and status, distribution, productivity and fishing capacity is also very limited. Management arrangements are also subject to exceptions which may affect compliance capacity in some instances.
Principle 2 (bycatch and TEPS)	0 of 12 & 8 N/A	2 of 12	2 of 12	This is a hand collection fishery and risk to Part 13-listed species is considered to be low. However there has been no formal assessment and there is no system to facilitate reporting if interactions do occur. It is also unlikely that fishers are aware of their reporting requirements under the EPBC Act.
Principle 2 (ecosystem impacts)	0 of 5	5 of 5	0 of 5	Risk to ecosystem is likely to be relatively low, but there has been no formal assessment.
EPBC requirements				
Part 12				No marine bioregional plans apply to the area of the Torres Strait.
Part 13	Meets			There have been no reported interactions with Part 13 listed species, and risks are likely to be low.
Part 13A	Meets			The Torres Strait Trochus Fishery is consistent with the Objects of Part 13A. Inclusion on the List of Exempt Native Specimens is recommended for nine years, until 9 October 2026.
Part 16	Meets			Given the lack of fishing activity management is considered sufficiently precautionary to prevent serious or irreversible environmental damage being caused by this fishery.

Assessment history:

1st assessment finalised 2005 – WTO with 3 conditions, 6 recommendations.

2nd assessment finalised 2008 – WTO with 3 conditions, 4 recommendations.

3rd assessment finalised 2012 – WTO with 3 conditions, 3 recommendations.

Fishery reporting:

Annual report – No annual reports have been provided to the Department.

Other reports providing information on the fishery include:

- [Combined Torres Strait Protected Zone Joint Authority Annual Report 2011-2012, 2012-2013, 2013-2014](#)
- [AFMA Protected Species Interaction Reports](#)
- [Australian Bureau of Agricultural and Resource Economics Fishery Status Reports](#)

Key links:

Fishery information page on agency website: <http://pzja.gov.au/the-fisheries/torres-strait-trochus-fishery/#.We6nINV96Uk>

There is no formal management plan, harvest strategy, ecological risk assessment, ecological risk mitigation strategy or publically available stock assessment for this fishery. Some arrangements are outlined in [A guide to management arrangements for Torres Strait Fisheries, June 2004](#).

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. 13](#)
- [Fisheries Management Notice No. 47 – Torres Strait Fisheries \(restriction on size of boats\)](#)
- [Community Fishing Notice No. 1](#) (pdf copy on PZJA website but not found on legislation.gov.au)
- [Torres Strait Fisheries Act 1984 - Proclamation \(17/03/1999\)](#)

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

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 some information is available on the PZJA's website, important 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. A website review is currently underway and expected to be completed by July 2018. Records of various management-related meetings are included on the PZJA website .
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 meeting records are published on the PZJA website . Agendas for these meetings are also published on the PZJA website in advance of the meetings, and members of the public are provided the opportunity to attend as observers. 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. Significant management changes are typically subject to a public consultation process.
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. 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	Does not meet Catch is assessed against the total allowable catch limit each year by the Hand Collectables Working Group but there is no harvest strategy or strategic plan for the management or assessment of the fishery. The CSIRO recommended various harvest strategies for the fishery to manage the risk of overexploitation (Murphy et al. 2010), but given the lack of fishing since that time, these have not been adopted. Harvest strategies are scheduled to be developed for other Torres Strait Fisheries during 2017–2020, but are not scheduled for the Torres Strait Trochus Fishery. If fishing resumes these sorts of strategies will be important to manage the risk of overexploitation.

Be capable of controlling the level of harvest in the fishery using input and/or output controls	<p>Meets</p> <p>A variety of input and output controls are used in the fishery. These include size limits, total allowable catch limits, boat size limits, gear restrictions and restriction of commercial fishing to licenced traditional inhabitants. Although there are no restrictions on the number of licenses available, all fishers are required to unload their catch to a licensed fish receiver who is then required to report this to AFMA within three days. In this way AFMA can monitor and manage catches.</p>
Contain the means of enforcing critical aspects of the management arrangements	<p>Meets</p> <p>The <i>Torres Strait Fisheries Act 1984</i> outlines penalties for non-compliance with management arrangements and the Queensland Boating and Fisheries Patrol currently enforces these arrangements for Australian fishers in the Torres Strait.</p> <p>AFMA in co-operation with the Papua New Guinean National Fisheries Authority and Australian Border Force - Maritime Border Command maintain a compliance presence in the Torres Strait to minimise the risk of incursions by foreign fishing vessels.</p> <p>AFMA and the Queensland Boating and Fisheries Patrol undertake an annual compliance risk assessment for the Torres Strait. The Queensland Boating and Fisheries Patrol has not identified any compliance priorities for the fishery (PZJA 2015).</p> <p>There were no reported breaches of regulations in the fishery in 2015, but enforcement is difficult as much of the fishing occurs in remote areas, amongst many boats spread over a vast area. The current compliance program is restricted by the costs of implementing a program in these circumstances.</p> <p>Some catch by illegal foreign fishers has been recorded in the past, but illegal foreign fishing is not considered a risk for the fishery due to the low market value of trochus product.</p>
Provide for the periodic review of the performance of the fishery management arrangements and the management strategies, objectives and criteria	<p>Partially meets</p> <p>There do not appear to be any performance reviews built into the management arrangements; however the Australian Government Bureau of Agricultural and Resource Economics and Sciences undertake annual assessments of this and other Commonwealth managed fisheries, using available information.</p> <p>Following the last (2009) survey of trochus in eastern Torres Strait, the CSIRO raised concern regarding the appropriateness of the trochus total allowable catch limit. It recommended introducing a trigger catch level of 100 tonnes (whole weight) with agreed management actions if this level was reached. This was to mitigate the risk of overfishing (Murphy et al. 2010). These recommendations have not been adopted and the total allowable catch limit remains unchanged.</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>Although there has been no formal risk assessment AFMA has suggested that ecosystem impacts may be associated with exploitation of target species; translocation of species via hull and anchor fouling; and anchoring/mooring and other anthropogenic activities such as treading on reef top habitat. There are no risk mitigation measures in place at this time, but the risks are likely to be relatively low.</p> <p>Undertaking an assessment would however provide greater confidence and allow any issues to be monitored and responded to as necessary.</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, the National Policy on Fisheries Bycatch, and bycatch 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.

Partially meets

All fishers must unload their catch to licenced fish receivers, who must then report this information to AFMA within three days. While this gives reliable information about catch volumes, fishers cannot be required to report any information on their fishing activity without legislative change. This significantly reduces AFMA's capacity to collect important fishery data.

Fishery independent surveys are undertaken periodically, and usually in association with survey of other Torres Strait fishery resources. The last survey was in 2009 and the commercial fishery has been inactive since that time.

The amount of non-commercial, including traditional harvest, is unknown, but trochus meat is often consumed by the community and is recognised as an important food source ([Crowe et al. 2002](#); [PZJA 2015](#); [AFMA 2017](#)).

Torres Strait Islanders have one of the highest recorded per capita seafood consumption rates in the world (Harris et al. 1994 and [Skewes et al. 2004](#) in [Murphy et al. 2010](#)) and also use trochus shell for arts and crafts ([Crowe et al. 2002](#) and [AFMA 2008](#) in [Murphy et al. 2010](#)).

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.

Does not meet

Torres Strait Trochus stocks have never been properly assessed at the regional level ([O'Silva 2001](#) and [Wilson et al. 2009](#) in [Murphy et al. 2010](#)), and there is no published abundance estimate for the Torres Strait ([Skewes 2010](#)).

Stock surveys were undertaken when the fishery was commercially active, but not since 2009. Estimates of density and standing stock from these surveys are considered unreliable, with density estimates having very low precision and little capacity to detect even large changes in trochus density ([Murphy et al. 2010](#)).

The total allowable catch limit (150 tonnes) is not scientifically based and may not be sustainable ([Murphy et al. 2010](#)). There is also no mechanism to assess the suitability of the limit or the sustainability of historical catches ([Murphy et al. 2010](#)). The reported annual catch of trochus over the last 10 years that the fishery was active (4–82 tonnes) was well below the total allowable catch limit of 150 tonnes ([Murphy et al. 2010](#)).

Trochus are highly vulnerable to any form of intensive exploitation ([David 2006](#) in [Murphy et al. 2010](#)) and highly susceptible to overfishing ([Castell 1997](#) and [Wright & Hill 1993](#) in [Murphy et al. 2010](#)). The fishery operates in a boom and bust fashion with activity closely linked to international demand and price for trochus, and overfishing may occur if prices remain high for an extended period ([AFMA 2008](#) in [Murphy et al. 2010](#)).

There has been a pattern of rapid declines shortly after commencement of commercial fishing for trochus in Torres Strait, with the fishery being overfished within the first four years of commencing in 1912 ([Wright & Hill 1993](#) in [Murphy et al. 2010](#)). ABARES ([Patterson et al. 2017](#)) has been unable to determine whether the stock is currently overfished, but given the current lack of commercial fishing, considers that overfishing is not occurring.

Populations experiencing declining densities from overfishing can suddenly collapse and be unable to recover ([Foale & Day 1997](#); [Foale 1998](#); in [Murphy et al. 2010](#)), and the short planktonic duration of larvae before settlement limits the dispersal range of the species ([Foale & Day 1997](#) in [Murphy et al. 2010](#)).

Trochus are also prone to recruitment overfishing on individual reefs, especially if neighbouring reefs are also overfished. Recruitment is further affected on reefs with relatively little suitable habitat for juveniles ([Foale & Day 1997](#) in [Murphy et al. 2010](#)). Evidence of stock collapse due to recruitment overfishing of trochus has been reported for several reefs on the Great Barrier Reef and in New Caledonia ([Foale & Day 1997](#) in [Murphy et al. 2010](#)), and significant declines have also been reported on reefs north of King Sound in Western Australia (over 135 tonnes per annum in 1980, to only 12 tonnes by 1998; [Crowe et al. 2002](#) in [Murphy et al. 2010](#)). A number of trochus fisheries in the Indo-Pacific region have also been overfished and no longer yield their full potential ([Foale & Day 1997](#); [Clarke et al. 2003](#); [AFMA 2008](#) in [Murphy et al. 2010](#)). Trochus are now protected in Indonesia ([Crowe et al. 2002](#) in [Murphy et al. 2010](#)).

AFMA is pursuing legislative changes to mandate reporting of fishery data by Traditional Inhabitant commercial fishers in the Torres Strait and this should aid in future monitoring and management.

1.1.3 The distribution and spatial structure of the stock(s) has been established and factored into management responses.

Does not meet

The distribution and spatial structure of the stocks does not appear to be considered in managing the fishery. Localised depletion has been identified as a risk ([AFMA 2008](#)) and has been observed in all regions of the fishery (Tawake pers. comm. and [Raudzens 2007](#) in [Murphy et al. 2010](#)).

[Murphy et al. \(2010\)](#) recommended that effort be distributed and a proportion of the breeding stock be protected ([Murphy et al. 2010](#)). AFMA suggested these protections could include, but should not be limited to, closed areas, move on rules or rotational zoning ([AFMA 2017](#)), but these measures are yet to be implemented. AFMA has undertaken to review these requirements if commercial fishing recommences.

<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>There have been significant problems collecting fishery data in the past, with no data collected for 10 of the 13 years during 1991–2003, and that which was collected being unreliable (D'Silva 2001 in Murphy et al. 2010). However, from 1 December 2017 all commercial fishers are required to unload their catch to licenced fish receivers, who must then report this information to AFMA within three days. This is expected to greatly improve estimates of commercial removals from the fishery.</p> <p>Trochus meat is also often consumed by the Torres Strait community. While the extent of non-commercial harvest is unknown (PZJA 2015 and AFMA 2017), Torres Strait Islanders are known to have one of the highest recorded per capita seafood consumption rates in the world (Harris et al., 1994; Skewes et al. 2004 in Murphy et al. 2010) and also use trochus shells in arts and crafts (Crowe et al. 2002; AFMA 2008 in Murphy et al. 2010).</p> <p>The risk of illegal fishing for trochus is considered low while trochus are of lower value than other products in the region (e.g. tropical rock lobster and finfish).</p> <p>Estimates of all removals are likely to be important to guide the setting of total allowable catch limits for the commercial sector and should be considered if commercial fishing recommences.</p> <p>The basis for the current 150 tonne total allowable catch limit is unknown and does not appear to be based on estimates of abundance from stock surveys or catch data.</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>Does not meet</p> <p>There is no sound estimate of potential productivity or the proportion that can be harvested from the fishery. Stocks have never been properly assessed at the regional level (D'Silva 2001; Wilson et al. 2009 in Murphy et al. 2010) and there are no published abundance estimates for Torres Strait (Skewes 2010).</p> <p>Estimates of density and standing stock from periodic fishery surveys are considered unreliable, the total allowable catch limit is not scientifically based and may not be sustainable and there is no means to assess the sustainability of the total allowable catch limit or historic catches (Murphy et al. 2010).</p> <p>The reported annual catch of trochus over the last 10 years that the fishery was active (4-82 tonnes) was well below the total allowable catch limit of 150 tonnes (Murphy et al. 2010) and there is insufficient information to determine whether the biomass is overfished. However the stock is not thought to be subject to overfishing (Patterson et al. 2017).</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>Does not meet</p> <p>There are no reference points or management triggers used in the management of the fishery, and given the current lack of commercial activity in the fishery, no harvest strategy is scheduled to be developed which would typically contain these measures.</p> <p>Murphy et al. (2010) raised concerns regarding the appropriateness of the total allowable catch limit, and recommended triggers based on historical information, anecdotal harvest patterns and a 20 per cent exploitation rate of the estimated standing stock. They also recommended that catches above the triggers not occur without further stock assessment to determine sustainability. These recommendations have not been implemented.</p> <p>While a total allowable catch limit is in place, it is not scientifically based and may not be sustainable. Estimates of density and standing stock are also considered unreliable (Murphy et al. 2010).</p>

<p>1.1.7 There are management strategies in place capable of controlling the level of take.</p>	<p>Partially meets</p> <p>A variety of input and output controls are used in the fishery. These include size limits, total allowable catch limits, boat size limits, gear restrictions and restriction of commercial fishing to licenced traditional inhabitants. Although there are no restrictions on the number of licenses available, all fishers are required to unload their catch to a licensed fish receiver who is then required to report this to AFMA within three days. In this way AFMA can monitor and manage catches.</p> <p>However the open access rights and artisanal nature of fishing makes regulatory control difficult (Murphy et al. 2010). Enforcement is likely also made difficult by fishing occurring in remote areas, amongst many boats, spread over a vast area, and exceptions to various rules under the <i>Torres Strait Fisheries Act 1984</i>. These exceptions are outlined below.</p> <p>Persons are prohibited from taking, processing or carrying trochus unless they hold a licence or do so in the course of traditional fishing; or for private purposes with the use of an Australian boat.</p> <p>Minimum and maximum size limits also apply unless the person is engaged in traditional fishing.</p> <p>For those not fishing for private purposes with the use of an Australian boat, the use of boats longer than 20 meters in the fishery is prohibited.</p>
<p>1.1.8 Fishing is conducted in a manner that does not threaten stocks of byproduct species.</p>	<p>Meets</p> <p>There is no byproduct associated with hand collection fisheries.</p>
<p>(Guidelines 1.1.1 to 1.1.7 should be applied to byproduct species to an appropriate level)</p>	
<p>1.1.9 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.</p>	<p>Meets</p> <p>Given the low commercial demand for trochus at this time, the fishery is likely to maintain ecologically viable stock levels. However all removals from the fishery should be accounted for to ensure catches remain sustainable, particularly in periods of high demand.</p>
<p>If overfished, go to Objective 2: If not overfished, go to PRINCIPLE 2:</p>	
<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.</p>	
<p>Management responses</p>	
<p>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>	<p>Not applicable</p> <p>Stock status has been classified uncertain. It has not been classified overfished (Patterson et al. 2017) and is therefore not subject to any recovery strategy.</p>
<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>	<p>Not applicable</p> <p>Stocks are not currently classified as overfished.</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.	Not applicable Hand collection fisheries are highly selective and able to avoid bycatch. Bycatch is likely to be limited to epifaunal and epifloral organisms living on or within trochus, such as bivalves, boring sponges and snails (Young & Challen 2004 and DEH 2005 in Murphy et al. 2010).
Assessments	
2.1.2 There is a risk analysis of the bycatch with respect to its vulnerability to fishing.	Not applicable Hand collection fisheries are highly selective and able to avoid bycatch.
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.	Not applicable Hand collection fisheries are highly selective and able to avoid bycatch.
2.1.4 An indicator group of bycatch species is monitored.	Not applicable Hand collection fisheries are highly selective and able to avoid bycatch.
2.1.5 There are decision rules that trigger additional management measures when there are significant perturbations in the indicator species numbers.	Not applicable Hand collection fisheries are highly selective and able to avoid bycatch.
2.1.6 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	Not applicable Hand collection fisheries are highly selective and able to avoid bycatch.

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

<p>2.2.1 Reliable information is collected on the interaction with endangered, threatened or protected species and threatened ecological communities.</p>	<p>Does not meet All persons are required to notify the Secretary of the Department of the Environment and Energy within seven days of an interaction that results in death, injury, trading, taking, keeping or moving a member of a species listed under Part 13 of the EBPC Act. The Department has a memorandum of understanding with AFMA to allow fishers to report via AFMA, but AFMA does not have the legislative capacity to mandate reporting by Traditional Inhabitant fishers.</p> <p>Daily fishing logbooks are available for use in this fishery and these include provision to report protected species interactions, but reporting is voluntary and the logbooks are not used by fishers.</p> <p>AFMA is pursuing legislative changes in order to mandate reporting by Traditional Inhabitant fishers, but this is unlikely to occur in the short term.</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 likely to be relatively low, there is no means to verify this, monitor or respond to any changes. It is also unlikely that fishers are aware of their obligations under the EPBC Act.</p>
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Assessments

<p>2.2.2 There is an assessment of the impact of the fishery on endangered, threatened or protected species.</p>	<p>Does not meet No ecological risk assessment has been completed for this fishery and is unlikely to be undertaken while the fishery remains inactive.</p> <p>The fishing methods used (free diving and hand collection with or without the use of a boat) mean that risks to protected species are likely to be relatively low, but may include impacts from things such as boat strikes, anchoring or trampling. Turtles are known to eat trochus, but it is not known in what quantities or how heavily turtles rely on trochus as a food source (DEH 2005). A number of other endangered, threatened and protected species occur in the region and assessment and mitigation is recommended as part of any precautionary management regime.</p>
<p>2.2.3 There is an assessment of the impact of the fishery on threatened ecological communities.</p>	<p>Not applicable There are no threatened ecological communities in the area of the fishery.</p>

Management responses

<p>2.2.4 There are measures in place to avoid capture and/or mortality of endangered, threatened or protected species.</p>	<p>Partially meets The risks associated with hand-collection fisheries are likely to be relatively low. However, there has been no risk assessment and there are no specific risk mitigation measures in place.</p>
<p>2.2.5 There are measures in place to avoid impact on threatened ecological communities.</p>	<p>Not applicable There are no threatened ecological communities in the area of the fishery.</p>
<p>2.2.6 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 risks associated with hand-collection fisheries are likely to be relatively low and unlikely to have significant impact on endangered, threatened or protected species. Undertaking an assessment would provide greater confidence and allow any identified issues to be monitored and responded to as necessary.</p>

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 The risks associated with hand-collection fisheries are likely to be relatively low. However, no ecological risk assessment has been undertaken and there is no system for collecting information on the impact of the fishery on the ecosystem and environment generally. Stock surveys when they are undertaken are not designed for this purpose. Current risk is low as there has been no reported catch since 2010.
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. <ol style="list-style-type: none"> Impacts on ecological communities <ul style="list-style-type: none"> Benthic communities Ecologically related, associated or dependent species Water column communities Impacts on food chains <ul style="list-style-type: none"> Structure Productivity/flows Impacts on the physical environment <ul style="list-style-type: none"> Physical habitat Water quality 	Partially meets Information on potential impacts of the fishery on the ecosystem is not collected and there has been no ecological risk assessment conducted for the Torres Strait Trochus Fishery. Impacts of the fishery on the ecosystem may include: <ul style="list-style-type: none"> over-exploitation of target species translocation of species via hull and anchor fouling impacts of anchoring/mooring and other anthropogenic activities such as treading on reef top habitat. Dugong may also be impacted by the presence of large vessels (mother-ships from which the tender boats operate) anchoring in channels adjacent to dugong feeding grounds (Hagihara et al. 2016). However AFMA has advised that when anchoring does occur it is usually done in a small number of areas that provide shelter and access to fishing areas. It is unknown whether these areas correspond to the channels frequented by dugong. Hand collection is likely to have a relatively small impact on the physical environment and the setting and enforcement of total allowable catch limits based on stock surveys should ensure catches are sustainable and minimise the risk of ecological impact. Undertaking a risk assessment would provide greater confidence in these assumptions and allow any identified issues to be monitored and responded to as necessary; however while the commercial fishery is inactive an assessment is unlikely.
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 The risks associated with hand-collection fisheries are likely to be relatively low and unlikely to have significant impact on ecosystems, provided stocks are managed sustainably.
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.	Partially meets While there has been no ecological risk assessment to identify the risk to the ecosystem, the scale and nature of the fishery suggests any impact is likely to be low level. There is no means to monitor interactions, and no plan to manage any current or emerging issues. Undertaking a risk assessment would provide greater confidence in this assumption and allow any identified issues to be monitored and responded to as necessary. The last (2009) stock survey recommended that trigger limits be included to ensure the sustainability of the stock, however no action has been taken since that time due to recent lack of reported fishing activity.
2.3.5 The management response, considering uncertainties in the assessment and precautionary management actions, has a high chance of achieving the objective.	Partially meets The risks associated with hand-collection fisheries are likely to be relatively low. Undertaking a risk assessment would provide greater confidence in this assumption and allow any identified issues to be monitored and responded to as necessary.

SECTION 3: ASSESSMENT OF THE TORRES STRAIT TROCHUS 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 for the Torres Strait.

Part 13

Accreditable plan, regime or policy (Divisions 1, 2, 3 and 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 "Statement of Management Arrangements 2005" was accredited in 2005 . The management regime for the fishery is described in this assessment 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 Although there has been no formal risk assessment, the risks associated with the fishery are likely to be very low. There have been no reported interactions with listed threatened species to date.
(g) And, is the fishery likely to adversely affect the survival or recovery in nature of the species.	No Records show no reported interactions with listed threatened 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 Although there has been no formal risk assessment, the risks associated with the fishery are likely to be very low. There have been no reported interactions with listed migratory species to date.
(g) And, is the fishery likely to adversely affect the conservation status of a listed migratory species or a population of that species?	No 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 Although there has been no formal risk assessment, the risks associated with the fishery are likely to be very low. There have been no reported interactions with cetaceans to date.
(g) And is the fishery likely to adversely affect the conservation status of a species of cetacean or a population of that species?	No 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 Although there has been no formal risk assessment, the risks associated with the fishery are likely to be very low. There have been no reported interactions with listed marine species to date.

(g) And is the fishery likely to adversely affect the conservation status of a listed marine species or a population of that species?	No 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 Interactions with protected species are 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	
(1) The objects of this Part are as follows: (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
(3) The Minister must not issue a permit unless the Minister is satisfied that: (a) the action or actions specified in the permit will not be detrimental to, or contribute to trade which is detrimental to: i the survival of any taxon to which the specimen belongs; or ii. the recovery in nature of any taxon to which the specimen belongs; 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> <p>(a) doing any of the following:</p> <p>(i) including items in the list;</p> <p>(ii) deleting items from the list;</p> <p>(iii) imposing a condition or restriction to which the inclusion of a specimen in the list is subject;</p> <p>(iv) varying or revoking a condition or restriction to which the inclusion of a specimen in the list is subject; or</p> <p>(b) correcting an inaccuracy or updating the name of a species.</p>	<p>The Department recommends that specimens derived from species harvested in the Torres Strait Trochus 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 until 9 October 2026.</p>
<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>The Torres Strait Trochus Fishery was assessed under Part 10 of the EPBC Act in November 2005 and the management regime, outlined in the Torres Strait Trochus Fishery Statement of Management Arrangements 2005 was accredited under section 33 of the EPBC Act.</p> <p>There have been no significant changes to the management regime since that time.</p> <p>The Department recommends that the LENS is amended under section 303DC(1)(a) to include product derived from the Torres Strait Trochus Fishery until 9 October 2026.</p>
<p>(1C) The above does not limit matters that may be considered when deciding to amend LENS.</p>	<p>Meets</p> <p>The Torres Strait Trochus Fishery is consistent with the Objects of Part 13A – refer assessment above.</p>
<p>(3) Before amending the LENS, the Minister must consult:</p> <p>(a) other Minister or Ministers as appropriate; and</p> <p>(b) other Minister or Ministers of each State and self-governing Territory as appropriate; and</p> <p>(c) other persons and organisations as appropriate.</p>	<p>Meets</p> <p>The Department considers that the consultation requirements have been met.</p> <p>On 10 August 2004, the then Minister for the Environment and Heritage wrote to all fisheries ministers seeking their views on inclusion of product derived from commercial fisheries in the list of exempt native specimens, while subject to declaration as approved wildlife trade operations. Responses in support of the proposal were received from all state and territory fisheries ministers and the Commonwealth minister.</p> <p>The application from AFMA (on behalf of the Torres Strait Protected Zone Joint Authority) was released for public comment from 26 April 2017 to 31 May 2017.</p> <p>The public comment notice sought comment on:</p> <ul style="list-style-type: none"> the proposal to amend the list of exempt native specimens to include product derived from the Torres Strait Trochus Fishery, and the AFMA/ Protected Zone Joint Authority application for the Torres Strait Trochus Fishery. <p>No comments were received.</p>

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 precautionary principle has been considered in preparing the Department's advice about decisions under section 303DC. Given the lack of fishing activity and the conditions proposed in Section 1, management measures are considered sufficiently precautionary to prevent serious or irreversible environmental damage being caused by this fishery.</p>

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Senator the Hon Anne Ruston
Assistant Minister for Agriculture and Water Resources
Parliament House
CANBERRA ACT 2600

Dear Senator

I am writing to you as Delegate of the Minister for the Environment and Energy in relation to the reassessment of seven Commonwealth-managed fisheries under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In early 2017, the Australian Fisheries Management Authority (AFMA) applied for export approvals for the Commonwealth Coral Sea, Commonwealth North West Slope and Western Deepwater Trawl, Torres Strait Bêche-de-mer, Torres Strait Finfish, Torres Strait Prawn, Torres Strait Trochus, and Torres Strait Tropical Rock Lobster fisheries under the EPBC Act.

These applications have now been assessed and I have agreed to declare five fisheries (Commonwealth Coral Sea, Commonwealth North West Slope and Western Deepwater Trawl, Torres Strait Bêche-de-mer, Torres Strait Finfish and Torres Strait Tropical Rock Lobster fisheries) as approved wildlife trade operations under section 303FN (Part 13A) of the EPBC Act for three years, until 18 December 2020. These approvals are subject to conditions agreed by officials from both departments as areas requiring ongoing attention (Attachment 1).

Based on current management arrangements, I have also agreed to exempt the Torres Strait Prawn and Torres Strait Trochus Fisheries from requiring EPBC Act export permits for nine years, until 9 October 2026. Should fishing effort reach any of the trigger limits in the Torres Strait Prawn Fishery Harvest Strategy 2011, or recommence in the Torres Strait Trochus Fishery, the Department will consider reassessing these fisheries.

The list of exempt native specimens has been amended to allow export of product from these seven fisheries for the duration that the respective approvals are in place. Please note that any person whose interests are affected by this decision may make an application to the Department for the reasons for the decision, and may apply to the Administrative Appeals Tribunal to have this decision reviewed. I have enclosed further information on these processes at Attachment 2.

The Department of the Environment and Energy requires AFMA to report annually on each of the seven fisheries, as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.

I wish to acknowledge the strong engagement and collaboration of AFMA officials in completing these assessments.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'IK' followed by a long horizontal stroke.

Dr Ilse Kiessling
Delegate of the Minister for the Environment and Energy
20 December 2017

**Conditions on the approved wildlife trade operation declaration for the
Commonwealth Coral Sea, North West Slope and Western Deepwater Trawl fisheries,
and the Torres Strait Bêche-de-mer, Finfish, and Tropical Rock Lobster fisheries –
December 2017**

Commonwealth Coral Sea Fishery

1. Operation of the Coral Sea Fishery will be carried out in accordance with management arrangements in force under the Commonwealth *Fisheries Management Act 1991*, Fisheries Management Regulations 1992 and relevant Commonwealth fisheries policies.
2. The Australian Fisheries Management Authority to inform the Department of the Environment and Energy of any intended material changes to the Coral Sea Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.
3. The Australian Fisheries Management Authority to produce and present reports to the Department of the Environment and Energy annually as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.
4. AFMA to limit the take of species listed under the Convention on the International Trade of Endangered Species (CITES), from the area of the Coral Sea Fishery to no more than:
 - a. 40 tonnes of any mixture of species belonging to the family Acroporidae per year (1 July – 30 June).
 - b. 50 individual humphead Maori wrasse (*Cheilinus undulates*) per year (1 July – 30 June).
5. AFMA to:
 - a. review the species composition and spatial extent of all coral harvest when 20 tonnes of coral has been harvested.
 - b. ensure that a disproportionate amount of coral species are not taken from a single reef.
6. AFMA to evaluate, document and seek to mitigate any risks posed by the Coral Sea Fishery to CITES-listed species. For coral species this will be undertaken at the reef-level, while for humphead Maori wrasse this will be undertaken at the sub-reef level.
7. AFMA to report the following to the CITES Scientific Authority of Australia, as part of the annual reporting referred to in Condition 3:
 - a. the harvested weight and locations of harvest for each coral species
 - b. the number of individual humphead Maori wrasse, their sex, lengths and locations of harvest
 - c. any assessments, management changes or findings relevant to the management of CITES listed species in the Coral Sea Fishery.
8. AFMA to complete the following for all sectors of the Coral Sea Fishery:
 - a. review and revise the ecological risk assessments
 - b. develop and implement ecological risk management strategies
 - c. review and revise the Bycatch and Discarding Workplan.

Commonwealth North West Slope Trawl and Western Deepwater Trawl Fisheries

1. Operation of the Western Deepwater Trawl and North West Slope Trawl fisheries will be carried out in accordance with management arrangements in force under the Commonwealth *Fisheries Management Act 1991*, *Fisheries Management Regulations 1992* and relevant Commonwealth fisheries policies.
2. The Australian Fisheries Management Authority to inform the Department of the Environment and Energy of any intended material changes to the Western Deepwater Trawl and North West Slope Trawl fisheries management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.
3. The Australian Fisheries Management Authority to produce and present reports to the Department of the Environment and Energy annually as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.
4. AFMA to ensure ecological risk assessments and associated management strategies are reviewed, updated and implemented.
5. AFMA to ensure:
 - a. that the harvest strategy for the North West Slope and Western Deepwater Trawl fisheries contains triggers and/or limits which are specific, measurable, time bound, and capable of managing the ecological effects of fishing.
 - b. that the fisheries' performance under harvest strategy triggers and limits is monitored; and triggered management actions are undertaken within specified timeframes.Harvest strategy performance should be reported as part of the requirements specified in Condition 3 above.

Torres Strait Bêche-de-mer Fishery

1. Operation of the Torres Strait Bêche-de-mer Fishery will be carried out in accordance with the management regime in force under the *Torres Strait Fisheries Act 1984*.
2. 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 Bêche-de-mer Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.
3. 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 *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.
4. The Torres Strait Protected Zone Joint Authority to implement a strategy to manage the risks of overfishing and localised depletion for all species harvested in the fishery. 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.
5. Torres Strait Protected Zone Joint Authority to complete an ecological risk assessment and implement an ecological risk mitigation strategy to ensure all environmental and ecological risks are appropriately managed.
6. Torres Strait Protected Zone Joint Authority to continue to pursue the changes necessary to facilitate reporting of interactions with species listed in Part 13 of the *Environment Protection and Biodiversity Act 1999*.

Torres Strait Finfish Fishery

1. Operation of the Torres Strait Finfish Fishery will be carried out in accordance with management arrangements in force under the *Torres Strait Fisheries Act 1984*.
2. 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 Finfish Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.
3. 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 *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.
4. The Torres Strait Protected Zone Joint Authority to implement strategies to improve data collection, and monitoring and management of catch in all sectors of the Torres Strait Finfish Fishery by 2019.
5. The Torres Strait Protected Zone Joint Authority to complete an ecological risk assessment for the Torres Strait Finfish Fishery.
6. The Torres Strait Protected Zone Joint Authority to improve estimates of stock abundance and harvest potential for all target species in the Torres Strait Finfish Fishery.
7. The Torres Strait Protected Zone Joint Authority to develop and implement reference points and relevant management triggers, including timeframes for management responses, for the Torres Strait Finfish Fishery.

Torres Strait Tropical Rock Lobster Fishery

1. Operation of the Torres Strait Tropical Rock Lobster Fishery will be carried out in accordance with management arrangements in force under the *Torres Strait Fisheries Act 1984*.
2. 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 *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.
3. 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 *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.
4. The Torres Strait Protected Zone Joint Authority to implement a strategy to manage the risks of overfishing and localised depletion in the fishery.

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.

Notification of Reviewable Decisions and Rights of Review¹

There is a right of review to the Administrative Appeals Tribunal in relation to certain decisions made by the Minister or the Minister's delegate under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Section 303GJ of the EPBC Act provides that applications may be made to the Administrative Appeals Tribunal for the review of the following decisions of the Minister:

(1) Subject to subsection (2), an application may be made to the Administrative Appeals Tribunal for review of a decision:

- (a) to issue or refuse a permit; or
- (b) to specify, vary or revoke a condition of a permit; or
- (c) to impose a further condition of a permit; or
- (d) to transfer or refuse to transfer a permit; or
- (e) to suspend or cancel a permit; or
- (f) to issue or refuse a certificate under subsection 303CC(5); or
- (g) of the Secretary under a determination in force under section 303EU; or
- (h) to make or refuse a declaration under section 303FN, 303FO or 303FP; or
- (i) to vary or revoke a declaration under section 303FN, 303FO or 303FP.

(2) Subsection (1) does not apply to a decision made personally by the Minister (but the subsection does apply to a decision made by a delegate of the Minister).

If you are dissatisfied with a decision of a type listed above you may:

- by notice, provided in writing, request that the Minister or the Minister's delegate give you a statement in writing setting out the reasons for the decision; and
- apply to the Administrative Appeals Tribunal (AAT) for independent merits review of the decision. Application for review of a decision must be made to the AAT within 28 days after the day on which you have received the reviewable decision. However an extension of time for lodging an application may be granted by the AAT under certain circumstances. Please visit the AAT's website at <http://www.aat.gov.au/> or telephone 1300 366 700 for further information. The role of the AAT is to provide a review mechanism that is fair, just, economical, informal and quick.

Applications & Costs

Applications to the AAT are made by lodging an Application Form (Form 1). This can be found on the AAT's website <http://www.aat.gov.au/>.

There are no strict timelines in which the AAT must review the decision, however the first Conference between the parties will usually be held within 6-10 weeks of the Application

¹ In accordance with the *Administrative Appeals Tribunal Act 1975* Code of Practice for Notification of Reviewable Decisions and Rights of Review

being lodged. The time frame for review of certain decisions can be expedited in some circumstances.

The cost of lodging an application for review is \$884 (GST inclusive) (current as of 1 July 2016).

You may be eligible to pay a reduced fee of \$100.00 if:

- you are receiving legal aid for your application;
- you hold a health care card, a Commonwealth seniors health card or any other card issued by the Department of Social Services or the Department of Veteran's Affairs that entitles the holder to Commonwealth health concessions;
- you are in prison or lawfully detained in a public institution;
- you are under 18 years of age; or
- you are receiving youth allowance, Austudy or ABSTUDY.

You may also be eligible for a reduced fee if you can demonstrate to the AAT that paying the full fee would cause you financial hardship. Further information can be found on the AAT's website.

Contact Details

Further information or enquiries relating to the decision should be directed to:

The Director
Wildlife Trade Assessments Section
Department of the Environment and Energy
GPO Box 787
Canberra ACT 2601
Telephone: +61 (0) 2 6274 1917
Email: sustainablefisheries@environment.gov.au

Alternatively you may contact the AAT at their Principal Registry or the Deputy Registrar, Administrative Appeals Tribunal in your Capital City or Territory.

Administrative Appeals Tribunal
Street address: Level 6, 83 Clarence Street, Sydney
Mailing address: GPO Box 9955, Sydney, NSW 2001
T: 1800 228 333 and (02) 9276 5000
F: (02) 9276 5599
E: generalreviews@aat.gov.au
W: <http://www.aat.gov.au>

Freedom of Information Request

You may make an application under the *Freedom of Information Act 1982* (FOI Act) to access documents. Further information can be found at <http://www.environment.gov.au/foi/index.html>. Please contact the Freedom of Information Contact Officer at foi@environment.gov.au for more information.

Hand Collectibles Working Group	Meeting 13 24 July 2018
Fish receiver system update	Agenda Item 2.2.2 FOR NOTING

RECOMMENDATIONS

1. That the Hand Collectible Working Group **NOTE** the update provided regarding the Torres Strait fish receiver system (FRS), in particular:
 - a. the FRS has been mandatory in all Torres Strait fisheries (excluding Torres Prawn) for 6 months;
 - b. AFMA has received some good catch and effort information through the FRS to date, a summary of which is provided below;
 - c. AFMA is working with industry and fish receivers specifically to resolve a number of issues.
2. That the Working Group **DISCUSS** and **ADVISE** on options for increasing fish receiver performance in the hand collectable fisheries.

BACKGROUND

3. In March 2017, the PZJA agreed to replace the current voluntary Torres Strait Seafood Buyers and Processors Docket Book system with a mandatory FRS for all Torres Strait Fisheries, excluding Torres Strait Prawn Fishery, which was implemented on 1 December 2017.
4. Accurate reporting and catch monitoring against TACs and individual catch allocations is not only important to ensure the sustainability of fisheries but also to maintain general compliance and integrity of management arrangements. The latter is very important for maintaining the value and security of fishing entitlements.
5. In relation to Torres Strait fisheries, effective catch monitoring through the FRS will support:
 - a. informed management of fish stocks, including a greater and informed understanding of current harvest of all fisheries and ensuring the sustainable utilisation of Torres Strait fisheries;
 - b. guiding sustainable growth in underutilised and/or closed fisheries e.g the Bêche-de-mer and Finfish Fisheries;
 - c. ensuring the integrity of individual catch allocations based on recommended biological catches.
6. Since the implementation, licenced fish receivers have been supplying important catch data for the main Torres Strait fisheries. Table 1 provides a brief summary of the performance of the fish receiver system up to 20 June 2018.

Table 1: Summary of activity in the fish receiver system for Torres Strait fisheries. Data is taken from 1 December 2017 to 20 June 2019.

Number of fish receiver licences granted	72
Number of fish receivers that have submitted CDRs	28
Number of Catch Disposal Records returned to AFMA	2838
Total reported catch Tropical Rock Lobster*	196,463 kg
Total reported catch Finfish Fishery**	21,666 kg
Total reported catch Bêche de Mer***	13,938 kg

*Catch data is reported data as at 20 June 2018. **Data for multiple species for each fishery has been combined. ***Data are unconverted weights.

7. The data received through the fish receiver system has:
 - a. been used to monitor catch in the Torres Strait Fisheries;
 - b. been used to create Catch Watch reports for the Tropical Rock Lobster fishery to keep industry informed of how the fishery is performing as a whole and how many kilograms of a TAC remain. AFMA is working to produce similar regular reports for each of the Torres Strait fisheries;
 - c. been used for Government reporting e.g. Australian Bureau of Agriculture and Resource Economics yearly fishery reports
 - d. supported Compliance operations
 - e. been used by PZJA Working Groups to inform recommendations and management decisions.
8. The data collected through the fish receiver system is released in line with AFMA's Information disclosure policy, which can be found on the AFMA website <http://www.afma.gov.au/about/fisheries-management-policies/>

Fisher and fish receiver responsibilities

9. Fishers and fish receivers have a number of responsibilities when landing product under the fish receiver system – Table 2 below provides a summary of these. Some of these responsibilities are permit conditions. Not abiding by the permit conditions is a breach under the *Torres Strait Fisheries Act* and under liable for penalties.

Table 2: List of key responsibilities for fishers and fish receivers as part of the Torres Strait Fish Receiver System.

Fishers must:
<ul style="list-style-type: none"> - Only offload their catch to and weighed by a licenced fish receiver - Land their catch when it is first brought onto land or when it is unloaded to a Carrier boat. - Provide their name, fishing licence number and boat symbol - Sign the CDR
Fish receivers must:
<ul style="list-style-type: none"> - Only receive catch from licenced fishers - Weight the catch and fill out the CDR as soon as the product is received - Register where they are receiving product with AFMA. Catch can only be received at these locations. - Send the original white copy to AFMA <u>within 3 days</u> of receiving the product

10. Whilst the fish receiver system has provided some good data, issues remain and need to be resolved. The most common issues are:

- Fish receivers receiving product from unlicensed fishers.
- Unauthorised people receiving product on behalf of a licenced fish receiver
- CDRs not being returned on time or not at all
- Product not being landed (weighed and a CDR completed) when it is first brought on to land.

11. AFMA has so far been working with individual fish receivers to resolve some of these problems and plans to conduct more visits to the outer island to continue to raise awareness of the fish receiver system and its rules. These visits will also allow for industry to provide feedback to AFMA directly as to the functioning of the FRS system and suggestions on ways to improve the system.

Fish receivers for Hand Collectables Fisheries

12. Since its implementation, the fish receiver system has been providing consistent data from the Tropical Rock Lobster (TRL) fishery that has been used to inform management. Part of the reason for this is that Thursday Island is a main port for tropical rock lobster, and many of the fish receivers that land TRL are in closer proximity to AFMA Thursday Island. For this reason, resolving some of the issues being faced by the fish receiver system (listed above) has been simpler.

13. The fish receiver system is not functioning as well in the Hand Collectables Fisheries as it has in TRL. The activities and performance of the fish receiver system for Beche de mer is listed in Table 3.

Table 3. Fish receiver system performance within the Hand Collectable Fisheries. Data are taken from TDB02 received up to 29 June 2018.

Number of Fish Receivers that have reported catch	8
Number of Fishers that have landed product	18
Average delay in receiving CDRs	35 days
Minimum delay in receiving CDRs	0 days
Maximum delay in receiving CDRs	192 days
Species landed	9

14. The majority of Beche de mer is being landed on the eastern and central islands; Mer, Erub, Ugar, Masig. Due to the distance between AFMA TI and the fish receivers on the outer islands, education and contact has been limited.
15. AFMA has identified a number of issues that are occurring in the Beche de Mer fishery that need to be resolved including:
 - a. Unauthorised agents completing catch disposal records. Only the licenced fish receiver or their authorised agent must sign the CDR.
 - b. Product being landed at unregistered premises. A licence condition for fish receivers is that product can only be landed at premises that are registered with AFMA.
 - c. Product not being landed directly when it is brought on to land. This is occurring for a number of reasons; product is being stockpiled and a CDR completed when the product is shipped; Product is being brought onto land, processed and shipped. The product is then landed and a CDR completed when it is received on the mainland.
 - d. CDRs not being returned within 3 days of the catch being landed. This is a condition of the fish receiver licence. For Beche de Mer CDRs there is an average difference of 35 days between a CDR being completed and it being returned to AFMA, the maximum difference was 192 days. Some of this delay can be attributed due to delays in the postal system. However, CDRs that span more than a month are being returned at one time, suggesting that CDRs are being held for a period of longer than 3 days before posting.
 - e. CDRs not being completed when the catch is received. Feedback from fish receivers suggests that a single CDR is completed for each fisher, when enough product has been received. This is can occur over a number of landings.
 - f. Unreported catch. AFMA suspect that there are Beche de Mer fishers and buyers that are not reporting their catch.
16. Currently the level of reporting in the Beche de Mer fishery, notably the delay in receiving catch reports and the gaps in reporting catch, does not adequately support management, particularly for species with low TACs such as Black Teatfish.
17. In the next six months, AFMA will work with fish receivers and the wider Beche de Mer industry to improve the performance of the fish receiver system, addressing the issues outlined previously. The aim of this next six months is to get the fish receiver system operating to a level that will support the management of Beche de Mer and an opening of Black Teatfish. The specific requirements for considering an opening, and for during an opening, will be discussed at Item 3.4.

DISCUSSION

18. The first six months of the fish receiver system has provided high levels of catch and effort data for the Tropical Rock Lobster Fishery. AFMA has worked consistently with fish receivers in the TRL fishery to achieve this level of reporting.
19. The performance of the fish receiver system in the Beche de Mer and Hand Collectables Fisheries is not currently at the same level as in the Tropical Rock Lobster fishery.
20. AFMA is seeking feedback from the Hand Collectables Working Group industry members and observers as to what issues are being faced by fish receivers in the Beche de Mer fishery that have resulted in the reduced level of performance.
21. In addition AFMA is seeking input as to how to resolve these issues to achieve a level of reporting that can properly support management of Beche de Mer species.

Hand Collectables Working Group	Meeting 13 24 July 2018
Fishery Updates Legislative amendments update	Agenda Item 2.2.3 FOR NOTING

RECOMMENDATIONS

1. That the Hand Collectables Working Group **NOTE** the status of proposed amendments to the *Torres Strait Fisheries Act 1984* (the Act) and *Torres Strait Fisheries Regulations 1985* (the Regulations), which govern how fisheries are managed in the Torres Strait.

BACKGROUND

What are the proposed amendments?

2. Following PZJA approval, AFMA is progressing amendments to the Act and Regulations. The proposed amendments are administrative in nature and will provide improvements to the efficiency and effectiveness of fisheries administration in the Torres Strait.
3. The proposed amendments will provide:
 - a. the ability to require catch reporting across all licence holders;
 - b. the ability to provide electronic licensing and monitoring to licence holders;
 - c. the ability to delegate the powers to grant and vary scientific and development permits;
 - d. the ability to simplify the renewal of fishing licences;
 - e. the ability to delegate powers to contracted service providers;
 - f. for the simplification of the disclosure of fisheries information; and
 - g. the ability to issue Fisheries Infringement Notices.
4. A number of additional amendments are also being considered for inclusion and will go to the PZJA for approval before being progressed any further. These include:
 - a. the ability for a single licence to be issued for primary and tender packages;
 - b. the ability for all licences to be granted for up to five years; and
 - c. the ability for a licence to be issued without a nominated boat.

Further details on the proposed amendments will be provided as this project progresses.

5. Of particular relevance to the Working Group, the amendment to provide for catch reporting across all licence holders will allow for the implementation of mandatory daily logbook reporting by TIB licence holders. This will provide for improved data on which to base management advice and decisions.

When will stakeholders be consulted?

6. AFMA will work closely with the TSRA and Queensland Department of Agriculture and Fisheries in progressing the proposed amendments. Opportunities to provide comment on the proposed amendments will also be provided to fishers, their communities and the general public as the amendments are progressed. This will be done so through direct communication with fishers, public notices as well as through the PZJA RAGs, MACs and Working Groups. Further details on when these opportunities will be publicised once determined.

How long will the amendments take?

7. AFMA now has dedicated resources to be able to progress this important piece of work. However, the amendment process is a lengthy and complex one, and is expected to take a number of years (refer to below table).

Table: Timeline for legislative amendments.

Regulation amendments	Indicative Timeline	Act amendments	Indicative Timeline
Submit proposed amendments to the PZJA then Minister for Agriculture and Fisheries for approval	Completed	Submit proposed amendments to the PZJA then Prime Minister and/or Cabinet for approval	August-December 2018
Prepare bid for drafting resources	Completed	Prepare bid for drafting resources	August-December 2018
Prepare drafting instructions in consultation with relevant government agencies	In progress	Prepare drafting instructions in consultation with relevant government agencies	August-December 2018
If required, prepare regulation impact statement and conduct public consultation	Now-June 2018	If required, prepare regulation impact statement and conduct public consultation	August-December 2018
Amending regulations prepared by Office of Parliamentary Counsel	August-December 2018 – subject to drafting resources being allocated to this project	Bill prepared by Office of Parliamentary Counsel	January-April 2019– subject to drafting resources being allocated to this project
Conduct public consultation on exposure draft of amending regulations	January-March 2019	Conduct public consultation on exposure draft of Bill	May-July 2019
Office of Parliamentary Counsel to prepare any changes to amending regulations identified as a result of public consultation	April 2019	Office of Parliamentary Counsel to prepare any changes to amending regulations identified as a result of public consultation	August 2019
Prepare associated legislation documents (Executive Council minute, explanatory memorandum, explanatory statement, statement of compatibility with human rights etc)	April 2019	Prepare associated legislation documents (explanatory memorandum, statement of compatibility with human rights, second reading speech etc)	August 2019

Submit legislative package to the Minister for Agriculture and Fisheries for approval	May 2019	Submit legislative package to the Minister for Agriculture and Fisheries for approval	September 2019
Submit legislative package to Federal Executive Council (ExCo)	June 2019	Give notice to the Clerk of the House, who will arrange for the Bill to be listed on the Notice Paper	TBA
Governor General to make the amending regulations	June 2019	Minister for Agriculture and Fisheries to present Bill to the House of Representatives for debate and agreement	TBA
Register amending regulations on the Federal Register of Legislative Instruments (FRLI), at which point they will come into force	June 2019	Bill presented to the Senate for debate and agreement	TBA
Table regulations in both houses of Parliament for a disallowance period of 15 sitting days	June 2019	Once the Bill has been agreed by both Houses in identical form, present Bill to the Governor-General for royal assent	TBA
Notify stakeholders of making of amending regulations	June 2019	Register Act on the Federal Register of Legislative Instruments (FRLI)	TBA
Implement new provisions of amending regulations	June 2019 onwards	Notify stakeholders of making of the Act	TBA
		Implement new provisions of the Act	TBA

Hand Collectables Working Group	Meeting 13 24 July 2018
Government Update QDAF Update	Agenda Item 2.2.6 FOR NOTING

RECOMMENDATIONS

1. That the HCWG **NOTE** the update provided in the paper supplied by Queensland Fisheries.

EAST COAST SEA CUCUMBER FISHERY

AFMA Hand Collectables Working Group Meeting – Fisheries Queensland Update

- The *Sustainable Fisheries Strategy* was released in June 2018 and outlines the following principles for fishing rules in Queensland:
 - Fishing rules adequately control catch to meet fishery-specific targets and cover all sectors (commercial, recreational, charter and traditional).
 - Sustainable catch limits are based on achieving at least maximum sustainable yield (around 40-50% biomass) by 2020. Moving to maximum economic yield (around 60% biomass) by 2027.
 - A consistent approach to management arrangements through harvest strategies with a preference towards quota wherever possible.
 - Latent effort is managed to reduce risk of increased effort over time.
 - Regionally specific management arrangements are put in place (if appropriate).
- The Sustainable Fisheries Expert Panel has been appointed and are experts in the field of fish biology, fishery management, stock assessment modelling, economic and social science and will provide independent advice to the Minister responsible for fisheries and Fisheries Queensland on best practice fisheries management and implementation of the Sustainable Fisheries Strategy. In doing this, the Expert Panel will review key outputs from the working groups, such as harvest strategies and recommended management actions.
- The establishment of fishery-working groups is a key action under the Strategy to provide operational advice and engage stakeholders from all sectors in the development of harvest strategies and day to day management of fisheries. The Sea Cucumber Fishery Working Group has been appointed and since then have met in March and June 2018.
- The East Coast Sea Cucumber Fishery has been operating under a Rotational Harvest Scheme for 15 years. A comprehensive catch data set has been recorded for each zone throughout this time and will be used to inform future management arrangements.
- The working group reviewed the current fisheries management framework and have developed a draft framework for a harvest strategy. Key items include:
 - Splitting up the current catch data and quota reporting into priority species (white teatfish and burrowing blackfish).

- Using an appropriate biomass proxy to track fishery performance in between formal stock surveys for priority species.
- Incorporating the Great Barrier Reef Marine Park Authority Incident Response Plan (still being drafted) into the harvest strategy to help inform actions when environmental incidents occur within the fishery area.
- Environmental Risk Assessments are due for all harvest fisheries early next year, results informing trigger points within the harvest strategy.
- Industry has requested the TACC for black teatfish be increased from zero and include the species in the development of the harvest strategy. The Expert Panel will review the independent black teatfish survey results at the July meeting and provide further advice to Fisheries Queensland.
- The working group is scheduled to meet again in November to review the draft harvest strategy.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
Fishery Updates Native Title update	Agenda Item 2.3 FOR NOTING

RECOMMENDATIONS

That the Hand Collectibles Working Group **NOTE** any updates on native title matters provided by members, including the representative from Malu Lamar (Torres Strait Islander) Corporation (Malu Lamar).

KEY ISSUES

1. On 7 August 2013 the High Court of Australia confirmed coexisting native title rights, including commercial fishing, in the claimed area (covering most of the Torres Strait Protected Zone). This decision gives judicial authority for Traditional Owners to access and take the resources of the sea for all purposes. Native titles rights in relation to commercial fishing must be exercisable in accordance with the *Torres Strait Fisheries Act 1984*.
2. Traditional Owners and native title representative bodies have an important role in managing Torres Strait fisheries. It is important therefore that the Working Group keep informed on any relevant native issues arising.
3. At the 8th meeting of the Hand Collectable Working Group (30 April 2015) it was agreed for a standing agenda item to be included in future HCWG meetings to allow a representative from Malu Lamar to provide a native title update.
4. AFMA has extended an invitation to Malu Lamar to attend this meeting as an observer and is investigating longer term arrangements for representation in consultation with PZJA agencies.

BACKGROUND

What does the Sea Claim Determination mean for native title holders?

5. On 2 July 2010 the Federal Court of Australia in *Akiba on behalf of the Torres Strait Islanders of the Regional Seas Claim Group v State of Queensland* recognised native title rights and interests of Torres Strait Islanders to around 40,000 km² of Torres Strait seas (the Determination Area – refer to **Attachment A**)¹. The original claim area was divided into Parts A and B, with the Court only making a Determination about that part of the claim area (Part A) that was not also claimed by Kaurareg and some mainland people (Part B).
6. On 7 August 2013 the High Court of Australia in *Akiba on behalf of the Torres Strait Regional Seas Claim Group v Commonwealth of Australia* confirmed coexisting native title rights in the Determination Area. These rights are legal rights recognised and protected by the law of Australia. The rights cannot be taken away without consultation and compensation. The rights that have been recognised are the rights of native title holders to:

¹ The Determination also found some parts of the claimed area in which the rights do not exist, although they may be subject to further determination under future claims. These are shown on the map in red (refer to **Attachment A**).

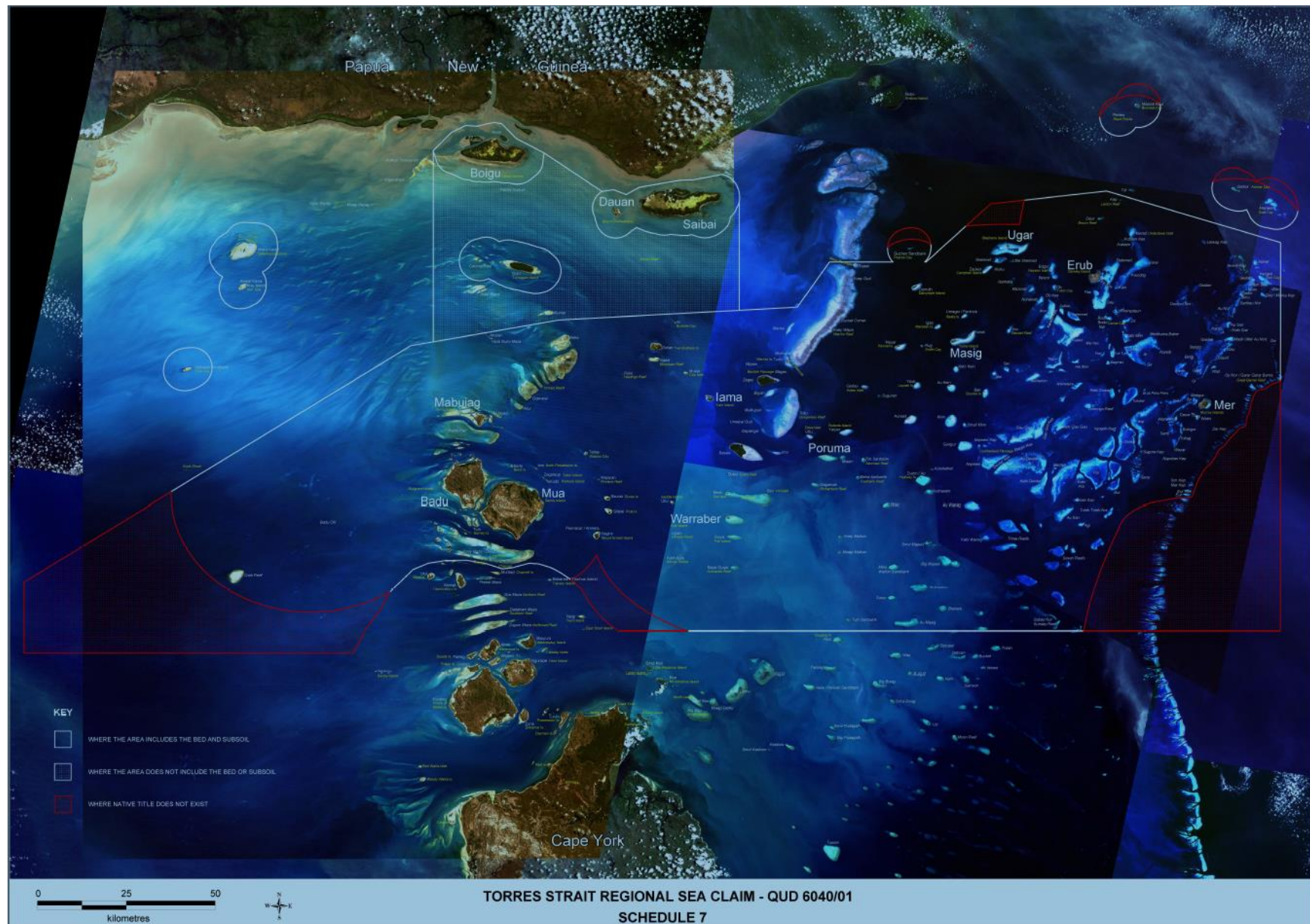
- a. go out into the waters and use them under their traditional laws and customs in whatever way they choose; and
 - b. take any resources from the waters (including water and things on or under the sea floor) and use them according to their traditional laws and customs in whatever way they choose, including for their livelihood, for their community and commercially.
- 7. The Determination does not give native title holders any new rights – it recognises their traditional rights as legal rights.
- 8. Further the Determination does not mean that native title holders can fish commercially without a community or commercial licence. Native title holders still have to obey the common law and all international, federal and state laws governing commercial fishing. But, any new laws cannot take away their native title rights. And when native title holders are fishing commercially (with a licence) they are still exercising a native title right, not just a right given to them by the licence.
- 9. The Judge did not find that everybody has the same rights in every part of the sea. He found that across the Torres Strait some parts were owned by the people of the different community islands and some parts were shared between two or more communities. In this way he recognised that under traditional laws and customs, people have their own areas and their shared areas.
- 10. The Judge also recognised the cultural and traditional importance of Ailan Pasin. He found that there were laws and customs about relationships and sharing between people and communities which included rights and obligations. He found that these things were very important and traditional but that the rights involved were not native title rights that could be recognised – this was only because they are more based on the importance of the relationships between people and are not ‘ownership’ rights.

Who represents native title holders and how does the PZJA consult?

- 11. In June 2014, Malu Lamar became the registered native title body corporate (RNTBC) for the Determination Area and holds the native title rights and interests in the area in trust for the native title holders. AFMA has extended an invitation to Malu Lamar to attend this meeting as an observer and is investigating longer term arrangements for representation.
- 12. Traditional Owners and native title representative bodies have an important role in managing Torres Strait fisheries and it is important therefore that the Hand Collectable Working Group are informed of developments in native title matters.
- 13. In accordance with section 24HA(7) of the *Native Title Act 1993*, the PZJA seek comments from representative bodies, RNTBCs and native title claimants on future acts (e.g. making/amendment of legislation; grant of a lease, licence, permit or authority) that relate to the management or regulation of living aquatic resources. In addition, the PZJA also seeks the advice of native title holders and representatives including Malu Lamar on fisheries matters through the various consultative RAGs, MACs and Working Groups.

Other sea claims

- 14. Part B of the Sea Claim is now proceeding through the Federal Court system.



TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
FISHERY UPDATES PNG National Fisheries Authority update	Agenda Item 2.4 For NOTING

RECOMMENDATIONS

1. That the Working Group **NOTE** the update provided by the PNG National Fisheries Authority.

BACKGROUND

2. A verbal report will be provided under this item.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Research update	Agenda Item 3.1 For DISCUSSION

RECOMMENDATIONS

1. That the Working Group:
 - a. **NOTE** the research update provided by the scientific member.
 - b. **NOTE** the finalised Strategic Research Plan from the Torres Strait Scientific Advisory Committee (TSSAC) in **Attachment 3.1a**;
 - c. **DISCUSS** and **ADVISE** on future research priorities for the Torres Strait hand collectable fisheries.

BACKGROUND

Research Member Update

2. A verbal report will be provided by the research member under this item.

Research priorities

3. This is a standing item for the HCWG. Having agreed research priorities helps to achieve more efficient and effective management.
4. Generally, the Torres Strait Scientific Advisory Committee (TSSAC) makes an annual public call for funding applications to conduct research to support fisheries management decisions. The call for research identifies research priorities to be addressed. AFMA seeks advice from the PZJA fishery consultative forums on fishery specific research priorities.
5. At its June 2016 meeting the Working Group agreed that future research priorities would be guided by the Harvest Strategy to be developed over the coming 18 months. The Harvest Strategy project is expected to be completed in May 2019.

TSSAC Five Year Strategic Research Plan

6. Over the past 12 months, AFMA and the Torres Strait Scientific Advisory Committee have been drafting a new five year Strategic Research Plan (SRP) (**Attachment 3.1a**) for Torres Strait research.
7. The SRP is the overarching document providing the TSSAC's strategic themes which guide priority setting for research in the Torres Strait fisheries over a five year period.
8. The document identifies three research themes, and under these, strategies and possible research activities against these themes. The document also provides guidance to researchers on research application development, and the TSSAC and PZJA forums in assessing applications through the assessment criteria in the SRP appendices. The SRP was finalised by the TSSAC in mid-July 2018.
9. In the past, fishery specific research planning was undertaken through fishery specific research priorities being included in the SRP and each Torres Strait fishery completing a list of annual research priorities, which fed into the TSSAC annual research statement. This process has now been simplified by combining individual fishery planning into one rolling five year research plan per fishery. The plans are written by the relevant Torres Strait forum

(Working group, MAC or RAG) based on the themes and strategies identified in the 5 year SRP. These plans are then used by AFMA and the TSSAC to create an annual research statement (ARS), listing annual priorities for Torres Strait research across all fisheries. The new plan should simplify this process.

KEY ISSUES

10. The TSSAC now requires each fishery to develop a five year fisheries research plan, which fits into the themes identified in this SRP. Fisheries research plans are required to be submitted to the TSSAC for consideration by September 2018.
11. The five year plans are to be updated annually, thus always having a five year projection for research. It is possible that the five year rolling plans will not be finalised in time for the development of the TSSAC 2019-20 ARS. In this case, fisheries will be asked to submit a one year list of research priorities for 2019-20, and the five year rolling plans will be applied to the following year (2020-2021 and beyond).
12. The HCWG is asked to consider the themes of the SRP and discuss and advise on future research priorities for hand collectable fisheries over the coming five years.

Torres Strait Fisheries Strategic Research Plan 2018-2023

TORRES STRAIT
PZJA
PROTECTED ZONE
JOINT AUTHORITY



Australian Government
Australian Fisheries
Management Authority



Box 7051, Canberra Business Centre, ACT 2610 / Ph (02) 6225 5555 / Fax (02) 6225 5500 / AFMA Direct 1300 723 621

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Torres Strait Scientific Advisory Committee

The Torres Strait Scientific Advisory Committee (TSSAC) includes members from each of the three main Protected Zone Joint Authority (PZJA) agencies (the Australian Fisheries Management Authority, the Torres Strait Regional Authority and Fisheries Queensland), industry members and scientific research members. TSSAC is responsible for providing advice to the Australian Fisheries Management Authority (AFMA) Executive on the use of AFMA research funds for Torres Strait fisheries research. This Torres Strait research provides critical information to the Minister and the Protected Zone Joint Authority (PZJA) for the management of Torres Strait commercial fisheries.

As part of its role the TSSAC:

- develops research priorities for PZJA fisheries in conjunction with the Resource Assessment Groups (RAGs) (or Management Advisory Committees (MACs) and Working Groups (WG)) and addresses PZJA's management needs and objectives as specified in the *Torres Strait Fisheries Act 1984* (the Act) and this plan;
- reviews and advises (where required) on individual fishery research plans for PZJA managed fisheries;
- advises the AFMA Executive on the allocation of research funds, and provides milestone reports and accounts against the use of funds.
- informs Torres Strait communities of project outcomes.

AFMA provides the TSSAC secretariat duties, including organising meetings and managing research contracts and projects milestones.

The TSSAC relies on the assistance of the various PZJA advisory groups (MACs, RAGs and Working Groups) to develop fishery-specific research plans and priorities based on this Strategic Research Plan (SRP). These groups provide current and up to date scientific and operational advice to the TSSAC as it relates to research proposals and fishery. More information about the advisory groups is provided at section 2.4 below.

The Terms of Reference for the TSSAC is at ([Appendix A](#))

About this plan

This plan specifies the research priorities and strategies that the PZJA intend to pursue in Torres Strait fisheries, and provides background to the processes used to call for, and assess, research proposals.

This SRP has been developed by AFMA in consultation with TSSAC to assist the PZJA to pursue the objectives of the *Torres Strait Fisheries Act 1984* (the Act) through research.

This document sets out the five year strategic plan (2018-2023) for research in Torres Strait fisheries to support a framework for fishery-specific, five-year research plans, and a TSSAC annual research statement.

1. Part one sets out the research planning and priorities, including the current research themes, strategies and possible research activities (Part 1 and [Appendix B](#)). It also provides guidance to researchers developing applications for research funding.
2. Part two provides guidance for the TSSAC and PZJA advisory groups when assessing research applications (see [Appendix C](#)).

Supporting information for the TSSAC and researchers can be found in appendices and referenced documents, which are useful when developing research applications.

It is intended that the SRP be a living document that responds to a changing environment. In line with this intent, this plan will be reviewed by the TSSAC as needed, but not later than 2022.

Part 1 Research planning and priorities

1.1 Role of five year fishery research plans and link to the TSSAC Strategic Research Plan

The three research themes described in this section are strategic priorities for Torres Strait and provide a basis for advisory forums (RAGs, MACs and working groups) when developing their five-year fishery research plans (see section 2.3.2).

The five year fishery research plans will vary between fisheries depending on the status of the fishery, its information requirements and particular knowledge gaps. Although it is a five year plan, the advisory forums are required to review and update the fishery plan annually so the plan will always have a five year projection.

The TSSAC uses both the strategic priorities in the SRP and the specific priorities within individual fisheries research plans to compile the TSSAC Annual Research Statement (ARS). The ARS is the list of priority research for a given year that researchers will focus on when developing research proposals. The ARS is also the key document for RAGs, MACs and WGs in their prioritisation of research applications for TSSAC funding consideration. All groups including TSSAC and researchers should refer to the 'criteria for assessing research investment' ([Appendix C](#)) when developing, assessing and ranking research proposals.

1.2 Torres Strait Fisheries Research Themes, Strategies and Research Activities

The TSSAC has identified three research themes, related strategies and possible research activities (basis for proposals) for the next five years that will help the PZJA to pursue the objectives of the *Torres Strait Fisheries Act 1984* (Appendix A) and improve fisheries management in the Torres Strait.

Researchers are encouraged to use this SRP and the five year fishery plans when considering and planning their proposed research in the Torres Strait, regardless of where they may seek funding. The TSSAC process ensures

robust consultation with a broad range of stakeholders regarding funding priorities through the PZJA advisory forums.

Theme 1: Protecting the Torres Strait marine environment for the benefit of Traditional Inhabitants

Aim

Effective management of fishery stocks based on understanding species and their biology and ecological dependencies so it can support Traditional Inhabitant social and economic needs.

Strategy 1a - Fishery stocks, biology and marine environment

Possible research activities under this theme may include:

- Stock assessment and fishery harvest strategies for key commercial species.
- Ecological risk assessments and management strategies for fisheries.
- Minimising marine debris in the Torres Strait.
- Addressing the effects of climate change on Torres Strait fisheries through adaptation pathways for management, the fishing industry and communities.
- Incorporating Traditional Ecological Knowledge into fisheries management.
- Methods for estimating traditional and recreational catch to improve fisheries sustainability.

Strategy 1b – Catch sharing with Papua New Guinea

Possible research activities under this theme may include:

- Status of commercial stocks and catches by all sectors within PNG jurisdiction of the TSPZ.
- Good cross-jurisdictional fisheries management through better monitoring and use of technology.

Theme 2: Social and Economic Benefits

Aim

Increase social and economic benefits to Traditional Inhabitants from Torres Strait Fisheries.

Strategy 2a - Promoting social benefits and economic development in the Torres Strait, including employment opportunities for Traditional Inhabitants

Possible research activities under this theme may include:

- Models for managing/administering Traditional Inhabitant quota
- Understanding what influences participation in commercial fishing by Traditional Inhabitants.
- Understanding the role and contribution of women in fisheries.
- Capacity building for the governance of industry representative bodies
- Methods for valuing social outcomes for participation in Torres Strait fisheries.
- Identifying opportunities and take-up strategies to increase economic benefits from Torres Strait fisheries.

Theme 3: Technology and Innovation

Aim

To have policies and technology that promote economic, environmental and social benefits from the fishing sector.

Strategy 3a – Develop technology to support the management of Torres Strait fisheries.

Possible research activities under this theme may include:

- Electronic reporting and monitoring in the Torres Strait, including for small craft.
- Technologies or systems that support more efficient and effective fisheries management and fishing industry operations.

Part 2 Research management and administration

The PZJA, established under the Act, is responsible for the management of fisheries in the Australian Jurisdiction of the Torres Strait Protected Zone (Figure 1). The PZJA members comprise the Commonwealth and Queensland Ministers responsible for fisheries, and the Chair of the Torres Strait Regional Authority.

Fisheries research findings are critical to the PZJA exercising its functions, and in particular, for monitoring the condition of the Torres Strait fisheries. Good research more broadly assists the PZJA to pursue the legislated objectives. For more information about the PZJA or the PZJA agencies responsible for the day to day management of Torres Strait fisheries see annual reports on the PZJA website (www.pzja.gov.au).

The TSSAC is the only committee that is solely focused on Torres Strait fisheries research, although other committees or agencies (see below) may sometimes fund and manage research projects relevant to Torres Strait fisheries. The different funding sources and management are discussed below.

Research in the Torres Strait comes with a unique set of challenges. The traditional way of life and Torres Strait Island culture are critically important to the communities residing across the many remote islands in the Protected Zone. Consequently, research needs to pay special attention to the social and economic contexts which are unique to the region. This includes consideration of the potential impacts that research may have on Torres Strait communities, both overt through direct interaction with communities and the more subtle emotional or psychological impacts of research activities taking place in and around culturally significant places.

2.1 Research Funding Environment

Torres Strait fisheries operate in a complex management environment with social, economic and cultural objectives being pursued alongside contemporary environmental and fisheries management objectives.

Therefore, the scope of potential fisheries research is necessarily broad. Research ranges from assisting Traditional Inhabitants to pursue their aspirations within local fisheries, undertaking routine science stock assessments and surveys, adaptation to the effects of climate change and ways to improve sustainability of, and economic and social benefits from the Torres Strait fisheries.

2.2 AFMA research funds

The TSSAC primarily funds research through AFMA's annual research contribution (currently at \$410 000 annually).

These funds are allocated at the discretion of the AFMA executive, based on recommendations of the TSSAC. The TSSAC considers research proposals based on the priorities set in this SRP and the ARS. When the TSSAC is unable to recommend funding for a project due to funding constraint, it may recommend that researchers go to other funding bodies. Depending on the priority and degree of funding constraint the TSSAC may support the project but ask the researcher to seek co-funding from another body.

Research priorities identified by the TSSAC in its SRP are also intended to implicitly influence other funding agencies in the research they may fund as it relates to Torres Strait fisheries. Equally, the TSSAC should be mindful of research being funded by other bodies, particularly where it may overlap with TSSAC priorities.

It is not possible to meet all Torres Strait research needs through the AFMA funds. Funding constraints are not likely to change and it would be beneficial for the TSSAC to play a greater role in supporting researchers to find other funding opportunities in order to broaden research delivery in the Torres Strait. This could be achieved through improved collaboration among research providers with an interest in the Torres Strait region. AFMA will actively engage in seeking greater collaboration between the TSSAC and other bodies.

2.3 Other funding bodies

Funding for Torres Strait fisheries related projects is sometimes provided by other government agencies or external funding bodies for Torres Strait research. This can take the form of contributions towards AFMA funded TSSAC projects, or be completely funded external to TSSAC and AFMA. In these cases, the funding body will manage the project themselves with little or no TSSAC comment. Information on some of these funding bodies and agencies is provided below. Further information about their role and research programs can be found on the agency websites.

2.3.1 Government Agencies

The Department of Agriculture and Water Resources, along with the Torres Strait Regional Authority and the Queensland Government may provide funding support for certain Torres Strait fisheries projects based on the relevance to their jurisdiction and their current priorities. Sometimes these projects and funds are managed by the TSSAC. TSRA in particular inject significant funds for Torres Strait fisheries research on a regular basis. TSRA funded projects generally have a focus on capacity building and traditional fisheries, or commercial fisheries with an indigenous interest, and generally compliment the TSRA core program work.

2.3.2 The Fisheries Research and Development Corporation (FRDC)

The FRDC is a statutory authority within the portfolio of the Federal Minister for Agriculture and Water Resources, jointly funded by the Australian Government and the commercial fishing industry. The FRDC may fund projects in the Torres Strait if such projects fit within the FRDC's Research, Development and Extension (RD&E) plan. The FRDC uses Commonwealth, State and Territory research advisory committees to assess and recommend projects for funding in line with the RD&E Plan.

The Indigenous Reference Group (IRG), FRDC

The IRG is the FRDC's Indigenous Fishing sub-program advisory partner. The IRG was established by the FRDC in 2012 to assist in working towards a

RD&E plan for indigenous Australians to improve economic, environmental and social benefits to Australia's indigenous people. The current priorities for the IRG, can be found at the FRDC website (www.frdc.com.au) Some of these priorities are highly relevant to Torres Strait fisheries, including;

- Primacy for Indigenous People
- Acknowledgement of Indigenous Cultural Practices
- Self-determination of indigenous rights to use and manage cultural assets and resources
- Economic development opportunities arising from Indigenous peoples cultural assets and associated rights
- Capacity building opportunities for Indigenous people are enhanced.

Human Dimensions Program, FRDC

The FRDC also has a new Human Dimensions Program, focusing on social-science and economic research related to fisheries. Information on this program can also be found on the FRDC website (www.frdc.com.au).

2.3.4 The Commonwealth Scientific and Industrial Research Organisation (CSIRO)

The CSIRO has a long history of contributing funding support for CSIRO-led Torres Strait research. This generally occurs as a co-funding of project managed through the TSSAC.

2.3.6 Collaboration among research providers

There are both formal and informal links between staff from many of these external funding bodies and agencies that contributes to successful funding of research in the Torres Strait. Improved collaboration among research providers may lead to more efficient use of research funds.

AFMA, as a key funding agency for Torres Strait fisheries research, will consult with external research providers and key research stakeholders in an

effort to improve collaboration among these groups and transparency about proposed Torres Strait fisheries research.

2.4 MACs, RAGs and Working Groups

MACs, RAGs and WGs are actively involved in the PZJA's research planning process for the Torres Strait.

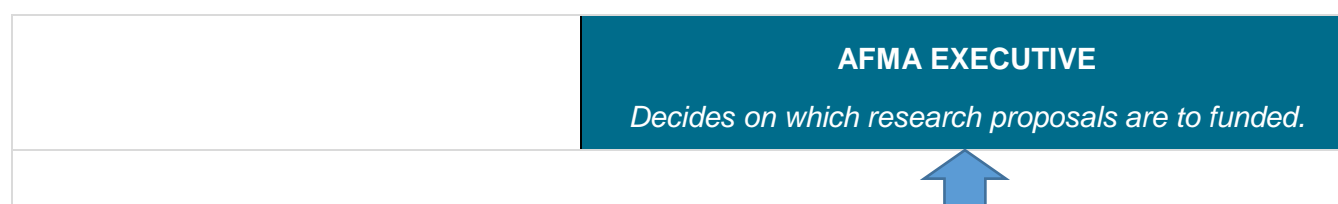
The roles of these different groups are less distinct than in the AFMA Commonwealth fisheries forums, as the working groups and MAC (there is currently only one MAC operating in Torres Strait) have a very similar function. There are now two RAGs within Torres Strait fisheries. Both Torres Prawn MAC and the hand collectible working group also perform RAG functions (primarily scientific advice).

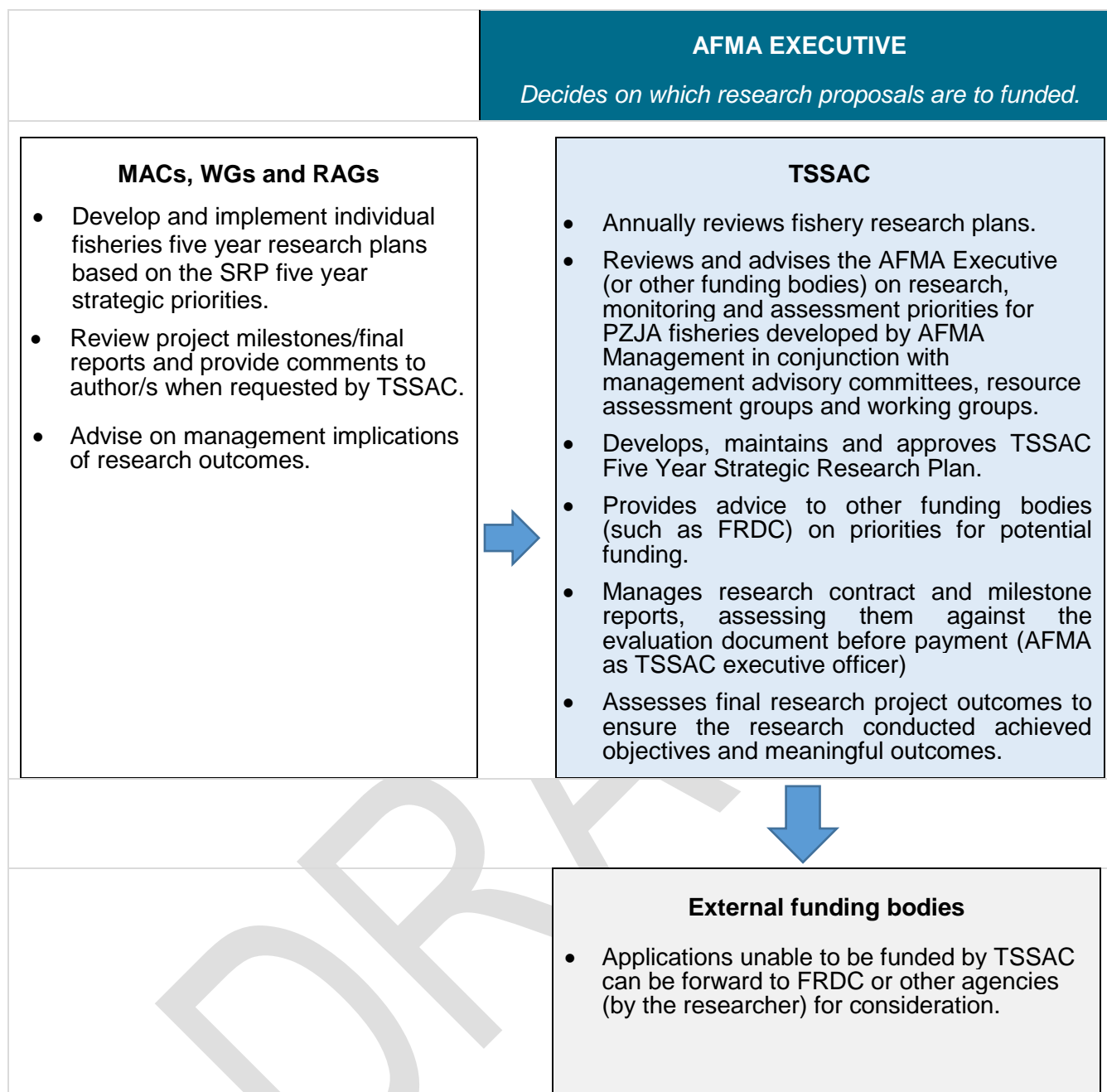
The collective scientific functions of these groups are to review scientific data and information and provide advice to the PZJA on the status of fish stocks, sub-stocks, species (target and non-target species) and the impact of fishing on the marine environment. This advice assists the Minister and PZJA in the role of managing commercial fishing within PZJA fisheries, particularly in relation to monitoring the condition of the Torres Strait fisheries.

The collective management advisory function is to provide advice on fishery-specific management policies and plans to assist the Minister and PZJA in the role of managing commercial fishing across the PZJA fisheries.

In relation to the TSSAC function, each of these groups will lead the preparation of the rolling five year, fishery-specific research plans which are underpinned by the SRP. See Figure 2 below for a map of roles and responsibilities during the TSSAC funding application process.

Figure 2. Roles and responsibilities of key participants in the PZJA's annual research cycle for Torres Strait fisheries





2.4 Confidentiality of community fishing data and intellectual property

Data collected during research projects can be regarded as confidential to local communities, or non-indigenous fishers. Confidentiality requirements should be considered for all research projects that may generate intellectual property related to traditional knowledge, or contain data, such as fishing grounds or catch data, of individual communities or fisheries. This data should be treated in the same way as commercial in confidence commercial fishing data. Researchers should consider the types of data they will be

collecting, and gain prior agreement from each community or relevant stakeholder/s as to how the data will be used for example. only for decision making or to be published in the public domain.

DRAFT

TSSAC's annual research cycle

Table 1. TSSAC funding Cycle

	TSSAC PROCESS
February	<p>Research providers submit pre-proposals for assessment, which meet the scopes provided by TSSAC in November.</p> <p>EOIs submitted are circulated to fisheries managers/ RAGs & MACs for comment; Fisheries Managers, RAGs/MACs identify any additional research priorities for potential FRDC funding.</p>
March	<p>TSSAC meets via teleconference to assess pre-proposals and Management/RAG/MAC comments.</p> <p>Applicants notified of TSSAC comments on their pre-proposals and asked to develop the consultation package (for review by AFMA by end of March) for use during full proposal development.</p>
April	<p>Researchers to complete full proposal (6 weeks total with consultation period)</p>
May	<p>Late May/ early June. TSSAC meet face to face to review full proposals and endorse final applications, or suggest necessary changes before endorsement.</p> <p>Applicants advised of the TSSAC's final evaluation.</p>
June	
July (START)	<p>TSSAC confirm the research budget for the new financial year (it doesn't generally change from year to year - \$410 000).</p> <p>New contracts and variations for essential research projects prepared and put in place, confirming forward budgets.</p> <p>RAGs, WGs and MACs to identify THEIR PRIORITY RESEARCH NEEDS for funding in the next financial year by updating their <i>five year rolling fisheries research plan</i>. This should be framed around strategies in the 5 year strategic research plan. Provide to TSSAC EO by end August.</p>
August	<p>RAGs/MACs submit their five year rolling fishery research plan to the TSSAC</p>

	Executive Officer, currently lisa.cocking@afma.gov.au, by end August.
September	TSSAC EO drafts the TSSAC Annual Research Statement (ARS) with each fisheries priorities for the current year.
October	<p>TSSAC meets (face to face or via teleconference) to finalise the PZJA ARS and agree on priorities for the TSSACs call for applications in November.</p> <p>AFMA develop scopes for the priority research projects and send to TSSAC out of session for consideration.</p>
November	The annual research call opens in November. Scopes sent to researchers seeking pre-proposals.

Appendix A: TSSAC Terms of Reference

Terms Of Reference

- i. Identify and document research gaps, needs and priorities for fisheries in the Torres Strait in conjunction with the PZJA advisory groups.
- ii. develop, maintain and approve the Torres Strait Five Year Strategic Research Plan. This includes balancing tactical short term needs and strategic needs to identify research gaps and priorities.
- iii. review rolling five (5) year research plans for Torres Strait fisheries
- iv. provide advice to the AFMA executive on priorities for the allocation of AFMA research funds and potential risks to achieving intended outcomes.
- v. Provide advice on effective consultation strategies with communities regarding research projects to ensure engagement throughout the project.
- vi. Consider the level of community support for research proposals and advise researchers on any actions needed to improve community consultation before a project is supported.
- vii. ensure research outcomes are communicated to community stakeholders.
- viii. provide advice to FRDC or other research providers on Torres Strait research priorities for potential funding consideration.
- ix. assess research investment and outcomes for the Torres Strait fisheries to measure the extent to which intended sustainability, social and economic needs are being met.
- x. provide a forum for expert consideration of scientific issues referred to the TSSAC by the Torres Strait advisory groups.
- xi. provide other advice to the Torres Strait advisory groups on matters consistent with TSSAC functions.
- xii. review research / consultancies, stock assessments, and other reports and outputs relevant to Torres Strait fisheries and advise the Torres Strait advisory groups on their technical merit.
- xiii. convene Fisheries Assessment workshops as appropriate to review and address assessment needs for Torres Strait fisheries.

Appendix B: Key factors influencing Torres Strait fisheries research needs

In developing this plan and the drivers for research in the Torres Strait, there are a number of factors which have been taken into account. This includes whole of Government policies and objectives relevant to the Torres Strait. These are explained in some detail below.

The Torres Strait Fisheries Act 1984 (the Act)

The PZJA is created under the Act; the legislation used by the Australian and Queensland Governments when managing Torres Strait fisheries.

The Act makes the PZJA responsible for monitoring the condition of the fisheries under its control and formulating policies and plans for their good management. In performing these functions, the Act requires the PZJA to have regard to the rights and obligations conferred on Australia by the Torres Strait Treaty' (<https://www.legislation.gov.au/Details/C2016C00677>), and in particular, the following management priorities:

- (a) to acknowledge and protect the traditional way of life and livelihood of traditional inhabitants, including their rights in relation to traditional fishing;
- (b) to protect and preserve the marine environment and indigenous fauna and flora in and in the vicinity of the Protected Zone;
- (c) to adopt conservation measures necessary for the conservation of a species in such a way as to minimise any restrictive effects of the measures on traditional fishing;
- (d) to administer the provisions of Part 5 of the Torres Strait Treaty (relating to commercial fisheries) so as not to prejudice the achievement of the purposes of Part 4 of the Torres Strait Treaty in regard to traditional fishing;
- (e) to manage commercial fisheries for optimum utilisation;
- (f) to share the allowable catch of relevant Protected Zone commercial fisheries with Papua New Guinea in accordance with the Torres Strait Treaty;
- (g) to have regard, in developing and implementing licensing policy, to the desirability of promoting economic development in the Torres Strait area and employment opportunities for traditional inhabitants.

Australian Government priorities

The Australian Government has identified priorities for research that are significant in shaping fisheries research effort and its reporting, namely:

- Global trends
- National Research Priorities
- Rural Research and Development Priorities

Global Trends

The five major trends that are expected to influence primary industries globally during the next 20 years, as identified by the Rural Industries Research and Development Corporation in its report *Rural Industry Futures – Megatrends impacting Australian agriculture over the coming twenty years*, include:

A hungrier world: Population growth will drive demand for food and fibre

A bumpier ride: Globalisation, climate change and environmental change will reshape the risk profile for agriculture

A wealthier world: A new middle class will increase food consumption, diversify diets and eat more protein

Transformative technologies: Advances in digital technology, genetic science and synthetics will change the way food and fibre products are made and transported

Choosy customers: Information-empowered customers of the future will have expectations for health, provenance, sustainability and ethics

National RD&E Strategy for Fishing and Aquaculture

The National Fishing and Aquaculture RD&E Strategy 2015-20 provides direction to improve the focus, efficiency and effectiveness of RD&E to support Australia's fishing and aquaculture industry.

The identified goals and key strategies are:

- Australia's fisheries and aquaculture sectors are managed, and acknowledged, to be ecologically sustainable.
- Security of access and resource allocation.
- Maximising benefits and value from fisheries and aquaculture resources.
- Streamlining governance and regulatory systems.
- Maintain the health of habitats and environments upon which fisheries and aquaculture rely.
- Aquatic animal health, and biosecurity (inclusive of pests) Aquaplan 2015-2019.

FRDC Research Development and Extension Plan 2015-20

The FRDC's RD&E Plan 2015-20¹ is focused on maximising impacts by concentrating on knowledge development around three national priorities:

1. Ensuring that Australian fishing and aquaculture products are sustainable and acknowledged to be so.
2. Improving productivity and profitability of fishing and aquaculture.
3. Developing new and emerging aquaculture growth opportunities.

¹ http://frdc.com.au/research/Documents/FRDC_RDE-Plan_2015-20.pdf

Appendix C: Criteria for assessing research investment in Torres Strait fisheries

The TSSAC will apply these criteria in assessing and ranking research proposals. Researchers should use the criteria as a guide when developing research applications and RAGs, MACs and WGs should also use these criteria when assessing proposals.

	Strongly disagree -----> strongly agree											Notes
Attractiveness	1	2	3	4	5	6	7	8	9	10	N/A	
1. Is there a priority need for the research (does it align with the Torres Strait Strategic Research Plan and Annual Research statement)?												
2. Is/are the end-user/s identified?												
3. Do the outcomes have relevance and are they appropriate to the end-users?												
4. Do the outputs contribute towards outcomes and are they measureable?												
5. Does the proposal actively engage Traditional Inhabitants and Torres Strait Islanders in the research?												
6. Are there employment opportunities for Traditional Inhabitants and Torres Strait Islanders?												
7. Does the research contribute to the knowledge that underpins ecosystem based fisheries management (EBFM) to improve the quality of decisions made?												

8. Does the project involve capacity development for Communities? If so, TSSAC to discuss if there is funding from other agencies such as the IRG or TSRA that could support this project.												
Feasibility												
9. Does the applicant and their team / resources have the capacity to produce the outputs?												
10. Is the budget appropriate to meet the outputs and outcomes?												
11. Does the proposal outline a coherent strategy surrounding data collection, analysis, and storage?												
12. Does the proposal include appropriate plans (for example, adoption, communication and/or commercialisation plans) to ensure that the full potential of the research is realised through adoption of research outputs by end-users?												
13. Are the methods scientifically sound, well described and consistent with the projects objectives?												

<p>14. Research will be most effective when there is effective engagement with fishery stakeholders, particularly Traditional Inhabitants of the Torres Strait, and where the research has widespread stakeholder support (refer to procedural framework for undertaking research in the Torres Strait and the TSSAC research proposal application).</p> <p>Does the project identify the key stakeholders and how they will be engaged regarding the project in a culturally appropriate way?</p>												
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DRAFT

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Catch data summary	Agenda Item 3.2 For NOTING

RECOMMENDATIONS

1. That the Working Group:

- a. **NOTE** the summary of catch and effort data for hand collection fisheries, as recorded in catch disposal records (TDB02) reported by licenced fish receivers since 1 December 2017; and
- b. **NOTE** the historical catch data (pre-2017) that was reported at the previous working group. These data were sources from daily logbooks, docket books and verbal reports. Beche-de-mer catch data reported to AFMA is under review and the figures presented here may be subject to change.

BACKGROUND

Fisheries activity

2. Fishing activity in both the Pearl Shell and Trochus Fisheries remains negligible. The low level of catch and effort in the Pearl Shell and Trochus Fisheries is thought to be due to low market demand rather than a decline in stock availability.
 - a. There have been no reports through logbooks or docket books of trochus being harvested in the 2015 and 2016 fishing seasons or the 2017 fishing season to date (Table 2).
 - b. There have been no reports through logbooks or docket books of trochus shell being harvested during the 2015 through 2017 fishing seasons or the 2018 fishing season to date.
 - c. Limited activity has been reported in the pearl shell fishery reported since 1 December 2017. During a review of developmental permits issued for the taking of undersized pearl shell in 2015 and 2016, AFMA received verbal reports that approximately 800 pearl shell was collected during the permit period, with roughly 15-20% comprised of shell between 100-130 mm. It was also reported that this low level of take has continued with pearl shell collected on an opportunistic basis largely by TIB licence holders whilst targeting TRL or in TRL closure periods.
3. Fishing activity in the Beche-de-mer Fishery has increased and is largely attributable to increased interest associated with two trial Black Teatfish openings in 2015 and 2016 (Tables 2, 3 and Figures 2, 3).

Active licences

4. A summary of fish licences for the hand collectable fisheries is provided in Table 1.

Table 1. Current licences as at 2 July 2018 for the Beche-de-Mer, Pearl and Trochus Shell fisheries

	TIB licences	TVH licences	Carrier Boat licences
Beche-de-mer	123	1 package (held in trust by TSRA)	14 (B and C)

Pearl shell	61	9 packages	13 (A, B and C)
Trochus	69	-	7 (A, B and C)

Catch reporting

5. On 1 December 2017 the Fish Receiver system was implemented. It became mandatory for all Torres Strait Fisheries licence holders (excluding Torres Prawn) to land their catch to a licenced fish receiver as soon as the catch either came onto land or was landed to a Carrier vessel.
6. AFMA has been working to increase awareness of and educate fishers about the fish receiver system. More information on the Fish Receiver System can be found at Item 2.2.2.
7. Reporting of beche-de-mer catch through voluntary logbooks and docket books remains low. In 2016 two buyers returned docket books to AFMA, and in 2017 two fishers return voluntary logbooks (Figure 1).
8. AFMA is aware that fishing for beche-de-mer and pearl shell has been ongoing however due to the lack of catch reports the scale and extent of fishing is unknown. The implementation of the fish receiver system has increased the reporting of beche-de-mer catch, however the level of reporting is still low.
9. AFMA is analysing additional returned logbooks that included Prickly Redfish catch from 2015. If these catches are not duplicated in the recorded docket book catch, the over catch for 2015 may increase. More information will be provided on this at Item 3.5.

Catch data and effort trends for hand collection fisheries in the Torres Strait

Table 2: Torres Strait Hand collectable fisheries catch data from catch disposal records (TDB02) from 1 December 2017 to 29 June 2018. These catch figures are still preliminary and may change as AFMA continue to review the reported catch.

Fishery	Catch (t)	TAC (t) (2018)
Trochus Shell	No reported activity	-
Pearl Shell*	-	-
Beche-de-Mer	26.14**	-
- Sandfish**	<0.02	0
- Surf redfish**	<0.03	0
- Black teatfish	0	0
- White teatfish	0.63	15
- Prickly redfish	8.64	15
- Basket species		80
Curryfish	15.37	(Species trigger 40t)
Other species	1.45	

*Limited activity from less than five fishers.

** Reported catch of no take species is being followed up but is assumed to be a misidentification.

Table 3: Torres Strait Trochus Fishery historical catch and effort records (source: AFMA docket book (TDB01) database).

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Trochus catch (kg)	8,046	1,526	650	0	0	0	0	0	0	0
Number of fishers	16	7	5	0	0	0	0	0	0	0

Table 4: Torres Strait Beche-de-mer Fishery historical catch records from 2005 to 2017 (source: AFMA docket book (TDB01) database and verbal reports obtained from industry during the 2015 Black Teatfish opening).¹

Common Name	TAC (t)	Recorded catch (kg) ²									
		2005	2007	2010	2011	2012	2013	2014	2015	2016	2017 ³
Black Teatfish	0 (15 ⁵)				75	2001 ⁴	138	16624 ⁴	23303 ⁴		
Prickly Redfish	15 (20 ⁶)	5564	128	146	11056	1255	5888	9173	28110 ⁴	11211	
Sandfish	0			5	31	2152	26	6			
Surf Redfish	0						52	1			
White Teatfish	15	734			3179	13294	12633	16341 ⁴	4200	990	
Blackfish	80 t 'basket'	186	128		507	73	216	1960	3596	1098	
Curryfish					1118				6099	1085	
Deepwater Redfish				7			5024	4229	5546		
Elephant Trunkfish					4	28	2		133		
Golden Sandfish							52	351	55		
Greenfish							1	1	14		
Stonefish				459							
'Basket' total		186	128	466	1629	101	5295	6541	15443	2183	
Grand Total	115	6484	256	617	15970	18803	24032	48686	71056	14384	12834

¹ Catch data reported to AFMA is under review and the figures presented here may be subject to change. With regards to Prickly Redfish, AFMA is assessing additional logbook returns received which contain 2015 Prickly Redfish catches. If the catches from these logbooks are not duplicated by docket books received, the amount of the overcatch may further increase.

² There was no catch reported in 2006, 2008, 2009.

³ Catch data for 2017 is an estimate based on catch reported through the voluntary docket books and is subject to change.

⁴ Yellow cells represent TAC over-catches.

⁵ The 15t TAC was available during 2014 and 2015 only.

⁶ The 20t TAC was available until the end of 2017.

Table 5: Torres Strait Beche-de-mer Fishery historical catch records from 1993 to 2004 (source: Tim Skewes who sourced the data QDPI logbook database, AFMA docket book (TDB01) database and industry sources).

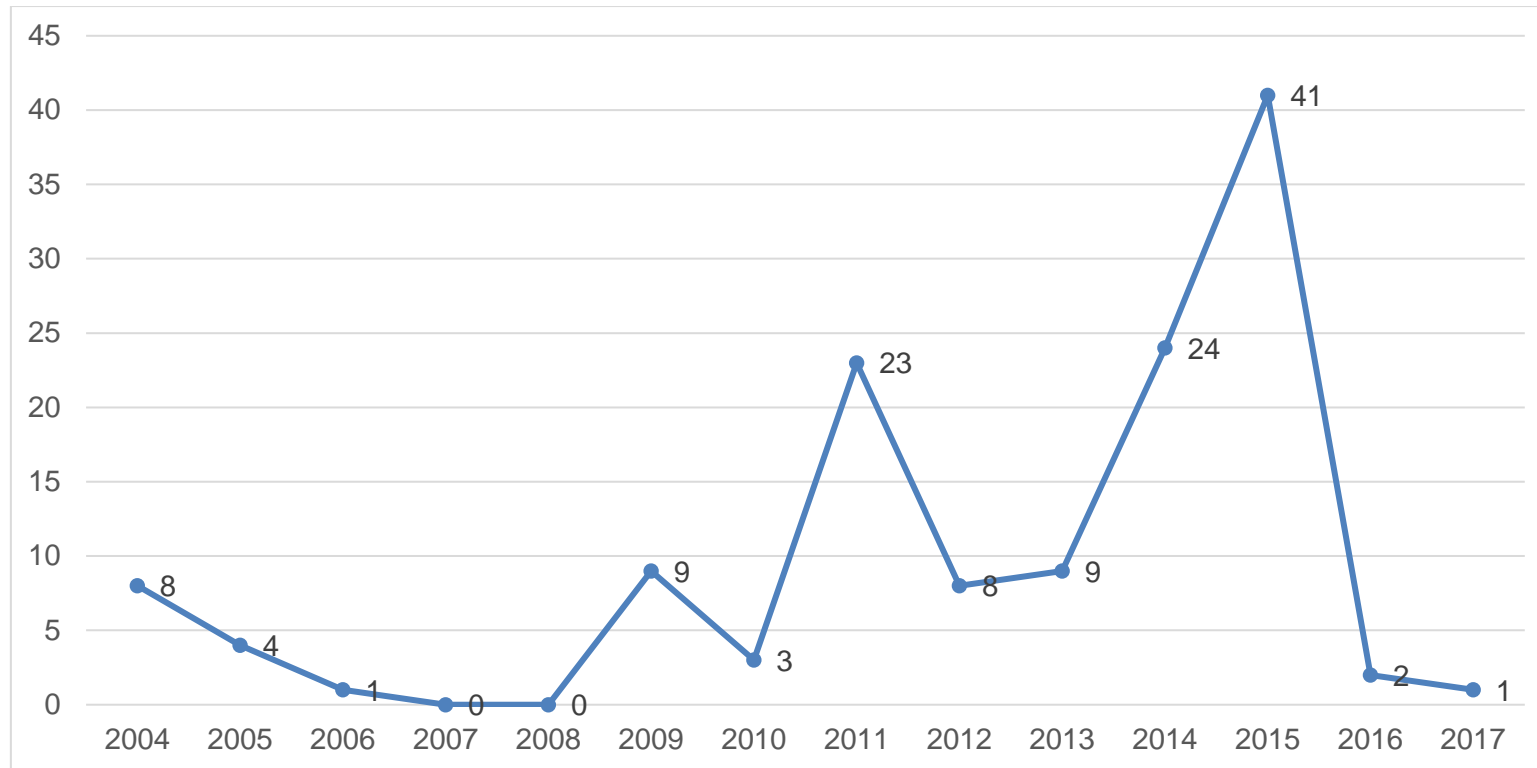
Common Name	Recorded catch (kg) ⁵										
	1993 ⁶	1994 ⁶	1995 ⁷	1996	1997	1998	1999	2000	2001	2002	2004
Black Teatfish		20000	50000	52777	40190	18462	9196		11820	3392	
Prickly Redfish				7	41	620	3332	347	160	10451	1188
Sandfish	40000	200000	1200000	30000	29955	48	39				
Surf Redfish	20000			34990	51658	60289	1497		59655	6487	
White Teatfish					123	855	1064	1207	3023	147	25
Blackfish					65	1211	1675		28502	10663	
Curryfish											
Deepwater Redfish					12		38	252			
Elephant Trunkfish									374	389	
Golden Sandfish											
Greenfish						440			88	1166	
Stonefish											
Leopardfish									30	9643	
Brown sandfish							30		382	3378	
Deepwater Blackfish							223	160	470		
Amberfish									192		
Grand Total	60000	220000	1250000	117774	122044	81925	17094	1966	104696	45716	1213

⁵ There was no catch reported in 2003.

⁶ Estimates obtained from industry sources.

⁷ Estimates from Williams et al, 2000.

Figure 1: Number of fishers selling catch to buyers and recorded in docket books by year (source: AFMA docket book (TDB01) database).⁸



⁸ These data do not include additional fishers reporting catch by other means (e.g. verbal reports) for the two Black Teatfish openings in 2014 and 2015.

Figure 2: Reported catches (kg) of key target species (species not subject to closures) from 2005 to 2017 (source: AFMA docket book (TDB01) database).²**Error! Bookmark not defined.**³

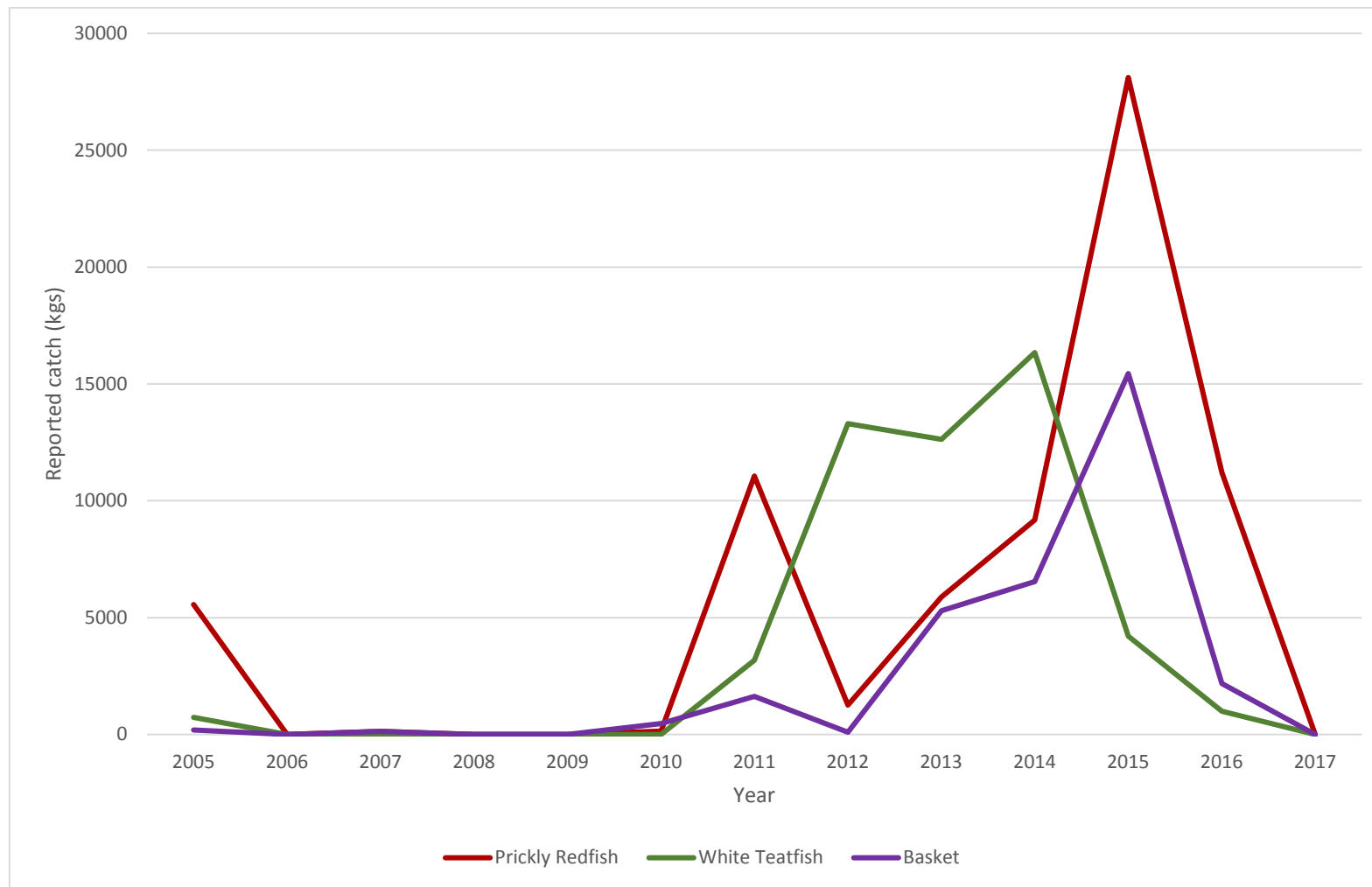
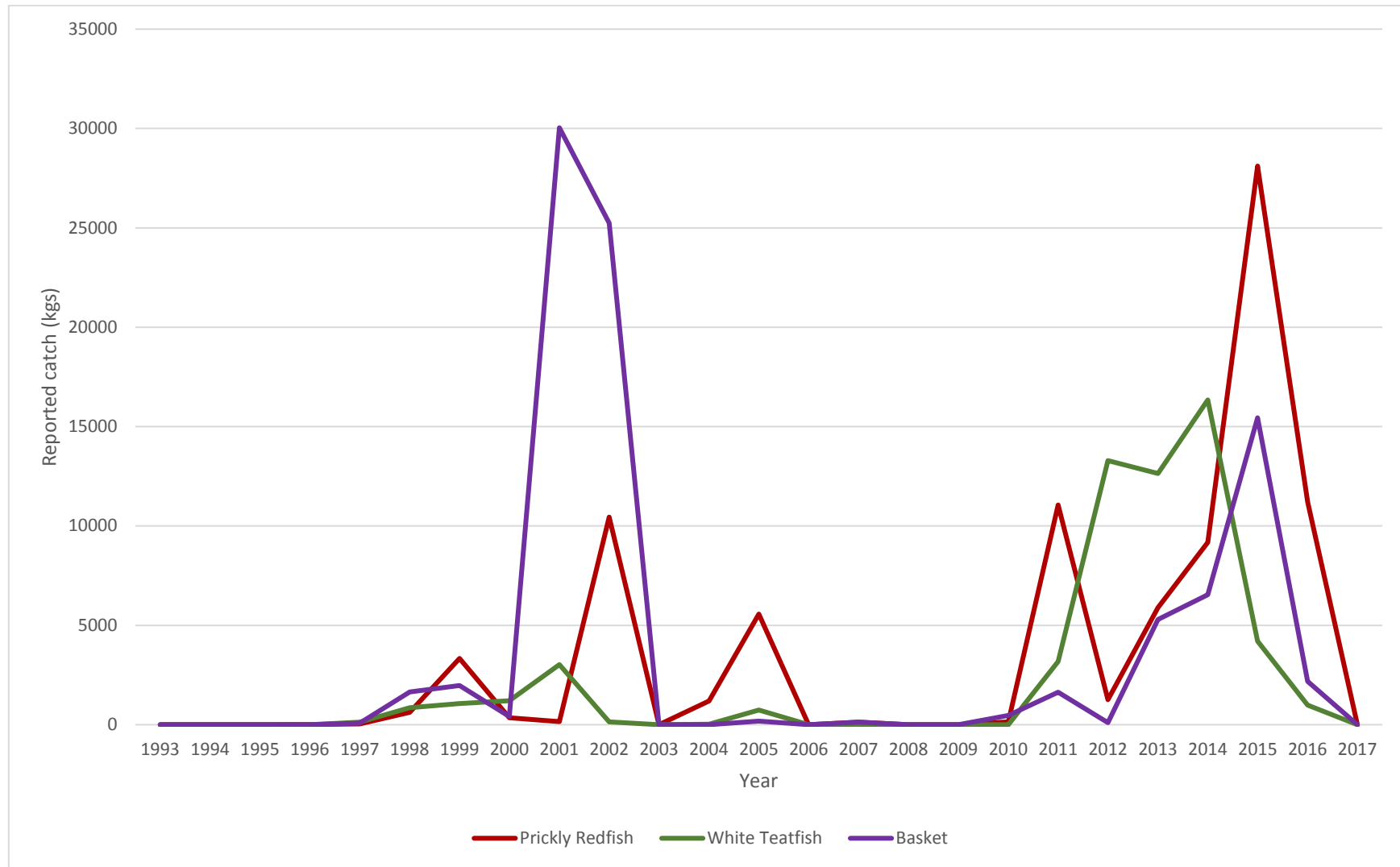


Figure 3: Reported catches (kg) of key target species (species not subject to closures) from 1993 to 2017 (source: AFMA docket book (TDB01) database).^{2,3,5}



HAND COLLECTABLE WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Pearl and Trochus Shell Fisheries update	Agenda Item 3.3 FOR NOTING

RECOMMENDATIONS

1. That Hand Collectables Working Group **NOTE** a verbal update from the AFMA members;

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Black Teatfish	Agenda Item 3.4 For DISCUSSION

RECOMMENDATIONS

1. That the Working Group:

- a. **NOTE** the history of the Black teatfish fishery and associated discussions and decisions of the Hand Collectables Working Group and Protected Zone Joint Authority Committee (Table 1).
- b. **NOTE** that the PZJA has agreed (out of session, February 2017) that fishing for Black Teatfish (*Holothuria whitmaei*) will remain closed until the risk of exceeding the total allowable catch (TAC) set for the species is substantially reduced through cost-effective management tools;
- c. **DISCUSS** and **ADVISE** on management arrangements needed to support any future opening of fishing for Black Teatfish, noting:
 - i. the arrangements AFMA has implemented to date to support any future opening (VMS, FRS and the public licence register) and the review of the FRS presented at item 2.2.2;
 - ii. the work still underway on the Beche-de-mer harvest strategy and legislative amendments to the Torres Strait Fisheries Act which will support the future development of the Beche-de-mer Fishery;
 - iii. previous management arrangements that have been considered (Table 2) to date by the Industry Workshop, Working Group and AFMA.
 - iv. that any management requirements discussed, would need to be met and consistently demonstrated for a period of time prior to a Black teatfish opening being considered.

KEY ISSUES

2. The HCWG has recommended that the Black Teatfish fishery not be opened until measures are in place to improve catch reporting (HCWG 9), with a preference for a mandatory Fish Receiver System (FRS) (HCWG 10). This recommendation was broadly supported by the fishing industry.
3. In line with the HCWG recommendation, the PZJA agreed in February 2017 that the Black Teatfish Fishery would remain closed until the risk of exceeding the total allowable catch (TAC) has been significantly reduced through cost-effective management tools.
4. On December 1 2017, the FRS was implemented. All Torres Strait fishers are required to land their catch with a licenced fish receiver. An update on the first 6 months of the FRS and how it is operating in the Hand Collectables fisheries is provided as Item 2.2.2. Following the implementation of the FRS, there has been increased calls from industry to conduct another trial opening of the Black Teatfish fishery.
5. Recommendations to reopen the Black Teatfish fishery will need to be supported by the Working Group, consulted on more broadly with fishers and other stakeholders and ultimately approved by the PZJA. This process will take a minimum of 6 months.

BACKGROUND

6. The Black teatfish fishery was closed in 2003 as the stock had been overfished. A CSIRO stock survey found that Black teatfish stocks had recovered to near pre-fishing biomass by 2009.
7. In 2011, as a result of this survey, HCWG5 recommended that a trial opening be conducted as a way to develop the black teatfish fishery in a sustainable manner. The aim of the trial was to slowly develop the fishery and to work towards a consistent and sustainable fishery, e.g. an opening for black teatfish fishing every year.
8. The PZJA accepted and agreed to this recommendation and a trial opening of one month was set for November 2014. In that year, the TAC of 15 tonnes was reached within two weeks of the trial and once all catch reports were reconciled was found to have been exceeded by 1.624 tonnes.
9. After reviewing the outcomes of the trial the HCWG recommended that another trial opening continue in 2015 for one month or until the 15 tonne TAC was caught. The continuation of the trial openings past the 2015 opening, was contingent on improvement in catch reporting.
10. In 2015, the fishery was closed after eight days as reported catch reached 15 tonnes. The final catch figure for the trial was 23.303 tonnes, an over catch of 8.303 tonnes. Reporting levels did increase during the 2015 trial, however the significant delay between capture and reporting undermined the ability to manage the fishery within the TAC limit.
11. In 2017, the PZJA agreed that the black teatfish fishery would remain closed until such time as cost-effective management tools were in place to reduce the risk of over catching the TAC.
12. Since the 2015 trial opening the Working Group has been working to develop advice on the future management arrangements for Black Teatfish – this process is ongoing.
13. At its meeting in November 2016, the Working Group recommended the following minimum requirements for allowing further fishing for Black Teatfish:
 - a. development and implementation of community-based catch monitoring arrangements (noting that in the short term these systems would be voluntary), starting with Community Monitoring Plans to be submitted to AFMA by 30 November 2016; and
 - b. implementation of a regulatory-based catch monitoring/reporting tool. The preferred tool being a mandatory FRS.
14. On 1 December 2017, the Fish Receiver System was implemented for all Torres Strait fisheries, except Torres Prawn. As discussed in Item 2.2.2, the Fish Receiver System is not currently working as effectively in the Beche de Mer fishery as in other Torres Strait fisheries.
15. There is currently an average lag in reporting Beche de Mer landings of 35 days. This is well above the licence condition that completed CDRs be returned to AFMA within 3 business days of being completed. This lag is comparable to the lag in reporting during the 2015 opening, which was considered by the HCWG to undermine the ability to manage the fishery.
16. AFMA has contacted fish receivers, fishers and buyers in the Beche de Mer fishery to gain an understanding of current catch rates across the fishery and to follow up on unreported catch. Further, AFMA Compliance are following up allegations of illegal, and unreported catches across the beche-de-mer fishing.

Table 1: Timeline of the Black teatfish fishery closures and openings.

Year	Meeting	Fishery status	Comments
2003	Pre-HCWG	Closed	Black teatfish found to be overexploited. PZJA agreed to shut the fishery.
2009	HCWG3	Closed	CSIRO presented early results of a survey of stock abundance of Hand Collectables fisheries in the eastern Torres Strait. Results indicated that the Black teatfish stock has recovered to near unfished biomass. CSIRO recommended a conservative TAC of 25 tonnes. This recommendation was contingent on appropriate management strategies being in place to reduce the risk of over fishing and localised depletion.
2011	HCWG5	Closed	HCWG recommended to TS Fisheries Management Advisory Committee a 15 tonne TAC for Black teatfish to be available for one month. The opening was recommended to occur during the Tropical Rock Lobster hookah season to limit the transfer of fishing effort, and was contingent on mandatory catch reporting being agreed to by the PZJA.
11/2014	NA	Open	The fishery was opened for the first trial in November 2014. The fishery was set to close either after a month or when the 15 tonne TAC was reached, which ever came first.
4/2015	HCWG8	Closed	Following the 2014 trial, the HCWG recommended that the trial arrangements be maintained as part of the re-development of the fishery. A second opening in November 2015 was agreed to under the same conditions of 15t TAC or one month. A further recommendation was that catch reporting levels needed to improve significantly (from 17.3%) for further trials to be considered. The number of fishers reporting their catches increased, however there was still issues with the timeliness of reporting.
11/2015	NA	Open	The second Black teatfish trial opening was conducted. The catch was not kept within the 15 tonne TAC and the fishery was closed after eight days. The reported total catch was 23 tonnes; which was 8 tonnes over the TAC.
6/2016	HCWG9	Closed	Recommended not to open the fishery again until measures were in place to significantly reduce the risk of overshooting the TAC. An action item from the meeting was to hold a workshop, with the support of AFMA and the TSRA, with industry representatives to consider immediate options to improve catch reporting, short, medium and long term management options.
10/2016	Industry workshop	Closed	Following the recommendation from the HCWG, an industry workshop was conducted on Erub Island. The workshop involved industry members, fishers and buyers, from the eastern islands. A range of views were put forward by industry at the meeting, with some fishers wanting the fishery to be opened against as soon as

Year	Meeting	Fishery status	Comments
			<p>possible (1 December 2016 was suggested) and others who wished to develop better catch reporting and community-based management arrangements. Advice from the meeting included:</p> <ol style="list-style-type: none"> 1. The development of community management plans; 2. A desire to move towards catch share allocations for the five communities. This allocation would be further restricted to operators from those communities to be decided by the PBC, cultural protocols to be adhered to; 3. Improved catch monitoring, possibly via mandatory logbooks. <p><u>Recommendation:</u> a) each community develop their community catch monitoring arrangements in details, b) proposals include other community based management arrangements (ie catch allocations, control over who can fish, cultural protocols) be developed and adopted by industry agreement, and c) that these proposals be submitted to the Hand Collectables Working Group and PZJA.</p>
11/2016	HCWG10	Closed	<p>The outcomes from the Industry Workshop were considered. The HCWG noted its previous recommendation that the fishery remain closed until measures are in place to improve reporting.</p> <p><u>Recommendation:</u> Minimum requirements for allowing further fishing for black teatfish</p> <ul style="list-style-type: none"> - Development and implementation of community based catch monitoring arrangements (noting that in the short-term these systems would be voluntary) to be submitted by 30 November 2016; and - Implementation of a regulatory-based catch monitoring/reporting tool. The preferred tool being a mandatory fish receiver system.
2/2017	PZJA	Closed	<p>The PZJA formally agreed to keep the black teatfish fishery closed until the risk of exceeding the TAC set for the species is substantially reduced through cost-effective management tools.</p>
6/2017	HWG11	Closed	<p>HCWG noted the out of session agreement that the Black teatfish fishery would remain closed until cost-effective management arrangements were in place that would reduce the risk of over catching the TAC.</p>
10/2017	HCWG12	Closed	<p>No formal recommendations were made. The HCWG reiterated the need to obtain reliable catch data and limit fishing effort to support a future opening.</p>

Table 2. Summary and status of previously discussed management arrangements for the black teatfish fishery.

Management tool	Details
Control – the rules under which an opening will be conducted	
Precautionary TAC	<p>In setting a TAC, consideration should be given to:</p> <ul style="list-style-type: none"> - seeking further scientific advice on the sustainable harvest. Advice in 2015 suggested that 25 tonnes of Black Teatfish could be sustainably harvested in 2015. However, given the high risks of overfishing due to poor catch reporting, the TAC was set at 15 tonnes. - whether a stock survey is needed to give a more accurate estimate of stock status, to inform TAC setting; - deducting any over-catches from future TACs.
Closure trigger	Set a TAC trigger at which point the fishery will be declared closed. During the 2015 trial opening, there was a lag in catch reports being received by AFMA, as many fishers reported previous days' catches a number of days after they were caught.
Limited opening period	Instead of opening the fishery for 1 month or until the TAC is reached, set the opening for 3-4 days. The maximum daily recorded catch during the 2015 trial opening was 4.341 tonnes. Allowing for a 10% increase in fishers participating in the trial opening, the total catch expected over a 3 day period would be approximately 14 tonnes.
Limited entry	Access to the opening is provided through developmental permits.
Timing of opening	<p>Any future trial opening should not be:</p> <ul style="list-style-type: none"> - in November. December has been suggested as a better time; - during the Tropical Rock Lobster (TRL) Fishery closure (1 October-30 November). Having any future trial opening coincide with when the TRL Fishery is also open may reduce effort, as some fishers will prefer to target TRL over Black Teatfish; - during a known spawning time for relevant species.
Prohibition on carrier boats	Carrier boats should not be permitted to receive Black Teatfish.
Landing restrictions	Restrict landings to specified communities (e.g. to the four eastern communities: Erub, Masig, Mer and Ugar) and/or specified fish receivers within a community.
Closure of Beche-de-mer Fishery post trial opening	Close the entire Torres Strait Beche-de-mer Fishery (i.e. all species) for one month once fishing for Black Teatfish is closed. This would assist compliance but not necessarily address catch reporting issues.

Monitoring – how catch and effort will be monitored	
<p>Mandatory Fish Receiver System</p> <p>** now in place</p>	<p>The FRS requires:</p> <ul style="list-style-type: none"> - fishers to land all fish to a licenced fish receiver; - fish receivers to weigh the catch, complete a catch disposal record and send it to AFMA; <p>Additional considerations:</p> <ul style="list-style-type: none"> - the frequency of reporting will need to be increased from within three days to daily at a minimum; - verbal reports may be needed, followed up by the paperwork; - development of an informal register of fish receivers who will be receiving Black Teatfish, to allow AFMA to target the collection of real time data on catches. <p>Some of these additional considerations could be facilitated under Voluntary Community Monitoring Plans.</p>
<p>Voluntary Community Monitoring Plans - to complement the FRS</p>	<p>Three communities have submitted Community Monitoring Plans - Erub, Mer and Ugar. These plans include strategies such as:</p> <ul style="list-style-type: none"> - centralised catch reporting system (catch to be recorded at a single location); - restrictions on who may fish in the fishery (fishing to only be carried out by the five eastern islands (Erub, Masig, Mer, Poruma and Ugar), catch to be allocated between the five eastern islands only (5 tonnes each), traditional boundaries to be applied, PBC approval required for fishers to fish and registration of fishers who will fish. <p>Community Monitoring Plans have yet to be provided by Masig or Poruma.</p> <p>Existing plans will need to be updated in preparation for any future trial opening to reflect the introduction of the FRS and complement the management arrangements to be applied during the opening.</p> <p>Community Monitoring Plans by themselves will not be sufficient to address the high risks of overfishing. Many of the strategies outlined in the plans will also take some time to implement. However, they are an important tool in the toolbox and will allow communities to demonstrate stewardship and readiness to move towards greater community-based management in the long term.</p>
<p>Vessel monitoring system (VMS)</p> <p>** now in place</p>	<p>VMS was implemented on primary and carrier boats on 1 July 2017.</p>
<p>Public licence register</p>	<p>AFMA is in the process of implementing a public register of Torres Strait licences to complement the introduction of the FRS. This will allow fishers and fish receivers to identify when licences expire, who else is licenced and assist with compliance.</p>

Enforcement – how compliance with the rules will be enforced	
Communication strategy	<p>A clear communication strategy will need to be developed in consultation with communities. The strategy should look to:</p> <ul style="list-style-type: none"> - provide information for fishers, fish receivers and communities more broadly on the management arrangements for any trial opening, including catch reporting requirements; - describe the process for closing the fishery including how this is to be communicated; - provide key contacts in both AFMA and communities to facilitate any trial opening; - provide all the materials necessary to support any trial opening – community notices/fact sheets, catch disposal records, reply paid envelopes, logbooks.
Aerial surveillance, at sea inspections, port inspections, fish receiver inspection	<p>A compliance presence at sea and on the islands will be needed before, during and after the opening, to prevent illegal stockpiling of Black Teatfish prior to any trial opening, illegal harvesting after the closure of the fishery and failure to comply with the rules during the opening.</p>

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Prickly Redfish – update on management actions	Agenda Item 3.5 For DISCUSSION

RECOMMENDATIONS

1. That the Working Group:
 - a. **NOTE** the PZJA Standing Committee endorsed the reduction of the prickly redfish total allowable catch (TAC) by five tonnes from 20 tonnes down to 15 tonnes effective as of 1 January 2018. A letter advising all licence holders of this change was circulated on 22 December 2017.
 - b. **NOTE** that as of 29 June 2018, reported catch of prickly redfish through catch disposal records (TDB02) is 8.64 tonnes, or approximately 60 per cent of the TAC, half way into the fishing season.

BACKGROUND

2. Prickly redfish overcatch in the TSBDMF has been a concern for a number of years. In 2015, the 20 tonne TAC was reportedly overcaught by 8 tonnes, however the total harvest may have been in the range of 40 to 50 tonnes; while 2017 catches are estimated to be overcaught by 20 to 30 tonnes.
3. Industry have observed declines in abundance of Prickly Redfish across many key fishing grounds and with fishers having to fish further afield and/or for a longer time to maintain good catch rates.
4. Due to its biological traits, being a relatively larger, slower growing, long lived, and less productive BDM species, prickly redfish is likely vulnerable to overfishing.
5. Scientific advice from CSIRO who presented biomass scenarios at three different levels of harvest have indicated that at harvest levels greater than 20 tonnes, the stock of prickly redfish will be depleted.
6. The nominal TAC of 20 tonnes which was set after stock surveys conducted in 2009, was reliant on understanding the amount of prickly redfish being harvested and accurately reported. To date, the provision of reliable fishery data remains poor and the PZJA and industry remain concerned over the amount of unreported catch.
7. The HCWG has repeatedly acknowledged the importance of accurate catch reporting to support the management of the fishery, which in turn supports positive investment within the industry. Despite this, AFMA have only received partial catch records from Ugar, Masig, Poruma and Mer industry groups for the 2015-2017 fishing seasons.
8. Scientific advice from the HCWG research member recommended the cessation of fishing for prickly redfish until catch reporting and fishery monitoring is improved to provide sufficient information on the status of the stock.
9. Based on this, HCWG12 held on 24 October 2017 noted that;
 - a. the PZJA were to be asked to consider a reduction in the total allowable catch of prickly redfish from 20 tonnes down to 15 tonnes as recommended by HCWG11 in June 2017;
 - b. BDM industry members agreed to provide any outstanding 2017 catch reports as an immediate priority;

- c. ongoing fishing be contingent on having reliable catch data.

KEY ISSUES

10. Following HCWG12, in December 2017 the PZJA Standing Committee endorsed the reduction of the prickly redfish TAC by five tonnes, from 20 down to 15 tonnes through the variation of TIB licences effective as of 1 January 2018.
11. The Standing Committee also agreed that any continued fishing for prickly redfish be contingent on having reliable catch data in order to monitor and enforce the TAC.
12. Reporting of beche-de-mer catch through voluntary logbooks and docket books remains low. In 2016 two buyers returned docket books to AFMA, and in 2017 two fishers return voluntary logbooks (**Figure 1 of Attachment 3.2a**).
13. Since the implementation of a mandatory Fish Receiver System (FRS) on 1 December 2017, catch reporting of prickly redfish has increased however the overall level of reporting remains low.
14. This is despite industry advice that fishing is occurring and with extensive liaison with industry to encourage the timely reporting of beche-de-mer catches. Without timely catch reporting it is difficult to determine the actual amount of stock being harvested or to undertake a basic fishery assessment.
15. As at 29 June 2018, reported catch of prickly redfish through catch disposal records (TDB02) was 8.64 tonnes, or approximately 60 per cent of the TAC, half way into the fishing season (**Agenda Item 3.2**).
16. AFMA is currently under review including additional logbook returns received which contain historic Prickly Redfish catches. If the catches from these logs are not duplicated by docket books received, the amount of over catch in previous fishing seasons may further increase.
17. Without any new information on stock status, and if catch reporting is still considered to be unreliable, the HCWG will need to further consider closure of the prickly redfish fishery.

HAND COLLECTABLE WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Future management priorities	Agenda Item 3.6 FOR NOTING

RECOMMENDATIONS

1. That Hand Collectables Working Group **NOTE** a verbal update from the AFMA members;
2. **DISCUSS** and **ADVISE** on future management priorities for the fisheries.

HAND COLLECTABLE WORKING GROUP	Meeting 13 24 July 2018
MANAGEMENT Budget for 2018/19	Agenda Item 3.7 FOR NOTING

RECOMMENDATIONS

1. That Hand Collectables Working Group **NOTE** a verbal update from the AFMA member about the budgeted projects and meetings for the fisheries for financial year 2018/19.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 13 24 July 2018
OTHER BUSINESS	Agenda Item 4 For DISCUSSION

RECOMMENDATIONS

1. That the Working Group **NOMINATE** any further business for discussion.