

19th MEETING OF THE PZJA TORRES STRAIT HAND COLLECTABLES WORKING GROUP

10 Nov 2022 (8:30 am – 5:00pm)

TSRA Board Room, Level 1 Torres Strait Haus, 46 Victoria Parade, Thursday Island

(video conference)

AGENDA

AGENDA ITEM 1 PRELIMINARIES

1.1 Acknowledgement of Traditional Owners, welcome and apologies

The Chair will welcome HCWG members, permanent observers, and casual observers to the 19th Torres Strait Hand Collectables Working Group.

1.2 Adoption of agenda

The working group is invited to consider and adopt the draft agenda.

1.3 Declarations of interest

Working group members are invited to declare any real or potential conflicts of interests to the group and determine whether a member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict.

1.4 Action items from previous meetings

The working group will note the status of action items arising from previous HCWG meetings.

AGENDA ITEM 2 WORKING GROUP UPDATES

2.1 PZJA Traditional Inhabitant members

PZJA TI members are invited to introduce themselves and provide an update on matters concerning the Torres Strait Hand Collectable fisheries, in particular, providing comment on fishing patterns, behaviours, prices, and market trends.

2.2 Scientific members

Scientific members are invited to provide an update on relevant research matters relevant to Torres Strait Hand Collectable fisheries.

2.3 Government Agencies

The Working Group will note updates from each of the PZJA government agency members on the latest developments relevant to Hand Collectable fisheries.

2.4 Native Title

The Working Group will note a verbal update from the Malu Lamar representative if in attendance.

2.5 Papua New Guinea National Fisheries Authority

The Working Group will note an update from the PNG NFA officials if in attendance.

AGENDA ITEM 3 BLACK TEATFISH TRIAL OPENING 9-12 MAY 2022 AND FUTURE OPENINGS

Having regard for advice from the Hand Collectable Resource Assessment Group (HCRAAG) and the application of the Harvest Strategy, the Working Group will discuss and provide advice on the potential for a future black teatfish opening and any arrangements required to support an opening.

AGENDA ITEM 4 TOTAL ALLOWABLE CATCHES FOR THE 2023 FISHING SEASON

Having regard for advice from the HCRAAG and applying the Harvest Strategy to all new information, the Working Group will discuss and provide advice on TACs for the 2022 fishing season.

AGENDA ITEM 5 RESEARCH PRIORITIES

Having regard for HCRAAG advice, the Working Group will discuss and provide advice to the TSSAC on research priorities for the beche-de-mer, trochus, mud crab and pearl shell fisheries under the Five-Year Rolling Research Plan. A five-year rolling research plan for Hand Collectable Fisheries is used to inform the Torres Strait Scientific Advisory Committee's (TSSAC) annual call for research funding proposals.

AGENDA ITEM 6 UPDATE ON A RECENT APPLICATION TO UNDERTAKE AQUARIUM FISHING IN THE TORRES STRAIT AND RELATED LICENCING MATTERS

The HCWG is asked to note updates on a recent application to undertake aquarium fishing in the Torres Strait and a PZJA decision on related licensing matters.

AGENDA ITEM 7 FUTURE MANAGEMENT PRIORITIES AND DATE FOR NEXT MEETING

The Working Group will discuss and provide advice on management priorities for Torres Strait Hand Collectable Fisheries. Having agreed management priorities and a work plan for Hand Collectable Fisheries aims to achieve a more efficient management process. The Working Group will consider a date and venue for HCWG20.

AGENDA ITEM 8 OTHER BUSINESS

The Working Group is invited to nominate any other business for discussion.

CLOSE OF MEETING

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No. 19 10 November 2022
PRELIMINARIES Welcome and apologies	Agenda Item 1.1 For NOTING

RECOMMENDATIONS

1. That the Working Group **NOTE**:
 - a. an acknowledgement of Traditional Owners;
 - b. the Chair's welcome address;
 - c. apologies received from members unable to attend.
2. Formal apologies have been received from Scientific member Nicole Murphy.
3. The Scientific Member, Assoc. Prof. Steve Purcell and the Queensland Department of Agriculture and Fisheries Member Ms Jenny Keys will be attending the meeting via videoconference.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
PRELIMINARIES Adoption of agenda	Agenda Item 1.2 For DECISION

RECOMMENDATION

1. That the Working Group consider and **ADOPT** the draft agenda.

BACKGROUND

2. A first draft annotated agenda was circulated to members and observers on 10 October 2022.
3. The draft agenda was revised to include minor comments and to better reflect the Agenda Items of matters to be discussed at the HCWG meeting and recirculated on 2 November 2022, along with Agenda Papers for the meeting.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No. 19 10 November 2022
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 (**Table 1**).
 - 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 declare all real or potential conflicts of interest or update the standing list of declared interests (**Table 1**) if required.
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.

Table 1. HCWG member and observer Declarations of Interest to be updated at the meeting. For members who are also members of the Hand Collectable Resource Assessment Group, the interest declared by those persons at the second HCRAAG meeting (27-28 September) are shown.

Name	Position	Declaration of interest
Members		
Nicholas McClean	Chair	Yet to be declared.
Nicole Murphy	Scientific Member	CSIRO staff member. Currently Principal or Co-Investigator on TSSAC funded projects for the Torres Strait Beche-de-mer and Tropical Rock Lobster Fisheries.
Steve Purcell	Scientific Member	Has interest in invertebrate fishery research has previously worked in the assessment of sea cucumber fisheries in the Pacific and New Caledonia, and on restocking/sea-ranching research. Specialist in sea cucumber ecology and fisheries. Will be involved in a sea cucumber population survey in New Caledonia to inform the CITES Appendix II listing of black and white teatfish.
John Tabo	Traditional Inhabitant Member Kemer Kemer Meriam	TIB licence holder with endorsements in the Spanish mackerel, reef line, beche-de-mer, trochus and tropical rock lobster fisheries. Member of Zenadth Kes Fisheries Limited.
Graham Hirakawa	Traditional Inhabitant Member Kaiwalagal	TIB licence holder with endorsements in the Spanish mackerel, pearl shell and tropical rock lobster fisheries. Member of Zenadth Kes Fisheries Limited.
Nicholas Pearson	Traditional Inhabitant Member Kulkagal	TIB licence holder with endorsements in the beche-de-mer and tropical rock lobster fisheries. Part of a family owned fishing business. Member of Zenadth Kes Fisheries Limited.
Toshi Kris	Traditional Inhabitant Member Maluialgal	TIB licence holder with endorsements in the Spanish mackerel and tropical rock lobster fisheries. Member of Zenadth Kes Fisheries Limited.
Pabai Pabai	Traditional Inhabitant Member, Gudumalulgal	Currently does not hold any commercial fishing licences but has interest to do so in the future. Member of Zenadth Kes Fisheries Limited.
Emma Freeman	AFMA Member	Employed by AFMA, no pecuniary interests or otherwise.
Nicholas Richards	Torres Strait Regional Authority (TSRA) Member	Employed by TSRA, no pecuniary interests as an individual, TSRA holds fishing licences on behalf of traditional inhabitants.
Jenny Keys	QDAF Member	Employed by Queensland Government and working in the Management and Reform Section, managing the East Coast Sea Cucumber and other

Name	Position	Declaration of interest
		harvest fisheries in Queensland. No pecuniary interests or otherwise.
Danait Ghebregabhier	Executive Officer, AFMA	Employed by AFMA, no pecuniary interests or otherwise

Permanent Observers		
Yen Loban	TSRA Fisheries Portfolio Member	TIB licence holder; TSRA Board Member for Ngurupai, Chair Zenadth Kes Fisheries Limited.
Joseph Posu	PNG National Fisheries Authority	To be declared.
Casual Observers		
Quinten Hirakawa	TSRA officer	Employed by TSRA and TIB licence holder with a BDM endorsement.
Ian Butler	Australian Bureau of Agriculture and Resource Economics (ABARES)	Employed by the Australian Bureau of Agricultural And Resource Economics and Science (ABARES), Department of Agriculture, Water and the Environment (DAWE). No pecuniary interests or otherwise.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No. 19 10 November 2022
PRELIMINARIES Action items from previous meetings	Agenda Item 1.4 FOR NOTING

RECOMMENDATIONS

1. That the Working Group **NOTE**:
 - a. the progress against actions arising from previous Hand Collectable Working Group meetings (**Attachment 1.4a**); and
 - b. the meeting record of the HCWG members' meeting held on 28-29 October 2021 is provided (**Attachment 1.4b**).

BACKGROUND

Actions arising

2. Updates are provided on the status of actions arising from the HCWG18 and previous meetings.

Meeting Record

3. The draft meeting record for HCWG18 was circulated out-of-session to members on 14 December 2021 for comment. The record was finalised out of session, emailed to Working Group members and posted on the PZJA website on 18 January 2022.

Status of actions arising from previous HCWG meetings.

#	Meeting	Action item	Responsibility	Status
1	HCWG 15 (1-2 Aug 19)	TSRA and AFMA to develop a discussion paper outlining suggested management arrangements, based on HCWG discussions for pursuing the use of hookah to fish for white teatfish, for further consultation with communities and consideration by the HCWG and the PZJA.	TSRA AFMA	Ongoing. The TSRA supported PZJA Traditional Inhabitant members to undertake cluster consultations in late 2019 which sought feedback from communities on the use of hookah to fish for white teatfish. An overview of the consultations outcomes was considered at HCWG 16. The HCWG recommended Malu Lamar discuss the review of the hookah prohibition at the stakeholder workshop with the view to developing management recommendations (see also Action 5 below).
2	HCWG 15 (1-2 Aug19)	AFMA to arrange a half/full day future management priorities workshop in conjunction with the next Hand Collectables Working Group meeting.	AFMA	Ongoing. AFMA was unable to arrange the workshop in conjunction with HCWG16 as the focus of that meeting was to seek firm advice on black teatfish for a 2020 opening. Options, including timing and means, for a future workshop will continue to be explored in consultation with members having regard for COVID 19 response measures (see also Action 5 below).
3	HCWG 16 (21 Feb 20)	Malu Lamar to make recommendations to AFMA and TSRA on an as needs basis to establish an MOU to assist in improved data collection in the Fishery.	Malu Lamar	Ongoing. While no formal MOU has been developed, a suite of parallel activities has since taken place including a full round of community visits focussed on Fish Receiver System education and awareness, and more recently PZJA traditional inhabitant member cluster consultations. AFMA also continues to work with individual operators to improve data collection. The TSRA is also working with Malu Lamar to agree a service level MOU that may include programs aimed at improving reporting.

#	Meeting	Action item	Responsibility	Status
				At the HCWG16 meeting, the Malu Lamar Chairperson expressed preference to maintain an ongoing action item on the development of the MOU to ensure it remains an option if needed.
4	HCWG 16 (21 Feb 20)	Malu Lamar to take the lead in convening a stakeholder workshop to further discuss and agree on cultural lore and industry agreements with respect to fishing for black teatfish and report outcomes to the HCWG.	Malu Lamar (supported by TSRA)	<p>Ongoing.</p> <p>The stakeholder workshop was initially planned to take place on 7-8 April 2020 but had to be postponed due to the COVID-19 emergency and resulting restrictions. A further workshop was scheduled for the 4-5 August 2020, however, did not proceed. At the face to face community meetings convened by AFMA with assistance from Michael Passi and Maluwap Nona, time was provided for participants to discuss cultural protocols. At the Black teatfish Industry Workshop held at Mer on 8-10 Feb 21, Mr Ned David, Chairperson of Gur A Baradharaw Kod (GBK) Torres Strait Sea Land Council advised that the GBK will develop a template for the development of land and sea protocols. A summary of the Mer Industry workshop, including community meeting outcomes is available on the PZJA website.</p>
5	HCWG 16 (21 Feb 20)	Malu Lamar to discuss the review of the hookah prohibition at the stakeholder workshop with a view to developing management recommendations.	Malu Lamar (supported by TSRA and AFMA)	<p>Ongoing.</p> <p>The stakeholder workshop was initially planned to take place on 7-8 April 2020 but had to be postponed due to the COVID-19 emergency and resulting restrictions. A further workshop was scheduled for the 4-5 August 2020 but did not proceed. TSRA have previously advised that a series of meetings in communities may now be pursued.</p> <p>The HCWG18 further discussed management options for the utilisation of white teatfish on 28-29 October 2021 and recommended that:</p> <ul style="list-style-type: none"> the assessment and development of management options for the utilisation of white teatfish is a high short-medium

#	Meeting	Action item	Responsibility	Status
				<p>term priority for the fishery requesting AFMA consider directing resources towards this management activity.</p> <ul style="list-style-type: none"> an industry workshop be held to enable industry to develop its preferred management options for the utilisation of white teatfish, while acknowledging the need for AFMA's assessment of the administrative feasibility of the preferred management option(s). <p>AFMA scheduled the industry workshop for 15-17 February 2022 but again had to postpone due to the COVID-19 situation in the Torres Strait Region at the time and the advice from Queensland Health and the Torres Strait Shire and Regional Councils for businesses and agencies to:</p> <ul style="list-style-type: none"> consider returning to work-from-home arrangements, where practical. reconsider non-essential travel into, within and out of the region to help reduce chances of further COVID-19 cases and transmission in the Torres Strait; and refrain from hosting large gatherings and community consultations. <p>AFMA will continue to work with the HCWG and industry to re-schedule the workshop and progress this matter.</p>
6	HCWG 17 (12 Oct 20)	AFMA to follow up with the Scientific member Steven Purcell on designing survey templates for the BDM Fishery to collect socio-economic data during Black teatfish reopening.	HCWG EO/ Scientific member Steven Purcell	<p>Ongoing. Following feedback from industry during consultation on the timing of the opening, AFMA did not pursue additional data collection initiatives and focused more on reinforcing the daily landing and reporting required to effectively monitor the black teatfish TAC. However, AFMA was able to fund a size frequency sampling project during the 2022. Collection of socioeconomic data for the fishery is still considered a priority for the fishery and is to be considered by the Working Group under Agenda Item 6 – Research Priorities, along with HCWAG advice on how to progress this item.</p>

#	Meeting	Action item	Responsibility	Status
7	HCWG 18 (28-29 Oct 21)	AFMA to seek Malu Lamar comments on the proposed new instrument, <i>Torres Strait Fisheries (Beche-de-mer) Management Instrument 2021</i> . This instrument will replace the current legislative instrument, the <i>Torres Strait Fisheries Management Instrument No. 15</i> , made under section 16 of the <i>Torres Strait Fisheries Act 1984</i> (the Act).	AFMA	Completed. The instrument was emailed to the Malu Lamar Chairperson at the time for comment on 17 November 2021 with a one-month comment period. No comments were received.
8	HCWG 18 (28-29 Oct 21)	Scientific member Steven Purcell to present at future meetings of the WG and HCRAH his work on socioeconomic studies and how they have informed fisheries management.	Steven Purcell, HCWG/HCRAH Scientific member	Ongoing. Scientific Member Steven Purcell will present to the Working Group under Agenda Item 6 – Research Priorities.



Australian Government

Australian Fisheries Management Authority

Torres Strait Hand Collectables Working Group

Meeting 18

28-29 October 2021

Final record

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

www.pzja.gov.au

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1 Preliminaries

1.1 Acknowledgment of traditional owners, welcome and apologies

1. The meeting was opening in prayer by Sereako Stephen around 8.45am.
2. The Chair welcomed members and observers to the 18th meeting of the Torres Strait Hand Collectables Working Group (the WG), in particular Nicholas Pearson and Gerald Bowie to their first meeting as newly appointed members for Kulkalgal and Maluialgal. The Chair acknowledged the traditional owners of the lands on which members were participating both in the meeting and those members on video conference and paid respect to Elders past, present and emerging.
3. The Chair noted that no apologies had been received.
4. The meeting was conducted as a face-to-face in Cairns and a video conference. All scientific members, the QDAF member and observers participated in the meeting via video conference whilst all other members and the Malu Lamar (Torres Strait Islander) Corporation RNTBC (Malu Lamar) observer participated from the Novotel Hotel conference room in Cairns.

1.2 Adoption of agenda

5. The WG adopted the draft agenda without any changes. Members and observers did not object to the meeting being voice recorded for the purposes of developing the meeting record. The recording is deleted once the meeting record is finalised and ratified by the WG.

1.3 Declarations of interest

6. The Chair advised members and observers, that as provided in the PZJA Fisheries Management Paper No. 1 (FMP1), all members must declare all real and potential conflicts of interest in the Torres Strait Beche-de-mer Fishery at the commencement of the meeting.
7. Where it is determined that a direct conflict of interest exists, the WG may allow the member(s) to continue to participate in the discussions relating to the matter but may also determine that, having made their contribution to the discussions, the member should retire from the meeting for the remainder of the discussions on that issue.
8. Declared interests are detailed in **Table 1** below. Each group of members and observers with similar interests were usually asked to leave the meeting to enable the remaining members to:
 - a. Freely comment on the declared interests;
 - b. Discuss if the interests preclude the members from participating in any discussions; and
 - c. Agree on any actions to manage declared conflicts of interest.

but in this meeting the WG agreed to address any additional conflicts of interest should they arise throughout the discussion of agenda items.

Table 1. Declared interests from each attendee

Name	Position	Declaration of interest
Members		
Anne Clarke	Chair	Previously contracted with Regional Development Australia Far North Queensland and Torres Strait. No pecuniary interests or otherwise.
Tim Skewes	Scientific Member	Independent Consultant. Previously employed by CSIRO. Scientific Member on the Hand Collectables Resource Assessment Group. Has been involved in Torres Strait research for about 30 years as a principal scientist and co-investigator for Torres Strait Scientific Advisory Committee (TSSAC) and TSRA funded projects focused on the sea cucumber, tropical rock lobster, finfish and traditional fisheries in Torres Strait. More recently involved in the 2019-20 sea cucumber survey and assisted with the report on developing options to measure non-commercial fishing in the Torres Strait. No current pecuniary interest in the fishery.
Steve Purcell	Scientific Member	Scientific Member on the Hand Collectables Resource Assessment Group. Lecturer at the Southern Cross University. Has interest in invertebrate fishery research has previously worked in the assessment of sea cucumber fisheries in the Pacific and New Caledonia, and on restocking/sea-ranching research. Specialist in sea cucumber ecology and fisheries. Will be involved in a sea cucumber population survey in New Caledonia to inform the CITES Appendix II listing of black and white teatfish. No other pecuniary interests or otherwise in the TS BDM Fishery.
Michael Passi	Traditional Inhabitant Member Kemer Kemer Meriam	Traditional inhabitant boat (TIB) licence holder and full time BDM operator. Hand Collectables Working Group Member.
Anthony Salam	Traditional Inhabitant Member Kaiwalagal	Traditional inhabitant boat (TIB) licence holder.
Nicholas Pearson	Traditional Inhabitant Member Kulkalgal	Traditional inhabitant boat (TIB) licence holder. TSRA Board Member. Owner of a fishing company that operates in the BDM and TRL Fisheries.
Maluwap Nona	Traditional Inhabitant Member Gudumalulgal	TIB licence holder and full time BDM operator. Chairperson of Malu Lamar; Director of MDW Fisheries Association on Mer; Traditional Inhabitant Member on TSSAC. Applicant on the Torres Strait Sea Claim Part B with other representatives.

Name	Position	Declaration of interest
		Employed as a Case Manager in the Northern Peninsula Area.
Gerald Bowie	Traditional Inhabitant Member Maluialgal	Traditional inhabitant boat (TIB) licence holder.
Selina Stoute	AFMA Member	Employed by AFMA, no pecuniary interests or otherwise
Mark Anderson	Torres Strait Regional Authority (TSRA) Member	Employed by TSRA in the Fisheries and Infrastructure programs, no pecuniary interests as an individual, TSRA holds fishing licences on behalf of traditional inhabitants.
Samantha Miller	QDAF Member	Employed by Queensland Government and working in the Management and Reform Section, managing the East Coast Sea Cucumber and other harvest fisheries in Queensland. No pecuniary interests or otherwise.
Executive officer		
Danait Ghebregabhier	Executive Officer AFMA	Employed by AFMA, no pecuniary interests or otherwise
Permanent Observers		
Sereako Stephen	Malu Lamar (Torres Strait Islander) Corporation RNTBC	Malu Lamar Director, TSRA Board Member for TRAWQ, Director on Gur A Baradharaw Kod Torres Strait Sea and Land Council (GBK), Chair of the Ugar Prescribed Body Corporate, Ugar Traditional Owner has previously held TIB fishing licence
Observers and invited industry participants		
Yen Loban	TSRA	TSRA Board Member and Fisheries Portfolio Member
Quinten Hirakawa	TSRA	Employed by TSRA and TIB licence holder with a BDM endorsement.
Keith Brightman	TSRA	Employed by TSRA working on PZJA related matters no pecuniary interests as an individual, TSRA holds fishing licences on behalf of traditional inhabitants.
Ian Butler	Australian Bureau of Agriculture and Resource Economics (ABARES)	Employed by the Australian Bureau of Agricultural and Resource Economics and Science (ABARES), Department of Agriculture, Water and the Environment (DAWE). No pecuniary interests or otherwise.

1.4 Action items from previous meetings

9. The WG noted the progress update provided against action item arising at previous HCWG meetings and that the meeting records for the HCWG Member's meeting on 7 August and the HCWG17 meeting on 12 October 2020 have been finalised and published on the PZJA website.
10. The HCWG noted further updates in relation to the specific action items outlined below:
 - a. Item 4 (HCWG16) - *Malu Lamar to take the lead in convening a stakeholder workshop to further discuss and agree on cultural lore and industry agreements with respect to fishing for black teatfish and report outcomes to the HCWG:*
 - HCWG TI members, including new ones, will continue to be involved in this process.
 - The TSRA's Fisheries Advisory Committee is currently seeking advice from GBK on how to proceed given this process needs to be led by Traditional Inhabitants.

2 Working group updates

2.1 Industry members

11. The WG noted the following updates from Industry members.
12. Fishers on Thursday Island and surrounding islands are seeking an update on the process for the review of the current hookah prohibition in the TS BDM Fishery in relation to fishing for white teatfish. Fishers had mixed feelings about the black teatfish opening, they were happy it opened but upset that they couldn't participate as it was during the TRL hookah season although they understood that there would have been too much effort if the opening had occurred during a TRL hookah closure.
13. Fishers at Mer Island have mainly focussed on prickly redfish and white teatfish and fishers on Erub and Ugar and the Central cluster on curryfish during this fishing season. There have been ups and downs due to the weather but it has been a good season overall. Reporting has been good throughout the year especially the reporting and other management arrangements that were in place during the black teatfish opening earlier this year which worked out really well. Fishers from the eastern cluster landed their catches back at their respective islands while fishers from the central cluster were based on Bourke Island.
14. Fisher members generally approved that AFMA closed the fishery before the 20t TAC was exceeded thus allowing the fishery to potentially remain open. Fishers were concerned that the TAC would be overcaught. Industry members that fished during the opening reported that it was beneficial to have Compliance fisheries officers on ground on Mer Island. As well as enforcing the regulatory arrangements for the opening, the compliance officers also supported fishers and fish receivers with the reporting and licencing requirements to be able to participate in the opening.
15. The Gudamaluylgal Nation was privileged to participate in the black teatfish opening and exercise their cultural protocols. Dorries from Saibai and Dauan arrived on Mer Island and met with the Traditional Owners. Fishers were able to make returns for their families in Gudamaluylgal Nation. Gudamaluylgal Nation also supports the concept of lifting the hookah ban to fish for white teatfish as a much needed fishery for everyone. Gudamaluylgal Nation is the only nation that does not have any accessible fisheries at the moment and it is working with the TSRA Fisheries Portfolio Member and others at the moment to have the Western Line closure lifted north of Buru (Turnagain Island). Gudamaluylgal fishers will continue to seek the permission and guidance from relevant Traditional Owners as per protocols as they continue to participate at future black teatfish openings even though the TIB licence does not restrict fishing grounds they can access.
16. Stakeholders in the Maluialgal Nation were not happy about the directness with which fisheries officers on Mer and other islands were boarding and searching some boats and disregarding their privacy. However, on the other hand they were happy about the TAC not being exceeded and fishers complying with maritime safety requirements although some fishers were not fully compliant. There have been complaints about there not being enough buyers during the black teatfish opening and those that were available being mostly based on Mer and Masig Islands.
17. It was discussed that fisheries officers need to be able to visually inspect boats in the course of undertaking their role such as checking for compliance with catch limits and fishing gear/equipment requirements. AFMA has received feedback from some operators from Mer Island

that they found this process confronting and is looking for feedback from Industry members on how fisheries officers might approach fishers when undertaking inspections. Industry members suggested that AFMA consider engaging a liaison officer that is across the cultural protocol during future black teatfish opening compliance operations.

18. Fish receivers based in the central region during the black teatfish opening worked with fishers from Poruma and Masig Islands as well as some that were based on Memey. The weather was a bit rough and therefore not ideal, but they managed to catch a few tonnes. An Industry member commented that some fishers weighed their catch with salt thus overestimating its weight and suggested that AFMA clarify the weighing requirements with industry leading up to the next black teatfish opening.
19. Fishers from Poruma and lama are not able to fish for curryfish at Dungeness and Warrior at the moment.
20. An Industry member proposed that consideration be given to allowing the use of hookah equipment to fish for curryfish found in deep waters (e.g. at Cumberland) as well as white teatfish.

2.2 Scientific members

21. The WG noted the following updates from the Scientific member, Tim Skewes:
 - The Western Australia sea cucumber fishery has recently received Marine Stewardship Council (MSC) certification for access to the European and North American markets. The Northern Territory and QLD east coast fishing industry is in the process of pursuing MSC certification. The TS BDM Fishery is in a good position to pursue this accreditation once the stock status of key species in relation to the limit reference point has been addressed.
 - He is assisting the Seychelles Government with a white teatfish and prickly redfish stock assessments. Stocks in the Seychelles are mostly now found in deeper water as the shallow reefs have been fished out.
22. The WG noted the following updates from the Scientific member, Steve Purcell:
 - There are new proposals lodged with CITES to consider listing for Thelenota species (prickly redfish, amberfish, lemonfish, candycane fish (*T. rubralineata*)) but there is not much data available to support the listing evaluation.
 - Currently involved in fisheries assessment in New Caledonia which include undertaking underwater surveys to determine stock size. Advice from the Sea Cucumber Assessment Group that fishers have moved north to new grounds and are targeting leopard fish (medium value species). Fishers in the north of the territory have been particularly active as stock in the southern grounds have been depleted. This is an interesting study as New Caledonia is one of the few fisheries that seems to have a sustainable sea cucumber fishery in the region and has some parallels with the BDM fishery and the east coast sea cucumber fishery.
 - Started a project with the World Food Organisation that includes undertaking a market study in China to provide information on the price of all sea cucumber species harvested in the Torres Strait which may be useful information for the fishery. Someone from Honk Kong will be commissioned to collect the price information.

2.3 Government Agencies

23. The WG noted the Communique from the Queensland Sea Cucumber Fishery Working Group's meeting on 23 August 2021 and the verbal update provided by the QDAF Member, Samantha Miller:
- Harvest Strategy updates for a number of fisheries are now available on the Fisheries Queensland website.
 - The Queensland Sea cucumber and Coral sea fisheries are currently undergoing a challenging Wildlife Trade Operation approval process in relation to some of the requirements being proposed and the tight timeframes for meeting the requirements which include:
 - determining appropriate minimum size limits and conversion ratios
 - establishing supply chain of evidence documentation
 - interpretation of stock assessments
 - economic data is available for Queensland fisheries but it has been challenging to publish data for small fisheries due to confidentiality considerations.
 - Queensland fisheries is seeking to employ an Indigenous fisheries manager and requested that AFMA and TSRA distribute the job advert to appropriate organisations within their network.
24. The WG noted the following TSRA update provided by the TSRA Member:
- Zenadth Kes Fisheries was established as of Dec 2020 comprising 25 members, which is made up of 5 members from each Cluster Nation and 5 Board Members. The Chair of the Board is Mr Yen Loban (currently also the TSRA Board Fisheries Portfolio Member). Zenadth Kes Fisheries will be looking to monetise and increase the value of the fishery across the next 5-10 years.
 - The TSRA Chair has formed a Fisheries Advisory Committee made up of seven committee members that are also TSRA Board members. Mr Yen Loban and Mr Nicholas Pearson are Chair and Vice Chair of the committee, respectively, and the rest of the membership consists of a TSRA Board member representative from each Cluster Nation. The committee's role is to provide advice from their communities to the TSRA.
 - At the PZJA level, TSRA is developing a 5-year action plan in partnership with the TSRA Fishery Advisory Committee working towards a long held aspiration of Torres Strait Islanders of 100% ownership of all Torres Strait fisheries and developing actions towards 100% utilisation of the fisheries.
 - The Wapil Project (employment and training project) was paused over the last 12 months due to travel restrictions and inability to do certain things but it is planned to resume and negotiations are underway with Prescribed Body Corporates (PBC) on locations to extend the program to Gudamaluylgal Nation which may tie in with opening the top western line closure.
 - There is some interest in Badu with an established factory which is already operating.
 - Commenced detailed conversations with the Ugar PBC regarding aquaculture, BDM being one of their species of interest – with some communities in the Central cluster also showing interest
 - TSRA has approached Scientific Members on the Torres Strait Scientific Advisory Committee for their advice on how to pursue aquaculture opportunities across all Torres Strait Fisheries which has yielded some promising contacts.
25. The WG noted the written update provided by AFMA, including:
- Progress to date against the nine WTO conditions for the BDM Fishery that will be provided to DAWE in November 2021 as part of the annual reporting requirement. The WTO conditions for the BDM Fishery include additional requirements that need to be met by the PZJA in managing the harvest of black and white teatfish, species listed under Appendix II of CITES.
 - An update on the status of proposed amendments to the *Torres Strait Fisheries Act 1984* and the *Torres Strait Fisheries Regulations 1985*, which includes an amendment to provide for catch

reporting across all licence holders to allow for the implementation of mandatory logbook reporting by the TIB sector.

- The launch of electronic catch disposal records (eCDRs) as part of the mandatory fish receiver system which provides fishers with a fast and easy way to electronically report received catch information to AFMA.

2.4 Native Title

26. The WG noted an update on the progress of Malu Lamar's request to become a member on the PZJA and advisory groups, the TSRA member advised that progress is underway to consider options on achieving this and working through the implications and significance of individual Director/Board members agreeing to recommendations that would require broader notification.
27. In response to a question about how information from Malu Lamar meetings is disseminated, the Malu Lamar Chairperson explained that this is supposed to occur through the PBC Chair of each Island and the GBK representatives. The TSRA also facilitates industry engagement and communications of outcomes through cluster visits with PZJA Traditional Inhabitant members.
28. Malu Lamar is under resourced and not able to engage with individual fishers on meetings outcomes but there is a process underway to secure funding to facilitate better engagement.

2.5 PNG National Fisheries Authority

29. The WG noted that although invited to the meeting, officials from the Papua New Guinea National Fisheries Authority were not in attendance to provide a further update to the background information on the PNG BDM fishery provided by AFMA in the agenda paper.
30. The WG further noted the reports from the Torres Strait Treaty Traditional Inhabitant Meeting held on 9 September 2021 and the Torres Strait Treaty Joint Advisory Council Meeting held on 10 September 2021.

3 Black teatfish trial opening 30 April – 3 May 2021 and future opening

31. The WG noted the update on the outcomes of the black teatfish trial opening on 30 April – 3 May 2021 and considered the HCRAG's draft recommendation on future black teatfish openings as outlined in the agenda paper. The WG also considered Dr Eva Plaganyi's presentation of the CSIRO analysis of the data collected during the black teatfish opening and the outcomes of the updated population modelling to include black teatfish catch data from the opening.

CONDITION 5 - If the Trial TAC is exceeded by more than 5%, then the fishery is automatically paused (i.e. no fishing allowed) for the following year

32. The WG noted that as the 20t TAC was not exceeded (total catch was 17.62t), the harvest strategy recommendation that the fishery automatically pause for the following year if the TAC is exceeded by 5 per cent does not apply.

CONDITION 6 - Was data collection during the trial conducted satisfactorily?

33. The WG agreed that data collection during the trial was conducted satisfactorily based on the HCRAG's advice on the reliability of the total catch reported and the results of the CSIRO analysis of the data. However, the voluntary reporting of area and effort information needs to improve

significantly. This is particularly relevant in light of the large amount of black teatfish catch that did not include corresponding location information.

34. The WG noted industry member comments that this catch is most likely from the Cumberland and Warrior areas and it should be followed up with the relevant fishers and fish receivers.
35. The WG noted that it is highly unlikely that there is damaged product that was discarded but not captured in the catch report due to the hardy nature of black teatfish as well as the daily catch landing and reporting requirements that applied during the opening. However, there is a provision in the CDRs to capture data on unmarketable catch due to damage.

CONDITION 7 - Noting the TAC was not exceeded and reliable data were collected, the data needs to be analysed to review the TAC and potential for the fishery to stay open in the future, or be re-opened periodically after a pre-specified interval

36. The WG supported HCRAAG's advice and **recommended** a black teatfish opening in 2022 with a 20t TAC. In making this recommendation, the WG considered the outcomes of the updated CSIRO population modelling which confirmed that a 20t TAC is sustainable and would not lead to a consistent decline in black teatfish biomass after the first year of fishing. In contrast the modelling found that catches of 30t could lead to a gradual depletion of the stock.
37. The WG also took into account industry member advice to ensure that all catch data continues to be captured during future openings.
38. Industry members discussed that closing the trial opening with a 2.4t residual TAC, whilst not ideal economically in the short term, was important to support the sustainability of the fishery to ensure that the competitive TAC was not overcaught given fishing effort can increase substantially.
39. The current BDM harvest strategy does not provide for the carryover of a rebuilding species, such provisions would need to be formulated and tested carefully before they can be considered for future openings.
40. The Queensland Member emphasized to the WG the need to be precautionary in setting a TAC for black teatfish. The east coast sea cucumber fishery is struggling to demonstrate to the Department of Environment why its black teatfish catch limit of 30t is acceptable and currently does not have a positive non-detriment finding, and hence a WTO approval, for the species.

Economic viability of current licencing arrangements

41. The WG discussed the HCRAAG's recommendation for it to consider the performance of the current licencing arrangements in the fishery given industry's concern about the economic viability of the fishery. Amongst other things, this may entail separating the licencing system for commercial and traditional fishing (noting traditional fishing does not require a licence). The WG commented that industry guidance is required to progress this issue and supported for the discussion to commence at an industry workshop ahead of the next black teatfish opening. Industry members supported this approach, including running the meeting with AFMA's support and with a standing invite for Malu Lamar.

CONDITION 8 - Additional data to be collected during future openings

42. The WG discussed ways in which voluntary area and effort reporting in catch disposal records (CDRs) by fishers can be improved while AFMA progressed the legislative amendments required to facilitate logbook reporting for the TIB sector. These include:
- ongoing education and engagement of individual fishers and fish receivers through workshops to reinforce the reporting system.
 - develop and engagement strategy for non-full time fishers that are either unfamiliar with the reporting requirements or may not understand the importance of providing the voluntary information.
43. The TSRA member sought the WG's endorsement to undertake a sea cucumber scientific stock survey in 2022/23.

4 Applying the harvest strategy to review total allowable catches (TACs)

44. The WG considered TACs for the 2022 fishing season commencing on 1 January 2022, in line with the BDM harvest strategy tiers and decision rules and taking into account new data and information available for the fishery since the harvest strategy was implemented and the HCRA's recommendations that:
- changes are not required to the current TACs for the 2022 fishing season.
 - that the basket trigger for curryfish vastus be increased to 30t in light of the additional information available for the species and the survey results indicating a more even relative abundance with curryfish herrmanni.
45. The WG further noted the HCRA's advice that all species remain in the low tier of the harvest strategy as a transition to middle tier requires at least two primary indicators and is not applicable during the initial years of harvest strategy implementation as insufficient detailed historical fishery data are available. For the high tier to apply a time series of high-quality species-specific surveys together with a reasonable level of catch is required.
46. Given the large number of species, the working group agreed to focus on the select species below, which were also assessed by the HCRA, with the rest of the species to be considered at the next meeting:
- White teatfish (target species)
 - Prickly redfish (target species)
 - Deepwater redfish (target species)
 - Hairy blackfish (target species)
 - Curryfish herrmanni (common) and Curryfish vastus (curryfish basket species)
 - Lollyfish (basket species)

White teatfish

47. The WG noted the HCRA's assessment outlined in the species assessment sheet (SAS) and:
- did not recommend any changes to the white teatfish TAC in 2022

- noted the HCRAAG's recommendation that it continue to consider the review of the current hookah prohibition in relation to white teatfish and undertake further community consultation on management arrangements that would support sustainable harvesting of white teatfish.

Prickly redfish

48. The WG noted that the prickly redfish TAC for 2020 was slightly overcaught although not enough to trigger the application of the overcatch rule in the harvest strategy. The WG further noted the HCRAAG's assessment of the species in the SAS, including advice to review the TAC if the species continues to be overcaught. The WG did not recommended any change to the prickly redfish TAC in 2022.
49. The stock is not considered to be at risk however Industry members commented that allowing hookah use to target deepwater sea cucumber species may help alleviate the pressure from frequently targeted species such as prickly redfish and optimise the value of the fishery. Targeting the same areas due to weather considerations may also have an impact on specific size classes and the industry more broadly may consider rotating their harvest of the species as practiced by Mer Island fishers. In addition to this, the industry might also need to do more work in finding markets for basket species.
50. The WG did not recommend any changes to the prickly redfish TAC in 2022.

Curryfish basket

Curryfish common (S. herrmanni)

51. The WG noted Scientific Member Tim Skewes' advice that recent survey trend indicates a decline in the density of curryfish common compared to previous years, however the biomass estimate is somewhat conservative as it does not include the central zone which wasn't surveyed but where there are known to be a significant biomass of curryfish. The surveyed areas predominantly consisted of large individuals, consistent with previous surveys and experience in the Pacific as it is rare to find juveniles. Part of it can be explained because small curryfish are cryptic and hide to avoid predation. They might also have a big interval between recruitments to the fishery.
52. Industry members advised that they mainly find curryfish at the top of the shallows at Dungeness and Warrior reef.

Curryfish vastus (S. vastus)

53. With regards to the HCRAAG's recommendation to double the curryfish vastus trigger limit, the WG sought clarification from the HCRAAG on the basis for the increase. The WG **recommended** that the HCRAAG revisit its advice given the modest standing stock biomass from the survey, relative to the 60t TAC for the curryfish basket. The WG sought further detail from the RAG to justify its recommendation to increase the trigger limit. The WG also noted that the approach to managing curryfish with a basket TAC may need to be reviewed.
54. Industry members advised that they do not encounter much curryfish vastus near Dungeness (~400kg per fishing event) and tend to process curryfish differently depending on the area they are from due to size differences.

55. The WG did not recommend any changes to the curryfish basket TAC or the curryfish vastus trigger limit in 2022. The WG agreed that species differentiation of reported curryfish catches needs to improve.

Lollyfish

56. The WG noted the decline in reported lollyfish catches over the last few fishing seasons and the HCRA's recommendation to AFMA to work with Poruma fishers to better understand fishing practices for the species. Industry members commented that fishing for this species had traditionally started as a source of income for women and children on the Island. Catches increased significantly as a buyer(s) offered attractive prices. Prices at landing have since dropped.
57. The WG did not recommend any changes to the lollyfish trigger limit in 2022.

Deepwater redfish

58. The WG noted the ABARES observer's comments that deepwater redfish was assessed individually as part of the annual ABARES Fishery Status Reports and the TAC for this species seems high relative to the standing stock biomass from the survey. The priority level for the ABARES assessment increased following its removal from the basket when the BDM harvest strategy was implemented in January 2020.
59. The WG did not recommend any changes to the deepwater redfish TAC in 2022 and **recommended** that the HCRA review the TAC in light of the biomass results from the survey.

Hairy blackfish

60. The WG noted the ABARES observer's comments that hairy blackfish was assessed individually as part of the annual ABARES Fishery Status Reports and the TAC for this species seems high relative to the standing stock biomass from the survey. The priority level for the ABARES assessment increased following its removal from the basket when the BDM harvest strategy was implemented in January 2020.
61. The Scientific member Tim Skewes commented that the scientific survey was not able to find many hairy blackfish due to their patchy distribution. They are a highly aggregating and cryptic species but can be found on Warrior Reef. Warrior Reef was not included in the 2019-20 survey.
62. The WG did not suggest any changes to the hairy blackfish TAC in 2022 and **recommended** that the HCRA review the TAC in light of the biomass results from the survey.

5 Management

5.1 Management options for the utilisation of white teatfish

63. The WG considered the AFMA agenda paper seeking its advice on the:
- relative priority of directing management resources to develop advice to the PZJA on management options to support the utilisation of the white teatfish TAC.
 - key considerations for assessing management options to help guide discussions with broader stakeholders; and

c. draft workplan proposed by AFMA to develop these management options.

64. In discussing this item, the WG noted the ongoing industry request to review the hookah prohibition to be able to fish in deeper water and further developments since it had last considered this matter, which include:

- i. the recent stock survey of sea cucumbers in east Torres Strait undertaken by CSIRO has confirmed previous understanding that white teatfish are a deeper water sea cucumber species. The survey found that over 75% of the stock is found in the deep water strata (>20 m deep), though none were found beyond 36m.
- ii. white teatfish was listed on appendix II of CITES meaning the harvest and export of the species is subject to additional requirements including a seasonal TAC limit of 15t and any increase would need to be demonstrated not to be detrimental to its survival in the wild.
- iii. the HCRAAG recommended that:
 1. stock assessment modelling be undertaken for white teatfish in light of the recent scientific information to inform current management arrangements for the species such as the TAC.
 2. The WG continue to consider the review of the current hookah ban in relation to the species and undertake further community consultation on management arrangements that would support sustainable harvesting of white teatfish using hookah.

a) *Relative priority of directing management resources to develop advice to the PZIA on management options to support the utilisation of the white teatfish TAC.*

65. The WG **recommended** that the assessment and development of management options for the utilisation of white teatfish is a high short-medium term priority for the fishery requesting AFMA consider directing resources towards this management activity.

b) *Key considerations for assessing management options to help guide discussions with broader stakeholders.*

66. The WG noted that industry's preferred options for utilising the white teatfish TAC require the use of hookah equipment to access deeper waters and the advice put forward by industry and communities during consultations on how these options might be implemented include:

- Allowing the use of hookah to fish for white teatfish only.
- Allowing the use of hookah to fish for white teatfish only and in certain areas.
- Having a designated white teatfish hookah fishing season which may potentially involve closing fishing to all other BDM species.
- Trialling fishing for white teatfish using hookah with one fisher per community.

67. The WG further considered the AFMA Member's advice that the development and implementation of these options (and any other options that may be identified) is likely to be complex due to:

- divided views among stakeholders on the use of hookah equipment in the BDM Fishery generally.
- the potential impact of options on the performance of broader management objectives. The BDM Fishery is open access to traditional inhabitants. TACs are fished competitively by licence

holders and input controls are in place to constrain fishing efficiency. In doing so, the catch per unit of effort by a fisher is constrained allowing the TAC to be shared by relatively more fishers. These same arrangements however place a regulatory barrier to fishers being able to fully take the TAC of the white teatfish; and

- the feasibility (inclusive of cost) of implementing, monitoring, and enforcing different options (for example allowing the use of hookah equipment in certain areas, by certain fishers and for certain species only).

68. The WG discussed that any option to use hookah equipment to fish for white teatfish would require more real time monitoring arrangements (boat level monitoring such as VMS, electronic monitoring, compliance officers) to ensure compliance with rules and avoid any unintended impacts on sea cucumber stocks. The components of each management option and the nature of those components (e.g. spatial, temporal or boat level effort controls) will determine the complexity and combination of the associated monitoring and compliance tools, with more elaborate management options (e.g. fishing in certain areas by certain fishers and for certain species only) requiring more complex monitoring and compliance arrangements. Any management option will therefore need to be assessed in light of the key monitoring and enforcement considerations associated with each option.

69. The WG discussed that the management options developed by industry will still need to be consistent with the objectives of the *Torres Strait Fisheries Act 1984* and the objectives adopted by the PZJA for the Torres Strait BDM Fishery, as outlined in the agenda paper. However, it is important for industry to be aware of the trade-offs as different management options will perform differently against the objectives in light of the management arrangements that are in place for the BDM Fishery.

c) *draft workplan proposed by AFMA to develop these management options.*

70. The WG noted the draft workplan and indicative timeline proposed to develop and implement the management options to support the use of hookah to fish for white teatfish. This included the administrative and consultative processes required to seek PZJA approval on the preferred management option and review the management instrument for the fishery to allow the use of hookah equipment, which is currently prohibited.

71. The WG **recommended** an industry workshop be held to enable industry to develop its preferred management options while acknowledging the need for AFMA's assessment of the administrative feasibility of the preferred management option(s). The WG discussed the benefit of Traditional Inhabitant members on the WG and HCRAAG meeting in early 2022 initially to develop potential management options and associated monitoring and compliance considerations to provide to the workshop. The WG was of the view that this would be of limited benefit to progress this issue given discussions held to date and could potentially delay the industry workshop due to other management commitments scheduled for Torres Fisheries. The WG also saw the benefit in having broader industry stakeholder input in the development of the management options.

72. The WG took the advice of WG TI members to assist AFMA with the workshop by taking carriage of nominating participants and facilitation similar to the black teatfish industry workshop held in February 2021.

73. The WG noted a recommendation from an industry member to invite TVH operators from the TRL Fishery to advise industry participants on the workplace safety considerations of using hookah equipment.

5.2 Torres Strait Fisheries (Beche-de-mer) Management Instrument

74. The WG considered the draft new legislative instrument proposed by AFMA to replace the current legislative instrument, the *Torres Strait Fisheries Management Instrument No. 15*, made under section 16 of the Torres Strait Fisheries Act 1984 (the Act). The new management instrument is being proposed to reflect updated management arrangements in the BDM fishery, to meet current legislative drafting styles and to ensure consistency with provisions in other Torres Strait Fisheries, including:
- a. Implementation of new size limits prescribed in the BDM harvest strategy.
 - b. Strengthening current hookah gear/equipment restrictions to improve enforceability and maintain the integrity of the existing requirements by clarifying any ambiguity that may arise in relation to whether sea cucumber was caught with the use of prohibited equipment. This is especially relevant during limited fishery openings of previously closed species such as black teatfish.
 - c. Additional exemption to allow for persons without a boat to fish in the BDM Fishery provided they are appropriately licenced under subsection 19(4A) of the Act. The WG noted that AFMA will need to consult with stakeholders on the design of the actual licencing arrangements that would apply to ensure they are fit for purpose. This includes ensuring that any licencing arrangements are consistent with the objectives of the Act to promote economic development in the Torres Strait area and employment opportunities for traditional inhabitants. The WG **agreed** to discuss this issue at the BDM industry workshop.
 - d. Removing provisions in subclauses 8.1(a)(b) and (c) of the current instrument as the original purpose is unclear (no record of a PZJA decision and not discussed in the Explanatory Statement for the current Instrument) but appears inconsistent with the current understanding in the fishery that a licence is required to commercially fish and that licenced commercial fishers are not restricted to the number of sea cucumber they can have in their possession. The exemption basically states that anyone can take sea cucumbers with or without the use of a boat provided they stick to the limits specified in the instrument.
 - e. Remove provisions for activities that are outside of the PZJA's remit (e.g. traditional fishing) and/or create administrative burden (e.g. instrument cessation date as the PZJA can review legislative instruments at any time if required).

75. The WG **recommended** that AFMA seek Malu Lamar's comments on the proposed new instruments as the Native Title representative body that holds native title rights, including commercial fishing rights, covering most of the waters of the Torres Strait Protected Zone. The WG **recommended** that AFMA provide Malu Lamar a one month consideration period.

ACTION – AFMA to seek Malu Lamar comments on the proposed new instrument.

76. The WG did not have any further comments on the rest of the proposed changes to be implemented via the new Instrument, Torres Strait Fisheries (Beche-de-mer) Management Instrument 2021.

5.3 Ecological Risk Assessment for the BDM Fishery

77. The WG noted the draft results of the CSIRO Ecological Risk Assessment for the Effects of Fishing (ERA) on the Torres Strait BDM Fishery (ERA) as outlined in the draft report. The draft ERA assessed all direct and indirect impacts to and of the BDM Fishery as having either minor or negligible scores and the overall risk for the ecological impacts for the effects of fishing and external activities is low. The assessment outcome was based on the scale and nature of the fishery as well as available survey data. Fishing for sea cucumbers is very selective as done by hand collection. There is no by-catch or by-product. The assessment concluded that the direct ecological impact on the benthos from harvesting the species is low.
78. The WG noted that the HCRAAG provided some comments for the ERA project team to consider when finalising the ERA and understood that in doing so the assessment outcomes are not expected to change. The WG noted the draft ERA did not identify any moderate-high risks, that all ecological components were eliminated at Level 1 and no specific ecological risk management strategy is required.
79. The WG noted the clarification that golden sandfish is classified as a secondary commercial species in the ERA as it comprises less than 20% of the annual average catches for the fishery for the assessment period (2016-2020) (and not based on value). The WG briefly discussed golden sandfish as a species of interest given the endangered status of stocks globally and the lack of a biomass estimate from the recent BDM stock survey as the species is known to be rare in the area of east Torres Strait that was surveyed. The species is known to occur in the western region of the Torres Strait in high aggregations due to its distinct habitat preferences so there may be some data for the species from Tropical Rock Lobster surveys, but its status remains relatively unknown. The direct impacts of fishing on the species in the context of the ERA assessment are likely low as there have been no reported catches of the species in the 2020 and 2021 fishing seasons and previous reported catches have remained well below the conservative 0.5t basket trigger limit for the species.
80. The WG **recommended** that the HCRAAG assess golden sandfish in line with the BDM Harvest Strategy at a future meeting.

6 Research priorities

81. The WG considered the information provided on the status of identified research priorities and needs for the BDM Fishery, and on the TSSAC research funding process, including funding available for the 2022/23 financial year. The WG also considered the additional analysis and sampling needs identified by the HCRAAG to address some of the key data gaps that exist in the fishery. The WG reviewed all identified research needs and priorities as outlined in Table 1, taking into account HCRAAG's advice on priorities.
82. With regards to the collection of socioeconomic data, the WG **recommended** that

- a. this research need is a high priority noting Industry members' strong support for this work to address the large socioeconomic knowledge gap in the fishery.
- b. As per HCRAAG's recommendation, the scope development of a socio economic analysis of the fishery needs to be informed by AFMA's review of CDR participation data to date, by social science expertise and HCRAAG and WG advice before it is finalised.

83. The WG acknowledged Scientific member Steven Purcell's extensive experience conducting socioeconomic studies in Pacific Island fisheries that has informed the management of those fisheries. The WG invited Dr Purcell to present at future meetings of the WG and the HCRAAG on his work.

ACTION – Scientific member Steven Purcell to present at future meetings of the WG and HCRAAG his work on socioeconomic studies and how they have informed fisheries management.

7 Other business

84. There was no other business nominated for discussion.

8 Future priorities and date for the next meeting

85. The WG noted that the agenda paper on future priorities captures items previously identified and endorsed by the WG, as well as a progress update against each item. The WG also noted that the next WG meeting is tentatively scheduled for June-July 2022.

86. The Chair thanked all members and observers for their contribution to a productive meeting. The Chair and members acknowledged and thanked the outgoing AFMA member and Senior Manager of Torres Strait Fisheries, Selina Stoute for all her work in and contributions to Torres Strait Fisheries.

87. Mr Sereako Stephen closed the meeting at 12:10pm in Prayer.

Table colour key	Completed	Scoped and/or costed	Not scoped/not costed
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Table 1. Overview and status update of research needs identified or discussed for Hand Collectable Fisheries at previous HCWG meetings and the rolling five-year research plan including HCRAAG's recommendations and assigned priorities from its meeting on 6-7 October 2021.

	Research activity	Detail	Status	Comments/questions	HCRAAG priority	HCWG priority and comments
1	Status of BDM stocks in relation to harvest strategy reference points	Consistent with the BDM harvest strategy and where there is sufficient information available, a tactical research project is needed to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible.	Not scoped/not costed		High priority	Scope of the project requires further consideration by the HCRAAG.
2	White teatfish modelling	Additional analysis on white teatfish to develop a rationale on the status of the stock in relation to harvest strategy reference points and modelling analysis on a sustainable TAC increase.	Not scoped/not costed		High priority	High priority. Estimate cost 60,000 (as per cost of similar projects for other species e.g. Spanish mackerel)
3	Black teatfish sampling	Representative sampling to collect size and weight frequencies during the black teatfish openings.	Not scoped/not costed		High priority	High priority. Estimated cost 40,000 – 80,000 depending on the level of work required (as per cost of similar projects for

	Research activity	Detail	Status	Comments/questions	HCRA priority	HCWG priority and comments
						other species e.g. Spanish mackerel)
4	Development of curryfish conversion ratios	Project to develop conversion ratios for curryfish with industry undertaking the sampling process.	Scoped and costed \$12,000	Full proposal developed and allocated funding in 2019/20 but did not proceed due to COVID-19.	High priority	High priority.
5	Sandfish stock survey	Outstanding stock survey of Sandfish at Warrior Reef to better understand its status	Not scoped/not costed	Identified as a research need for the fishery by HCWG17 at its meeting 12 October 2020. Was part of the 2019-20 stock survey but did not proceed.	High priority subject to confirmation of support from lama and Tudu Island PBC, GBK, Traditional Owners and fishers.	High priority. Contingent on support from lama and Tudu Traditional Owners which have already indicated through TSRA that they support a sandfish survey and this advice being provided to the HCRA. Estimated cost 150,000.
6	Black and white teatfish follow up surveys	Follow up black and white teatfish surveys focusing on specific areas and potentially including areas not surveyed previously such as south east TSPZ, barrier and deep-water strata.	Not scoped/not costed	The RAG will initially need to determine what is required, other than an independent survey, to meet the WTO requirement to provide a revised population estimate.	Medium term priority	Supported post another black teatfish opening. Estimate cost 290,000 (based on last survey).
7	Socio-economic	Collecting data on socioeconomic indicators for	Not scoped/not costed	Identified as a research need for the fishery by HCWG17 members.	Medium term priority and update the current wording to reflect RAG advice.	High priority. Subject to:

	Research activity	Detail	Status	Comments/questions	HCRA priority	HCWG priority and comments
		the fishery through recall surveys.			Research scope and survey design and development to be: <ul style="list-style-type: none"> • Informed by AFMA's review of CDR participation data to date and by social science expertise • further considered by the HCRA 	<ul style="list-style-type: none"> • further HCRA advice on the scope and additional work to be done to support it. • more clarity on questions being asked, data required and indicative cost. Project may fall within the remit of ACR.
8	Management Strategy Evaluation (MSE) of the Beche-de-mer Harvest Strategy	1. Collate all data and biological information; 2. Update and extend the spatial multispecies TS BDM operating model developed earlier (or construct a new model); 3. Use MSE to evaluate how well the HS achieves the pre-specified objectives; 4. In consultation with stakeholders, use the MSE framework to investigate ways to improve the current HS.	Not scoped Est cost – \$130k	Identified as an essential research priority by HCWG in the rolling five-year research plan for Hand Collectable Fisheries. Requires 3-5 years of BDM HS implementation.	Medium priority and to be held off until the harvest strategy has been in place for a few years.	Interacts with no.1
9	Supply chain	Better understanding of the supply chains as per other fisheries to better understand	Not scoped/not costed		Not prioritised	

	Research activity	Detail	Status	Comments/questions	HCWAG priority	HCWG priority and comments
		vulnerabilities and help develop an industry that is resilient to fluctuating export market conditions.				
10	Exploring sea ranching/re-seeding opportunities		Not scoped/not costed	Identified as a key research need for the fishery by HCWG Traditional Inhabitant members. Industry initiated pilot project currently underway on Ugar.	To be removed from the research plan - Aquaculture falls outside the remit of the PZJA. PZJA can provide support through provision of information and permitting collection of broodstock. With regarding to Sandfish aquaculture, the PZJA will initially want to establish the status of the sandfish stock on Warrior reef.	Noted
11	Ecological Risk Assessment (ERA) – Torres Strait Pearl Shell Fishery	Conduct an ERA for the Torres Strait Pearl Shell (TSPF) Fishery	Not scoped Est cost - \$20,400	Identified as an essential research priority by HCWG in the rolling five-year research plan for Hand Collectable Fisheries	To be remove from the research plan as there is no fishing activity and therefore no immediate ecological risk.	To be retained in research plan and activated when fishing for pearl oysters commences. There is some information on Pearl shell stock estimates from Tropical Rock Lobster surveys.
12	Understanding biological parameters of BDM species,	Identifying gaps in knowledge of biological parameters of BDM species and	Not scoped/not costed	Identified as an essential research priority by HCWG in the rolling five-year research plan for Hand Collectable	Low priority and proposed that it be addressed as the need arises.	There are conservative proxies that are best addressed through

	Research activity	Detail	Status	Comments/questions	HCRA priority	HCWG priority and comments
	including growth, mortality, size and breeding seasonality	investigating options for collaborative research		Fisheries Requires further scientific advice.		other avenues such as University students.
13	Stock Status Survey	To undertake a stock survey of all Torres Strait beche-de-mer species with a focus on deeper water species	Completed in 2019 - 2020	Final report identified research needs that the HCRA may want to consider further	N/A	
14	Ecological Risk Assessment (ERA)	Conduct an ERA for the TSBDM Fishery	Draft completed on 30 June 2021.	Needs to be completed by January 2022 to meet WTO condition 5 for the fishery.	N/A	
15	Climate Change impacts and vulnerability	Scoping study across all Torres Strait	Completed	Final report made recommendations for further research	N/A	
16	Data analysis	Further analysis of catch data collected during the 2021 trial reopening of black teatfish to inform future openings and follow up work from the stock survey.	Completed	HCWG identified this as the highest research need for the BDM Fishery. CSIRO completed the black teatfish catch data analysis from the 2021 opening and updated the modelling to inform future opening and TAC.	Completed	

Summary of actions arising from HCWG18

Action item	Responsibility
AFMA to seek Malu Lamar comments on the proposed new instrument proposed by AFMA to replace the current legislative instrument, the <i>Torres Strait Fisheries Management Instrument No. 15</i> , made under section 16 of the Torres Strait Fisheries Act 1984 (the Act).	AFMA
Scientific member Steven Purcell to present at future meetings of the WG and HCRAAG his work on socioeconomic studies and how they have informed fisheries management.	Steve Purcell

Summary of HCWG18 recommendations

Agenda item #	Recommendation
3	The WG supported HCRAAG's advice and recommended a black teatfish opening in 2022 with a 20t TAC, considering: <ul style="list-style-type: none"> the outcomes of the updated CSIRO population modelling which confirmed that a 20t TAC is sustainable and would not lead to a consistent decline in black teatfish biomass after the first year of fishing. In contrast the modelling found that catches of 30t could lead to a gradual depletion of the stock. industry member advice to ensure that all catch data continues to be captured during future openings.
4	The WG recommended that the HCRAAG revisit its advice given the modest standing stock biomass from the survey, relative to the 60t TAC for the curryfish basket. The WG sought further detail from the RAG to justify its recommendation to increase the trigger limit.
4	The WG did not recommend any changes to the deepwater redfish TAC in 2022 and recommended that the HCRAAG review the TAC in light of the biomass results from the survey.
4	The WG did not suggest any changes to the hairy blackfish TAC in 2022 and recommended that the HCRAAG review the TAC in light of the biomass results from the survey.
5.1	The WG recommended that the assessment and development of management options for the utilisation of white teatfish is a high short-medium term priority for the fishery requesting AFMA consider directing resources towards this management activity.
5.1	The WG recommended an industry workshop be held to enable industry to develop its preferred management options for the utilisation of white teatfish, while acknowledging the need for AFMA's assessment of the administrative feasibility of the preferred management option(s).
5.2	The WG recommended that AFMA seek Malu Lamar's comments on the proposed new instruments as the Native Title representative body that holds native title rights, including commercial fishing rights, covering most of the waters of the Torres Strait Protected Zone. The WG recommended that AFMA provide Malu Lamar a one month consideration period.
5.3	The WG recommended that the HCRAAG assess golden sandfish in line with the BDM Harvest Strategy at a future meeting.

Agenda item #	Recommendation
6	<p>With regards to the collection of socioeconomic data, the WG recommended that:</p> <ol style="list-style-type: none"> this research need is a high priority noting Industry members’ strong support for this work to address the large socioeconomic knowledge gap in the fishery. As per HCRAAG’s recommendation, the scope development of a socio economic analysis of the fishery needs to be informed by AFMA’s review of CDR participation data to date, by social science expertise and HCRAAG and WG advice before it is finalised.

List of attachments

Attachment A – Presentation on the results of the CSIRO analysis of data reported during the opening

Attachment B – Meeting Agenda

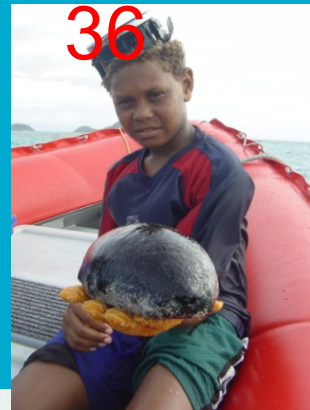


Torres Strait bêche de mer fishery: black teatfish trial re-opening

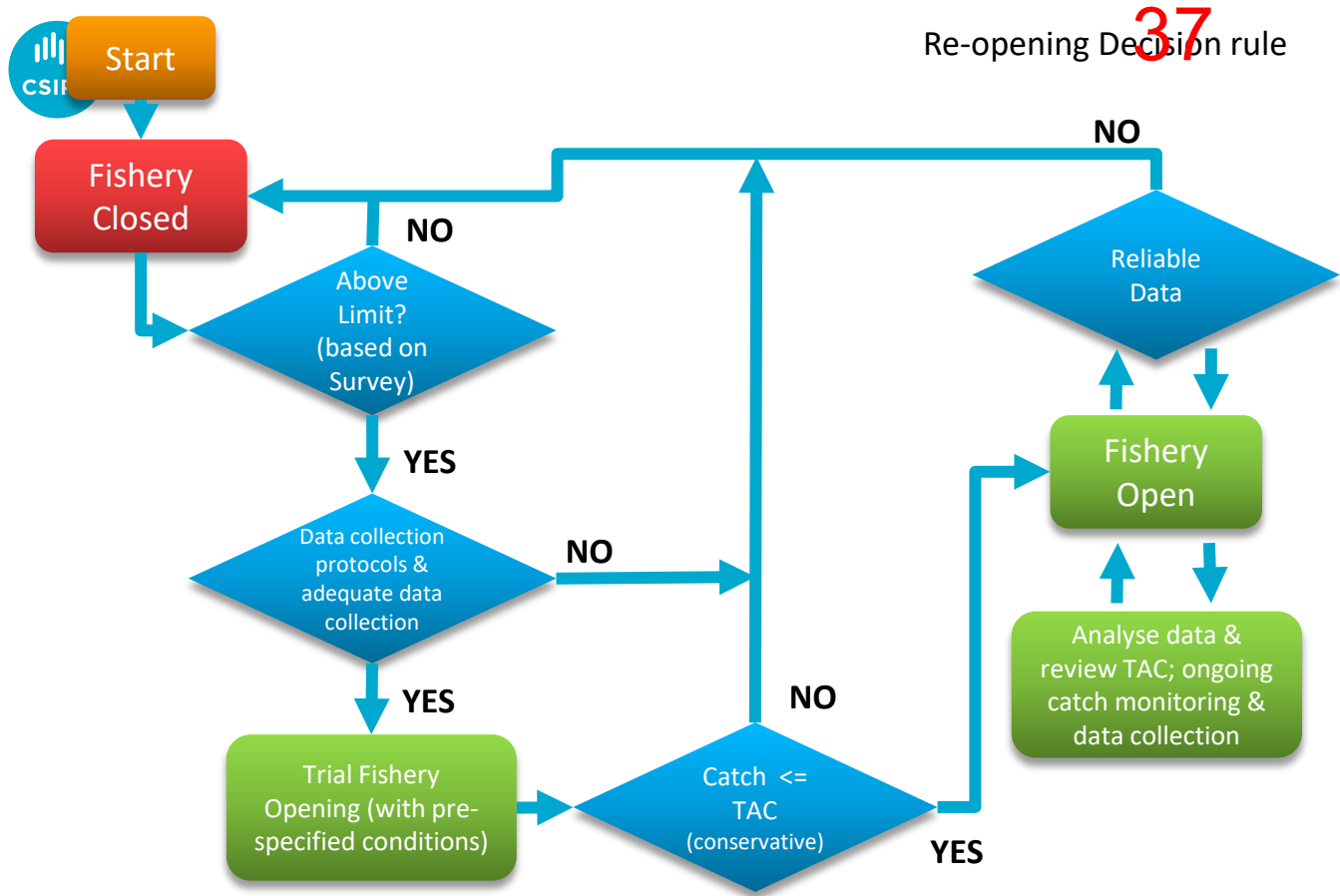
Éva Plagányi, Nicole Murphy and
Timothy Skewes

HCRAg | October 2021

Black teatfish 'Pauraber or
Goleh-Golher Pauraber'



*CSIRO acknowledges the Traditional Owners of the land, sea and
waters, of the area that we live and work on across Australia. We
acknowledge their continuing connection to their culture and we pay
our respects to their Elders past and present*



Re-opening

- New catch reporting measures in place
 - CDR catch reporting - compulsory since 2017
- Torres Strait Beche-de-mer Harvest Strategy

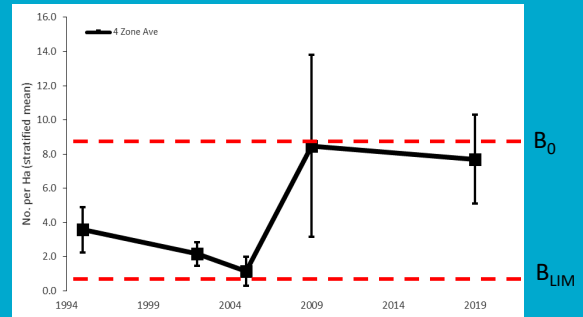
Re-opening Decision Rule applies for species that have been:

- *Closed to fishing due to concerns of overfishing or stock depletion, significantly exceeding catches beyond the TAC, or in the absence of reported catches*

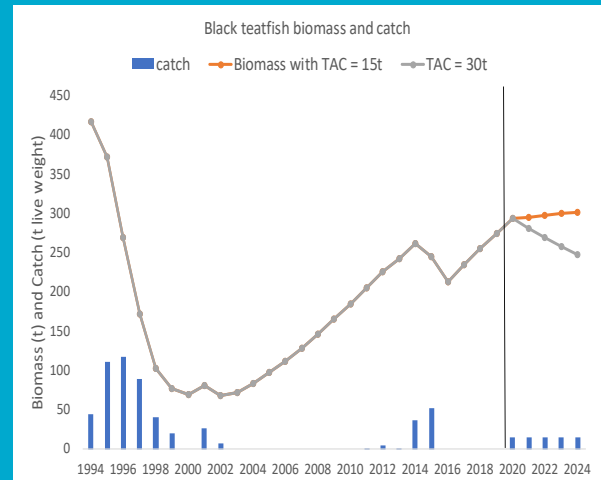
- Stock above B_{LIM} from use of high quality survey data
 - Meets parameters of the Decision Rule - species to be opened with *Trial 15 t*
- Additional population modelling - 21 t can be removed
 - Allows for higher opening TAC (tier 3)
- Quota allowance: 20 t

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SURVEY



POPULATION MODELLING





Re-opening

- Trial opening: 30th April 2021 for 20 t
 - Closed 3rd May 2021
 - 17.26 t caught as at 15:00 on 5th May 2021
- (<https://www.pzja.gov.au/2021-black-teatfish-trial-opening>)

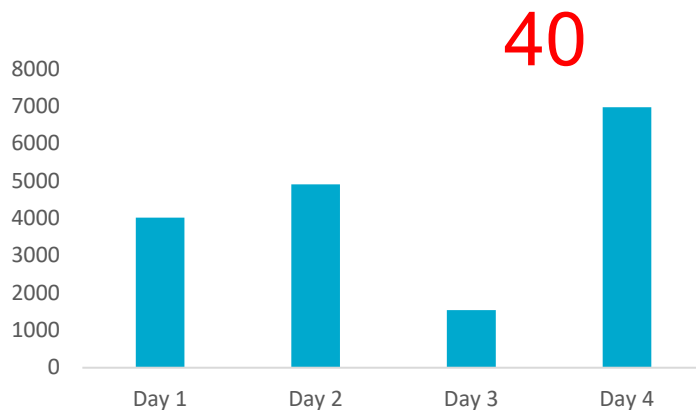
- Notes
 - Fishers organised among themselves, previous times described as 'free for all'
 - Went further out and worked in across days
 - Came in early on fourth day in anticipation that nearing quota
 - Happy with how the fishing went



Traditional Owner & fisher, Mr Tristen Passi – Mer Island

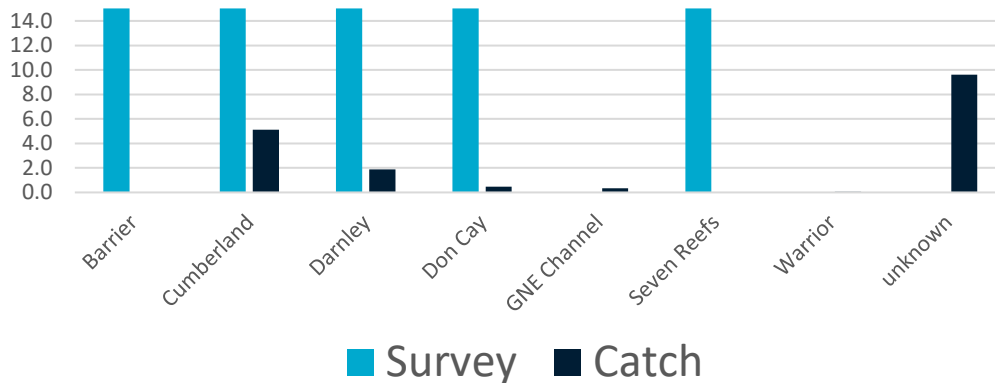
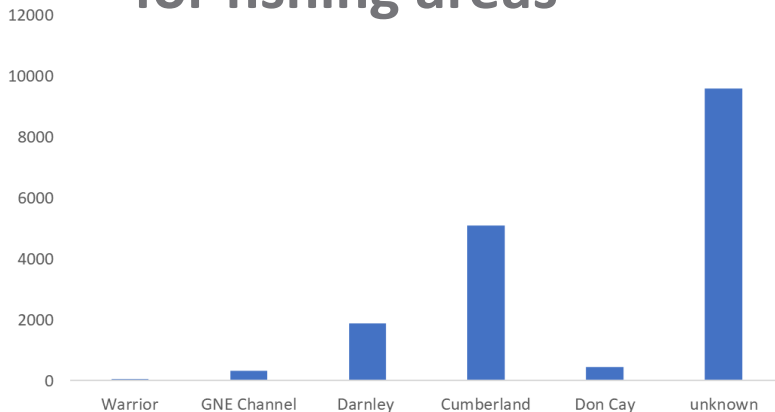


Sum of converted weight (kg) for catch taken for areas fished for each fishing day



Weight (kg)	Warrior	GNE Channel	Darnley	Cumberland	Don Cay	Blank*	Grand total
April total	-	119.78	41.24	468.95	311.13	3257.46	4198.57
30-Apr	-	119.78	41.24	468.95	311.13	3075.51	4016.62
May total	50.95	208.33	1837.69	4634.13	145.56	6358.28	13234.94
1-May	-	141.19	551.31	1392.45	-	2820.29	4905.24
2-May	-	67.15	276.20	1030.81	-	166.42	1540.57
3-May	50.95	-	1010.19	2210.87	145.56	3553.51	6971.08
Grand total	50.95	328.12	1878.94	5103.08	456.69	9615.74	17433.51

Total catch (converted weight ⁴¹kg) for fishing areas



Missing Data to Inform assessments

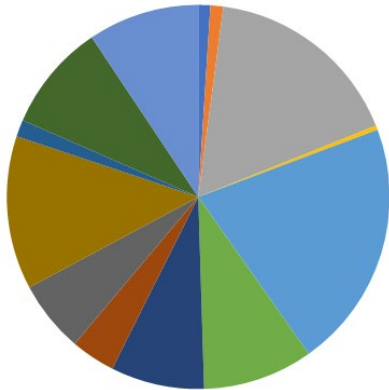
Day	Warrior	GNE Channel	Darnley	Cumberland	Don Cay	Unknown area
1	-	119.8	41.2	468.9	311.1	3075.5
2	-	141.2	551.3	1392.5	-	2820.3
3	-	67.1	276.2	1030.8	-	166.4
4	50.9	-	1010.2	2210.9	145.6	3553.5

Largest catch taken from ‘unknown’ area recorded in catch data

It is important to improve communication for future fishing around the need to record location, as this limits the usefulness of the data.

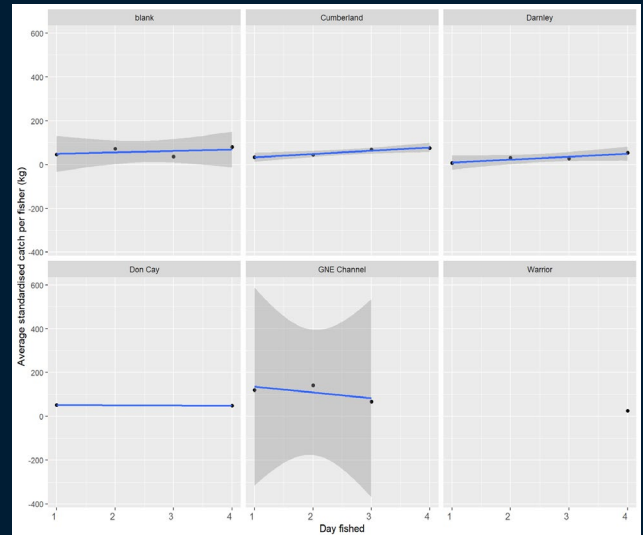
Information as to why Warrior Reef was only fished on day 4 – or whether this is the only day for which area was recorded – would also help scientific understanding of the information content of the data.

Catch landed at fish receivers

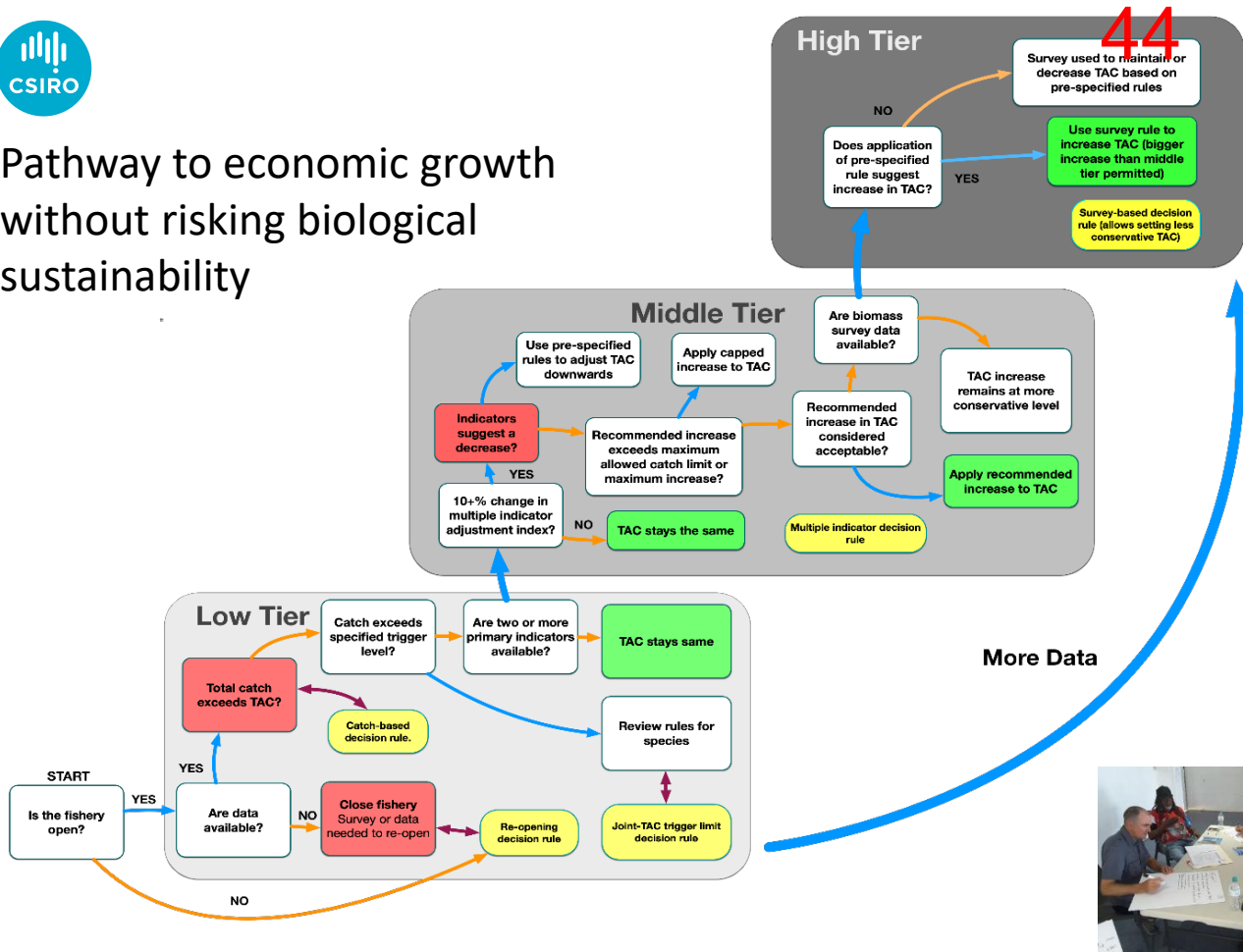


- Fairly good spread of the catch amongst fish receivers,
- 3 fish receivers landed ~half catch

- No trends or local depletion was seen for catch and areas fished. The high variance for the Great North East Channel results from the area not being fished on day 4



Pathway to economic growth without risking biological sustainability



Summary Framework Components

- **Management controls – static**

- Size limits
- Close areas or seasons eg during breeding season

- **Monitoring and data collection to determine indicators**

- **Management controls – dynamic - Decision Rules Needed:**

Low tier:

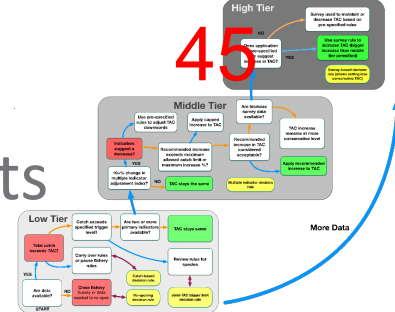
1. Catch-based Decision rule: for species-specific recommended biological catch
2. Joint TAC trigger-limit Decision rule: for lumped species category
3. Re-opening Decision rule: for re-opening a fishery or area

Middle tier:

4. Multiple Indicator Decision Rule: for adjusting species-specific TACs

High tier:

5. Survey-based Decision Rule



Primary Indicators

- **Catch per species**
- Effort
- CPUE (Catch Per Unit Effort)
- Size/mass
- Spatial footprint
- Species composition



Summary

- Total catch amounts were reliably and timeously reported
- Majority (55%) of the catch did not include details such as the area caught and no. fishers
- Missing data limits the usefulness of the data to support additional analyses related to the sustainability and productivity of the stock
- Harvest Strategy can't just rely on surveys – need additional indicators going forward especially for CITES-listed species

Part 13A conditions to the Torres Strait Protected Zone Joint Authority on the approved wildlife trade operation declaration for the Torres Strait Beche-de mer Fishery - December 2020

Condition 7:

By 1 November 2023 the Protected Zone Joint Authority must provide the department with a revised population estimate for Black Teatfish (*Holothuria whitmaei*) and White Teatfish (*Holothuria fuscogilva*) in the Torres Strait that is based on new information for the fishery, including catch data and fishery-independent data or scientific expert advice and an assessment of the impact of harvest on the stocks.

Thank you

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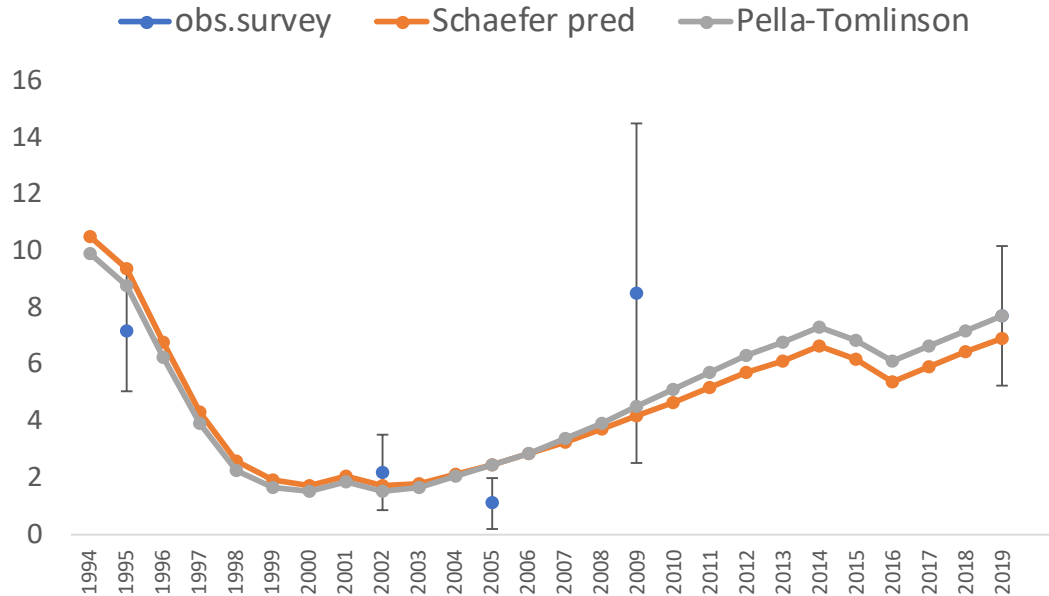
$$N_{t+1} = N_t + r N_t \left(1 - \left(\frac{N_t}{K} \right)^\mu \right) - C_t$$

Diagram illustrating the Pella-Tomlinson equation with parameter annotations:

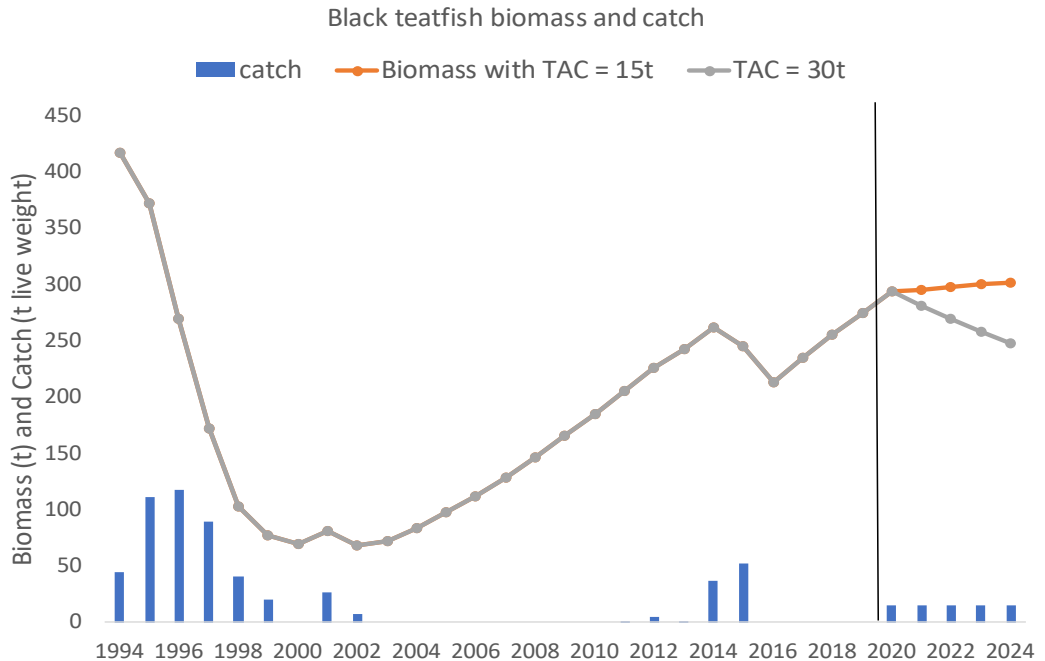
- N_{t+1} : Total biomass of BTF per year (indicated by a blue arrow pointing to the variable)
- r : Intrinsic growth rate (indicated by a blue arrow pointing to the variable)
- K : Carrying capacity (pristine biomass) (indicated by a blue arrow pointing to the variable)
- μ : Shape parameter (indicated by a blue arrow pointing to the variable)
- C_t : Total annual catch (indicated by a blue arrow pointing to the variable)

- Lumped biomass model
- Assumes growth is density-dependent
- The combination of r and K is more robust than these parameters on their own and informs on sustainable/replacement yield
- Implemented in ADMB

Model fit to survey data : $r=0.2$; double surv(95)

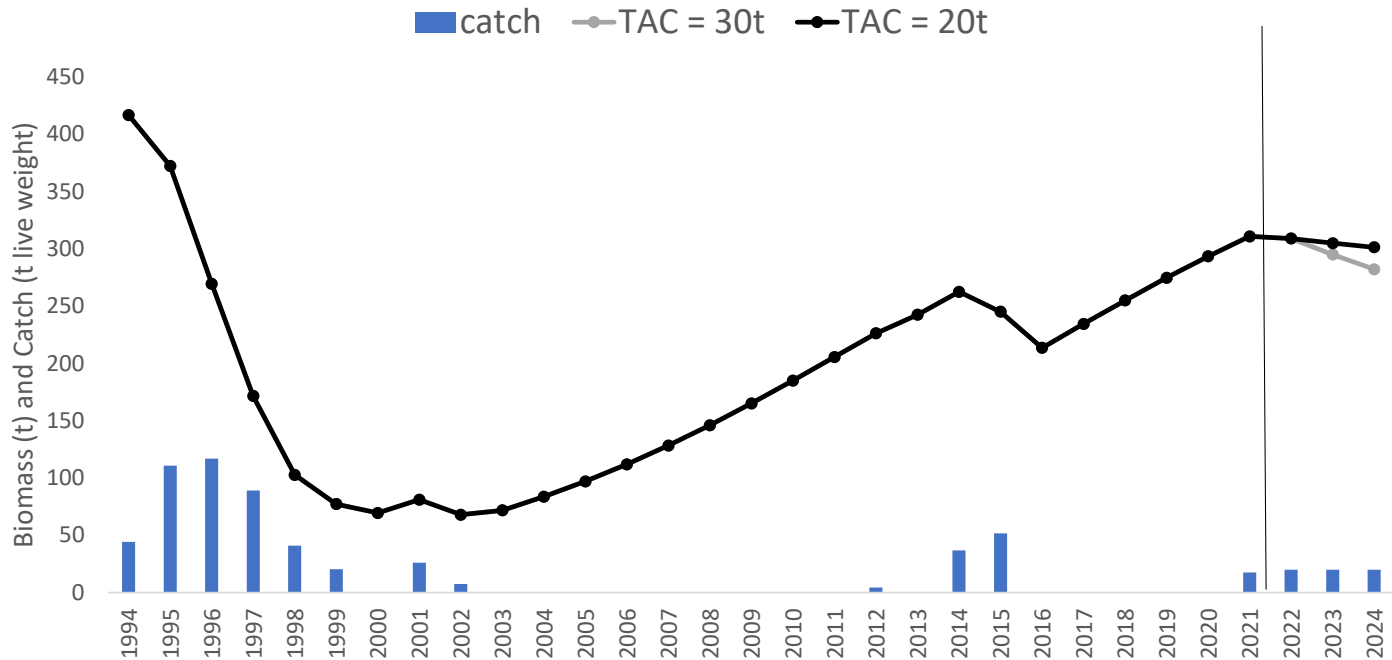


Base-case model estimated biomass trajectory and forward projection



Updated 2021 Modelling Results

Black teatfish biomass and catch (Model 4) - 2021 update with Catch(2021)=17.6t

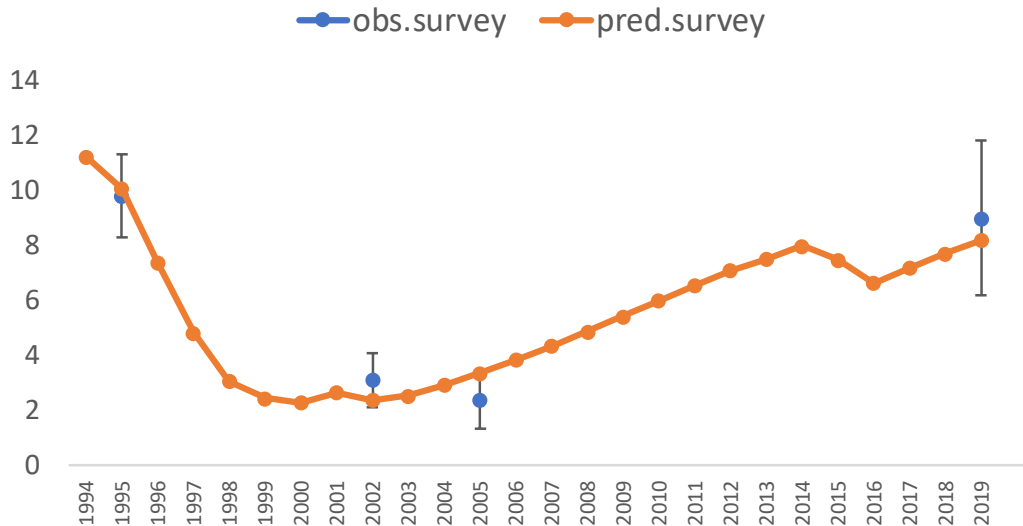


Model Results Summary: MSY

	Description	MSY (t)	BMSY (t)	B(2019) (t)	B2019/BMSY
Model 1	S; fix r	18.5	245.4	336.9	1.37
Model 2	double surv(95)	16.9	225	242.3	1.08
Model 3	S; fix r	15	300.5	385.7	1.28
Model 4	S; fix r; dbl	20.8	208.3	274.7	1.31
Model 5	S; est r,K	28.5	195.8	344.3	1.75
Model 6	S; est r,K; dbl	24.6	197.8	308.2	1.56
Model 7	P; est r,K,mu; dbl; mu=3.5	49.7	257.4	308.2	1.19
Model 8	Fix K, est r	19.9	410.2	647.8	1.57

Use survey series that includes outer barrier (less variable as less fishing there, but no data for 2009)

Model fit to "barrier "survey data : $r = \text{fix } 0.2$; $K = 430 \text{ t}$
 $[\text{STD } 87]$; $\text{MSY} = 21.5 \text{ t}$



18th MEETING OF THE PZJA TORRES STRAIT HAND COLLECTABLES WORKING GROUP

28 (8:30 am – 5:00pm) - 29 October 2021 (8:30 am – 12:00 pm)

Video Conference and Whittington Room, Novotel Oasis Cairns

FINAL AGENDA

AGENDA ITEM 1 PRELIMINARIES

1.1 Acknowledgement of Traditional Owners, welcome and apologies

The Chair will welcome HCWG members, permanent observers, and casual observers to the 18th Torres Strait Hand Collectables Working Group.

1.2 Adoption of agenda

The working group is invited to consider and adopt the draft agenda.

1.3 Declarations of interest

Working group members are invited to declare any real or potential conflicts of interests to the group and determine whether a member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict.

1.4 Action items from previous meetings

The working group will note the status of action items arising from previous HCWG meetings.

AGENDA ITEM 2 WORKING GROUP UPDATES

2.1 Industry and Scientific members

This agenda item is an opportunity for the Working Group to develop a common understanding of Hand Collectable fisheries including recent fishing, economic, biological and ecological trends. Industry and scientific members are asked to provide a brief verbal update on any recent developments relevant to Hand Collectable fisheries. The Working Group will note the updates from industry and scientific members and observers.

2.2 Government Agencies

The Working Group will note updates from each of the PZJA government agency members on the latest developments relevant to Hand Collectable fisheries.

2.3 Native Title

The Working Group will note a verbal update from the Malu Lamar representative if in attendance.

2.4 Papua New Guinea National Fisheries Authority

The Working Group will note an update from the PNG NFA officials if in attendance.

AGENDA ITEM 3 BLACK TEATFISH TRIAL OPENING 30 APRIL – 3 MAY 2021 AND FUTURE OPENINGS

Having regard for advice from the Hand Collectable Resource Assessment Group (HCRAAG) and the application of the Harvest Strategy, the Working Group will discuss

and provide advice on the potential for a future black teatfish opening and any arrangements required to support an opening.

AGENDA ITEM 4 APPLYING THE HARVEST STRATEGY TO REVIEW TOTAL ALLOWABLE CATCHES

Having regard for advice from the HCRAAG and applying the Harvest Strategy to all new information, the Working Group will discuss and provide advice TACs for the 2022 fishing season.

AGENDA ITEM 5 MANAGEMENT

5.1 Management options for the utilisation of white teatfish

The Working Group will discuss and provide advice on the relative management priority to develop advice to the PZJA on management options to support the utilisation of white teatfish TAC against other future management priorities. If recommended as a short-to-medium term priority the Working Group will discuss key considerations for assessing management options and an appropriate workplan.

5.2 Torres Strait Fisheries (Bech de Mer) Management Instrument

The *Torres Strait Fisheries Management Instrument No. 15* (the Instrument) needs to be remade to reflect the current management arrangements in the fishery including to give effect to the revised size limits in the BDM Harvest Strategy. The Working Group will discuss and provide advice on the proposed changes.

5.3 Ecological Risk Assessment for the BDM Fishery (CSIRO)

The CSIRO have completed a draft Ecological Risk Assessment for the fishery. The HCRAAG has considered the draft assessment outcomes. The Working Group will note the outcomes and implications.

AGENDA ITEM 6 RESEARCH PRIORITIES

Having regard for HCRAAG advice, the Working Group will discuss and provide advice to the TSSAC on research priorities for the beche-de-mer, trochus, mud crab and pearl shell fisheries under the Five-Year Rolling Research Plan. A five-year rolling research plan for Hand Collectable Fisheries is used to inform the Torres Strait Scientific Advisory Committee's (TSSAC) annual call for research funding proposals.

AGENDA ITEM 7 OTHER BUSINESS

The Working Group is invited to nominate any other business for discussion.

AGENDA ITEM 8 FUTURE PRIORITIES AND DATE FOR THE NEXT MEETING

The Working Group will discuss and provide advice on management priorities for Torres Strait Hand Collectable Fisheries. Having agreed management priorities and a work plan for Hand Collectable Fisheries aims to achieve a more efficient management process. The Working Group will consider a date and venue for HCWG19.

CLOSE OF MEETING

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
PZJA TRADITIONAL INHABITANT MEMBER UPDATES	Agenda Item 2.1 For NOTING

RECOMMENDATIONS

1. That the Working Group:
 - a. **NOTE** any verbal updates provided by PZJA Traditional Inhabitant industry members;
 - b. **DISCUSS** any strategic issues, including economic trends, relevant to the development of the Torres Strait Hand Collectable Fisheries.

BACKGROUND

2. Verbal reports are sought from PZJA Traditional Inhabitant members under this item.
3. It is important that the Working Group develops a common understanding of any strategic issues, including economic, fishing and research trends relevant to the management of Torres Strait Hand Collectable Fisheries, including within adjacent jurisdictions. This ensures that where relevant, the Working Group is able to have regard for these strategic issues and trends.
4. Working Group industry members are asked to provide any updates on trends and opportunities in markets, processing and value adding. Industry is also asked to contribute advice on economic and market trends where possible.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
SCIENTIFIC MEMBER UPDATES	Agenda Item 2.1 For NOTING

RECOMMENDATIONS

1. That the Working Group
 - a. **NOTE** any verbal updates provided by scientific members; and
 - b. **DISCUSS** any strategic research projects or issues that may be relevant or of interest to Torres Strait Hand Collectables Fisheries.

BACKGROUND

2. Verbal reports are sought from scientific members under this item.
3. It is important that the Working Group develops a common understanding of any strategic issues, including economic, fishing and research trends relevant to the management of Torres Strait Hand Collectable Fisheries, including within adjacent jurisdictions. This ensures that where relevant, the Working Group is able to have regard for these strategic issues and trends.
4. Scientific members are asked to contribute advice on any broader strategic research projects or issues that may be relevant or of interest to Torres Strait Hand Collectables Fisheries.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
GOVERNMENT AGENCY UPDATES	Agenda Item 2.3 For NOTING & DISCUSSION

RECOMMENDATIONS

1. That the Working Group:
 - a. **NOTE** the written updates provided by the Torres Strait Regional Authority and the Australian Fisheries Management Authority (AFMA) below;
 - b. **DISCUSS** the progress to date against the Wildlife Trade Operation (WTO) conditions for the BDM fishery as summarised in **Table 1**;
 - c. **NOTE** any verbal updates provided by the Queensland Department of Agriculture and Fisheries (QDAF).

KEY ISSUES

Torres Strait Regional Authority update, November 2022

1. A series of Torres Strait fishing workshops was recognised as a finalist at the National Seafood Industry Awards 2022 in Brisbane. The Torres Strait Regional Authority (TSRA) and Fishwell Consulting progressed from state to national finalists in the People and Development category for their fisheries workshops with Traditional Owners from across the region. They received the People Development Award for this work focussed on capacity building of local people and communities to support sustainable seafood stock and fishing industries in northern Australia waters. The workshops were funded by TSRA and the Department of Climate Change, Energy, the Environment and Water.
2. The WAPIL project (Fishing for our Future) has slipped significantly mostly due to land access issues for facilities and is being reviewed. Suggested improvements in implementation and approaches will be discussed at the WAPIL Steering Committee meeting November 17th. The potential benefits for the FF and RL fisheries relate to improved and increased capacity for cold chain sea food storage, processing and transport; commercial fishing operations and skills development; business planning and development and increased employment opportunities.
3. The Torres Strait Regional Adaptation and Resilience Plan 2016-2021, is being updated and details how climate change will impact the region's communities and land and sea country, and what steps can be taken to reduce the likely impacts in order to ensure the region has a strong viable future. The report focuses on the impacts and vulnerabilities across five dimensions of climate change resilience including human, financial, natural, physical and social capital climate change adaptations and mitigations. This updated report will complement the CSIRO scoping study and proposal for funding on climate change and variability, and the AFMA planned climate change data incorporation into fisheries management.

Australian Fisheries Management Authority Update

Wildlife Trade Operation (WTO) Approval under the EPBC Act 1999

4. The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires the Australian Government to assess the environmental performance of all commercial fisheries, including those in the Torres Strait, and promote ecologically sustainable fisheries management. Approval under the EPBC Act is necessary for fisheries to be able to legally export commercially wild caught seafood from Australia. Such approvals may be subject to conditions applicable to the responsible management authority and fishers.
5. The Torres Strait BDM Fishery was first accredited as an approved Wildlife Trade Operation (WTO) in June 2005 for a period of three years and was subsequently reassessed and re-approved in 2008, 2011, 2014 and 2017.
6. The fishery was last assessed in 2020 and, as of 23 December 2020, was declared by the Delegate for the Minister of the Environment, as an approved WTO under the EPBC Act until 30 November 2023 subject to several conditions being addressed during the period of the approval. The advice from the Delegate to AFMA on the WTO approval and the conditions imposed on the Torres Strait BDM Fishery is provided as **Attachment 2.3a**.
7. AFMA invites both the RAG and Hand Collectable Working Group (WG) to monitor progress against each condition and provide advice on addressing conditions. To assist the RAG and WG, **Table 1** provides a summary of relevant actions taken or proposed to address each condition.

Table 1. progress to date against the Wildlife Trade Operation (WTO) conditions for the TSBDM fishery. A copy of the advice to AFMA on the WTO approval is also provided as Attachment A.

WTO Conditions for the BDM Fishery	Progress as of October 2022
<p>Condition 1</p> <p>The Torres Strait Protected Zone Joint Authority must ensure that operation of the Torres Strait Bêche-de-mer is carried out in accordance with management arrangements defined in the <i>Torres Strait Fisheries Act 1984</i>, <i>Torres Strait Fisheries Regulations 1985</i>, <i>Torres Strait Fisheries Management Instrument No.15</i> (Torres Strait Sea Cucumber Fishery), licence conditions and the Torres Strait Bêche-de-mer Fishery Harvest Strategy.</p>	<p>On track:</p> <p>The Torres Strait Bêche-de-mer Fishery continues to be managed in accordance with management arrangements in force under the <i>Torres Strait Fisheries Act 1984</i>.</p> <p>In February 2022 the Torres Strait Fisheries Management Instrument No.15 (Torres Strait Sea Cucumber Fishery) was repealed by the <i>Torres Strait Fisheries (Bêche-de-mer) Management Instrument 2022</i>. The new instrument implements new size limits prescribed in the BDM Harvest Strategy, agreed by the PZJA on 19 November 2019. It also strengthens existing prohibitions on the use of underwater breathing apparatus as well as other administrative changes aimed at future-proofing the legislative instrument and to meet current legislative drafting styles.</p>
<p>Condition 2</p> <p>The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment 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</i></p>	<p>On track:</p> <p>There have been no material changes to management arrangements for the Fishery. As a result AFMA, on behalf of the PZJA, has not been required to inform the Department.</p>

WTO Conditions for the BDM Fishery	Progress as of October 2022
and Biodiversity Conservation Act 1999 decisions are made.	
Condition 3 The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended changes to fisheries legislation that may affect the legislative instruments relevant to this approval.	On track: AFMA, on behalf of the PZJA, provided the Department an update on proposed legislative amendments on 26 October 2021.
Condition 4 The Torres Strait Protected Zone Joint Authority must provide reports to the Department of Agriculture, Water and the Environment annually as per Appendix B of the <i>Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i> .	On track: AFMA, on behalf of the PZJA, submitted the 2021 annual report on 29 November and will provide the second annual report by 30 November 2022.
Condition 5 The Protected Zone Joint Authority must complete an ecological risk assessment of the Torres Strait Bêche-de-mer Fishery by 1 January 2022 and develop an associated risk management strategy to address any risks identified in this assessment.	Completed: The CSIRO undertook the ecological risk assessment for the fishery, the draft of which was considered by the HCRAAG at its meeting on 6-7 October 2021. The final report was circulated to the HCRAAG on 21 December 2021 and is also available on the PZJA website . The Department was also updated on the draft outcomes of the ERA as part of the 2021 annual report with a final update to be included in the 2022 annual report.
Condition 6 The Torres Strait Protected Zone Joint Authority must ensure that there is a sufficient level of compliance measures in place to ensure the sustainable management of the Torres Strait Bêche-de-mer Fishery, in accordance with the management arrangements in place for the fishery.	On track: To ensure AFMA's compliance efforts are targeted in the right areas an intelligence driven risk based approach, using Compliance Risk Management Teams (CRMTs) will be applied under the 2020-21 National Compliance and Enforcement Program . The 2020-21 Program will focus on four key areas, one of which is compliance within Torres Strait Fisheries, focusing on quota evasion and reporting of threatened, endangered and protected (TEP) species. This document explains AFMA's compliance program priorities and objectives for the 2020-21 financial year (FY) and performance in the 2019-20 FY.
Condition 7 By 1 November 2023 the Protected Zone Joint Authority must provide the department with a revised population estimate for Black Teatfish (<i>Holothuria whitmaei</i>) and White Teatfish (<i>Holothuria fuscogilva</i>) in the Torres Strait that is	On track: AFMA, on behalf of the PZJA, is on track to meet this condition by the due date.

WTO Conditions for the BDM Fishery	Progress as of October 2022
based on new information for the fishery, including catch data and fishery-independent data or scientific expert advice and an assessment of the impact of harvest on the stocks.	
<p>Condition 8</p> <p>The Torres Strait Protected Zone Joint Authority must limit the seasonal take of the following species listed under the Convention on the International Trade of Endangered Species (CITES), from the Torres Strait Bêche-de-mer Fishery to no more than:</p> <ol style="list-style-type: none"> 1) 15 tonnes of White Teatfish (<i>Holothuria fuscogilva</i>); and 2) 20 tonnes of Black Teatfish (<i>Holothuria whitmaei</i>). <p>The Torres Strait Protected Zone Joint Authority must report the amount of White Teatfish and Black Teatfish harvested by weight and where available, include the number of individuals, their lengths and locations of harvest, as part of the annual reporting referred to in Condition 4</p>	<p>In progress:</p> <p>The current TACs for white and black teatfish are 15t and 20t respectively. Black teatfish catches during the 2021 and 2022 trial openings did not exceed the 20t TAC and catches of white teatfish to date are significantly below the TAC of 15t. AFMA will report black and white teatfish catches for 2022 and their location of harvest as part of the annual report to the department. Information on the number of and length of individual black and white teatfish collected will be provided to the department if and when available.</p>
<p>Condition 9</p> <p>The Protected Zone Joint Authority must address any over harvest of the Total Allowable Catch (TAC) for either Black Teatfish (<i>Holothuria whitmaei</i>) or White Teatfish (<i>Holothuria fuscogilva</i>) in one season and ensure that any over harvest of the species is properly accounted for in subsequent fishing seasons in line with the provisions in the Torres Strait Bêche-de-mer Fishery's Harvest Strategy.</p>	<p>On track:</p> <p>AFMA, on behalf of the PZJA, will address any overcatch of black or white teatfish in accordance with the provisions in the fishery's harvest strategy.</p>

Appendix II CITES listing of sea cucumber species:

Black and white teatfish in August 2020

8. The new WTO approval includes additional requirements that need to be met by the PZJA to manage the harvest of black and white teatfish which were listed under Appendix II of the Convention on the International Trade of Endangered Species of Wild Fauna and Flora (CITES) on 28 August 2020.
9. CITES is a binding international agreement aimed at preventing international trade from driving unsustainable population decline in species listed under the Convention. Species listed under Appendix II of CITES are not necessarily threatened with extinction, and may still be traded internationally provided the trade, or a specified level of trade, has been determined to be non-detrimental to the survival of the species in the wild.

10. The then Department of Agriculture, Water and the Environment (DAWE) is Australia's CITES Scientific Authority and has made a positive non-detriment finding of the Torres Strait Beche-de-mer Fishery subject to the conditions of the Fishery's wildlife trade operation (WTO) approval. One of these conditions places a seasonal TAC limit of 20t and 15t for black and white teatfish respectively.

Proposed listing of species in the genus *Thelenota* (including *Thelenota ananas* prickly redfish)

11. AFMA is aware that, in November 2022, the 19th meeting of the Conference of the Parties to CITES (CoP19) will be considering a [proposal to include all species in the genus *Thelenota* under Appendix II of CITES](#).
12. The Wildlife Trade Office at the Department of Climate Change, Energy, the Environment and Water (DCCEEW) is leading the engagement with the various jurisdictions to better understand the potential business and regulatory impacts of the proposed listing. This information will inform Australia's negotiating position at CoP19 and the required Regulatory Impact Analysis and National Impact Analysis, to be considered by the Australian Parliament, should they be adopted. This information will also inform the necessary regulatory arrangements to allow international trade to continue.

Compliance outcomes for the 2021-22 season

13. AFMA has been delivering domestic compliance functions in the Torres Strait in accordance with the National Compliance and Enforcement Program. There were four compliance officers based in the Thursday Island office delivering both domestic and foreign compliance outcomes.
14. In May 2022, the Black Teatfish fishery opened for a second successful year with high compliance, this trial opening was supported by a strong interagency team.
15. AFMA recommenced operational field activities and continues to conduct these activities in accordance with best practise, mandatory social distancing, and hygiene and in accordance with guidelines developed for field activities. In April 2022 Australia reopened its international borders after 2 years due to COVID-19. PNG Treaty village visits are being planned for the coming year.
16. AFMA fisheries officers have delivered the following outcomes between July 2021 – June 2022:
 - a. 34 ports/freight hubs visits;
 - b. 70 fish receiver inspections;
 - c. 33 vessel inspections;
 - d. With the loosening of restrictions the FMB team were able to recommence community visits, the compliance team was able to attend one of these meetings at Masig Island in June. AFMA officers delivered a number of trainings to other joint agencies.
 - e. AFMA has one matter currently before the court, with one recent matter under investigation. One matter dating back to 2018 was also decided in favour of AFMA by the court this reporting year with fines and a conviction recorded.
 - f. AFMA conducted 17 at sea patrols of the TSPZ supported by Queensland Police and Australian Border Force.
17. To target priority risks in Torres Strait fisheries, AFMA have established a specialised multi-disciplinary Compliance Risk Management Team (CRMT). Priority risks specific to the Torres Strait include unlicensed fishing, unlicensed fish receiving and non-compliance with catch/landing reporting to AFMA. Failing to report catch or landings is considered quota evasion and results in the undermining of the ongoing sustainable management of the Torres Strait Fisheries.

18. Further details are contained in AFMA's National Compliance and Enforcement Program document accessible on the AFMA website at: <https://www.afma.gov.au/domestic-compliance>. This document explains AFMA's compliance program priorities and objectives for the 2021-2022 financial year.
19. All stakeholders are encouraged to report any suspicious or illegal fishing activity involving your fisheries to AFMA, either directly to our Torres Strait office or CRIMFISH (1800 274 634)

ABARES Fishery Status Reports

20. Each year, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) compiles fishery status reports which provide an independent assessment of the biological status of fish stocks and the economic status of fisheries managed, or jointly managed, by the Australian Government (Commonwealth fisheries). The most recent ABARES Fishery Status Report was released in 2021 and summarises the performance of these fisheries in 2019 and 2020 and over time, against the requirements of fisheries legislation and policy.
21. In the 2021 report, all BDM species are classified as not being subject to overfishing, with Sandfish being the only species in the Torres Strait that continues to be classified as overfished. The status of the Torres Strait Beche-de-mer and Trochus Fisheries is summarised in the table below.

TABLE 19.1 Status of the Torres Strait Bêche-de-mer and Trochus fisheries

Biological status					
Stock	2019		2020		Comments
	Fishing mortality	Biomass	Fishing mortality	Biomass	
Black teatfish (<i>Holothuria whitmaei</i>)					No catch in 2020. Biomass is likely to be above the limit reference point.
Curryfish (<i>Stichopus hermanni</i> , <i>S. vastus</i>)					Catch is below TAC. Densities of both species are similar to, or higher than, historical densities.
Deepwater redfish (<i>Actinopyga echinites</i>)					No catch in 2020. Unable to reconcile biomass status based on available information.
Greenfish (<i>Stichopus chloronotus</i>)					Catch is below TAC. Density is similar to historical densities.
Hairy blackfish (<i>Actinopyga miliaris</i>)					Unable to reconcile fishing mortality status or biomass status based on available information.
Prickly redfish (<i>Thelenota ananas</i>)					Catch is below TAC. Density is similar to historical densities.
Sandfish (<i>Holothuria scabra</i>)					No catch in 2020. Last full survey (2010) indicated that stock was overfished.
Surf redfish (<i>Actinopyga mauritiana</i>)					Unable to reconcile fishing mortality status or biomass status based on available information.
White teatfish (<i>Holothuria fuscogilva</i>)					Catch is below TAC. Density is stable.
Other sea cucumbers (up to 13 species)					Unable to reconcile fishing mortality status or biomass status for 1 species in the basket based on available information.
Trochus (<i>Trochus niloticus</i>)					No catch in 2020. Unable to reconcile biomass status based on available information.

Economic status

Estimates of NER and GVP are not available. The current management approach, which, among other things, provides for TACs and community involvement in the management of fishery resources within the context of a tiered approach, is appropriate.

Notes: GVP Gross value of production. NER Net economic returns. TAC Total allowable catch.

Fishing mortality Not subject to overfishing Subject to overfishing Uncertain Not assessed
Biomass Not overfished Overfished Uncertain Not assessed

22. ABARES fishery status reports can be accessed on the ABARES website at:
https://daff.ent.sirsidynix.net.au/client/en_AU/search/asset/1032581/0

Torres Strait Trochus Fishery update

Management arrangements

23. Many of the management arrangements applicable to the fishery are set out in *Fisheries Management Notice (FMN) No 76* and include:

- a. The taking of trochus is restricted to hand collection or by hand-held non-mechanical implements.
- b. The use of underwater breathing apparatus is not permitted.
- c. A minimum size limit of 80 millimetres and maximum size limit of 125 millimetres applies to all fishing (except traditional).

24. The total allowable catch for the Torres Strait Protected Zone (TSPZ) is 150 tonnes.

Strategic assessment

25. On 12 April 2017, 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 EPBC Act as a WTO.

26. The then Department of the Environment and Energy (DOEE) 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.

27. The Torres Strait Trochus Fishery targets a single trochus species, *Tectus niloticus*, using hand-collection and diving in the TSPZ. 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.

28. The DOEE recommended 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 fishery will be reassessed.

Commercial catch and number of licences

29. AFMA understands the fishery to have little to no fishing activity in recent years, with no commercial catches reported since 2018 (41kg). As at 1 September 2020, 2021 and 2022, the following number of TIB licences had trochus (TR) fishery entries:

Year	Number of TIB licences with Trochus fishery entries	Number of TVH licences
2020	71	0
2021	92	0
2022	61	0

Torres Strait Pearl Shell Fishery update

Management arrangements

30. The gold-lipped pearl shell (*Pinctada maxima*) and to a lesser extent the black-lipped pearl shell (*Pinctada margaritifera*) are the main species targeted in the Torres Strait, although five other species occur.
31. Pearl farms purchase product from fishers for use in seeding for the production of pearls and also for use in making other shell products such as jewellery.
32. There are a range of input controls that apply to the Pearl Shell fishery, including:
 - a. Minimum shell size limits which are aimed at ensuring the most suitable shells are taken for farming and affording some protection to young shells and spawning stocks; and
 - i. *Pinctada maxima* must be >130mm and <230mm;
 - ii. *Pinctada margaritifera* must be > 90mm
 - b. Gear restrictions; shell can only be harvested by diving or collected by hand.
 - c. Boat length restrictions; boats must not exceed 6m in length.
33. The fishery is regulated through Torres Strait Fisheries Management Instrument No. 7 (Torres Strait Pearl Shell Fishery).

Minimum size limit trial with developmental permits

34. Following a recommendation from the HCWG in 2013, the PZJA agreed to issue developmental permits to existing licence holders for the taking of undersized pearl shell (*Pinctada maxima*). The objective of the permits was to support revitalisation of the Torres Strait pearl farming industry by developing a commercial trial to investigate whether using smaller shell for seeding and culture could increase the overall productivity of pearl farming. At the time, industry considered that smaller shell enabled them to maximise their seeding cycle potential due to more cycles, with the later seeding cycles producing larger and more valuable products.
35. Eight existing licence holders were subsequently issued developmental permits in 2015 with a competitive total allowable catch set of no more than 2,000 undersize pearl shell size between 100-130 mm to be taken within the allocated period of one year. Mandatory catch reporting of harvested pearl shell was a condition of the permit. Only two of the eight permits issued were active during the trial.
36. In 2017, AFMA undertook a review of the developmental permit trial in an effort to understand the low uptake of developmental permits that were issued.
37. Through interviews with permit holders and buyers, AFMA understood that:
 - b. 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.
 - c. 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.
 - d. 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. Tropical Rock Lobster).

Commercial catch and number of licences

38. AFMA understands the fishery to have little to no fishing activity in recent years, with no commercial catches reported since 1 December 2017. As at 1 September 2020, 2021 and 2022, the following number of TIB licences had pearl shell (PL) fishery entries:

Year	Number of TIB licences with Pearl shell fishery entries	Number of TVH licences
2020	67	4 primary/tender packages 3 individual licences 6 held in trust by the TSRA
2021	75	4 primary/tender packages 3 individual licences 6 held in trust by the TSRA
2022	61	4 primary/tender packages 3 individual licences 6 held in trust by the TSRA

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
NATIVE TITLE UPDATE	Agenda Item 2.4 For NOTING & DISCUSSION

RECOMMENDATIONS

1. That the Working Group (WG) NOTE any updates on Native Title matters from members, including the representative from Malu Lamar (Torres Strait Islanders) Corporation RNTBC (Malu Lamar).

BACKGROUND

2. 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 Title rights in relation to commercial fishing must be exercisable in accordance with the *Torres Strait Fisheries Act 1984*.
3. Traditional Owners and Native Title representative bodies have an important role in the management of Torres Strait fisheries. It is important therefore that the Working Group keep informed on any relevant Native Title issues arising.
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.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
PAPUA NEW GUINEA NATIONAL FISHERIES AUTHORITY UPDATES	Agenda Item 2.4 For NOTING

RECOMMENDATIONS

1. That the Working Group:

- a. **NOTE** the fishery update to be provided by representatives from the Papua New Guinea National Fisheries Authority if in attendance.
- b. **NOTE** the Australia and Papua New Guinea (PNG) bilateral meetings series was held in Cairns recently, including the Fisheries Committee Meeting which was held on 30 August. The outcomes of the discussions will be circulated to the PZJA Advisory Groups once finalised and available.

KEY ISSUES

2. AFMA has a standing invite for officials from the PNG National Fisheries Authority (NFA) to attend all PZJA consultative forums. If in attendance, NFA officials will provide an update on the PNG hand collectable fisheries at the meeting, including an update on the beche-de-mer fishery.
3. In 2010 PNG placed a moratorium on fishing for BDM. On 1 July 2017 the moratorium was lifted and the PNG beche-de-mer fishery has been opened three times since (2018, 2019 and 2020). AFMA understands that although the season open date usually falls on 1 July, it can vary from year to year depending on the progress of the stock biomass assessment surveys and analysis that is used to set the total allowable catches for each province.

BACKGROUND

4. The *Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two Countries, including the area known as Torres Strait, and Related Matters* (the Treaty) was signed by both Parties at Sydney on 18 December 1978 and ratified by Australia on 15 February 1985. The Treaty defines the border between Australia and PNG and provides a management framework of the common border area. This area is defined by the Treaty and is known as the TSPZ.
5. Australia and PNG established the TSPZ with the principal purpose of acknowledging and protecting the traditional way of life and livelihood of the traditional inhabitants of both Parties, including their traditional fishing and free movement (Article 10(3)). A further purpose is to protect and preserve the marine environment and indigenous fauna and flora in, and in the vicinity of, the TSPZ (Article 10(4)). A range of subsidiary obligations and rights exist under the Treaty. Relevantly, Australia and PNG commit under the Treaty to co-operate in the conservation management and optimum utilisation of Protected Zone commercial fisheries (Article 21) insofar

that the achievement of the purposes for the establishment of the TSPZ are not prejudiced in regard to traditional fishing (Article 20(1)).

6. The Treaty recognises the rights of both countries to Protected Zone commercial fisheries. This recognition is implemented through cooperative management and catch sharing provisions of Part 5 of the Treaty. Since the Treaty was ratified, Australia and PNG have entered into formal arrangements under Article 22 to cooperatively manage six fisheries, referred to as 'Article 22 fisheries'. These are the commercial fisheries for prawns, tropical rock lobster, Spanish mackerel, pearl shell, and traditional fisheries for turtles and dugong.
7. The BDM Fishery is not an Article 22 fishery and is, therefore, not managed under formal catch sharing arrangements with PNG. However, Australia and PNG recognise the importance of complimentary management arrangements, shared science and strong communication between both Parties given some sea cucumber stocks are shared (e.g. Sandfish) and beche-de-mer stocks are vulnerable to overfishing.
8. Updates on the status of the respective fisheries and agreements between PNG and Australia on catch sharing arrangements and related matters usually take place at annual fishery bilateral meetings and meetings of the Torres Strait Joint Advisory Council (JAC) established under Article 19 of the Treaty, but may occur intersessionally as required by the two Parties.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
BLACK TEATFISH TRIAL OPENING 9-12 MAY AND FUTURE OPENINGS	Agenda Item 3 FOR DISCUSSION & ADVICE

RECOMMENDATIONS

1. That the Hand Collectables Working Group:

- a. **NOTE** the update on the outcomes of the black teatfish trial opening on 9 – 12 May 2022, including an overview of catch and effort reporting by licenced fish receivers (**Attachment 3a**) and information from fishers that participated in the opening who will be in attendance at the meeting.
- b. **NOTE** that length and weight sampling was undertaken during the opening on Erub and Mer Islands and, to a limited extent, Bourke Islet.
- c. **NOTE** that having considered all available information, including the draft CSIRO analysis of the data from the openings (**Attachment 3b**), the Hand Collectables Resource Assessment Group (RAG) recommends (draft) that black teatfish continues to open annually with a 20t TAC on the basis that:
 - i. the 2022 trial reopening TAC of 20t was not overcaught (condition 5 of the HS);
 - ii. data was collected satisfactorily during the opening (condition 6 of the HS);
 - iii. updated modelling analysis, inclusive of 2022 catch and sampling data, confirmed that a 20t TAC is sustainable (conservative estimate of MSY being 21t) and would not lead to a decrease in black teatfish biomass after the first year of fishing (condition 7 of the HS). In contrast, the modelling found that catches of 30t could lead to a gradual depletion of the stock.
 - iv. That AFMA continue to focus on communication and education on improving voluntary reporting of area and effort data by fishers and fish receivers, including preparing fact/information sheets and organising a teleconference with all fish receivers as a cost effective way to discuss ways of improving voluntary reporting.
 - v. Given the usefulness of the size frequency sampling undertaken during the 2022 opening, continue to undertake scientifically designed sub-sampling during the opening to collect size and weight frequency data during black teatfish openings at key landing locations.

2. Having considered the draft RAG advice, and the BDM HS Reopening decision rule, **DISCUSS** and **PROVIDE ADVICE** on the potential for the fishery to stay open on an ongoing basis (Condition 7) and under what conditions including:

- a. an appropriate, ongoing, TAC; and
- b. any additional data that should be collected during future openings, noting an ongoing condition of the fishery remaining open is that reliable data collection continues, and preferably includes additional data such as CPUE, spatial footprint and size composition (Condition 8).

- c. Any ongoing assessment of the impact of harvest on the stock to ensure it continues to be at sustainable levels.

KEY ISSUES

1. The re-opening decision rule in the BDM Harvest Strategy (Section 2.11.4) sets out the conditions that need to be met when considering the potential for a previously closed fishery to stay open in future, following a successful trial opening. These are outlined below to guide the Working Group's discussion:

STEP 1 - Was data collection during the trial conducted satisfactorily (condition 6)

- AFMA believes that reported catches accurately reflect the total amount of black teatfish that was caught and landed during the season due to the high level of industry compliance with the daily catch landing and reporting requirements that applied. AFMA had a significant compliance presence throughout the region during the opening, including land-based officers on some of the key islands which were able to support and assist industry meet the licencing and reporting requirements.
- AFMA also had four (4) scientific fisheries observers that were undertaking size frequency sampling during the entire period of the opening as part of the CSIRO-led research project. Those observers were also able to support and assist industry with the catch reporting requirements for the opening.
- Having considered advice from both AFMA and industry members and observers on the reliability of total catch reported and data analysis undertaken by CSIRO, the RAG agreed that data collection during the trial opening was conducted satisfactorily.

STEP 2 - Noting the TAC was not exceeded and reliable data were collected, the data need to be analysed to review the TAC and potential for the fishery to stay open in the future, or be re-opened periodically after a pre-specified interval (Condition 7)

2. The RAG considered the CSIRO analysis of the data collected during the reopening which indicates that:
 - No evidence of stockpiling as day 1 catches were not relatively large
 - No evidence of declining catch after a few days, which would indicate depletion
 - Low catch on day 3 - 2021 due to falling on the Sabbath
 - Low catch on day 4 - 2022 due to fishery opening for a half day and some fishers choosing not to fish
 - Cumulative catches were tracked and adhered to the management TAC
 - The number of fishers participating in the fishery was only a fraction of the available fishing effort (i.e. potential TIB effort in Torres Strait) indicating possibly that fishing effort was controlled by local traditional "Island custom" management
3. The rationale for the 20t trial opening TAC is outlined in the Background section below and includes the Working Group's advice on this matter at its 21 February and 7 August 2020 meetings.
4. In making its recommendation to continue to open fishing for black teatfish on an ongoing basis with a 20t TAC, the RAG considered the outcomes of the CSIRO modelling which was updated to

include the 2022 black teatfish catch data and the size frequency data collected during the opening. The modelling confirmed that a 20t TAC is sustainable (conservative estimate of MSY being 21t) and would not lead to a consistent decline in black teatfish biomass after the first year of fishing. In contrast, the modelling found that catches of 30t could lead to a gradual depletion of the stock.

5. **The Working Group is asked to consider the RAG's recommendation and provide advice on a TAC for an ongoing black teatfish opening that is set at a demonstrably conservative level, taking into account the outcomes of the 2021 and 2022 trial openings.**

STEP 3 - Additional data to be collected during future openings

6. Prior to the 2021 black teatfish trial opening AFMA broached the possibility of doing logbook reporting and some length sampling with industry during consultation with industry and communities on the timing of the opening. Initial feedback from industry was positive however they had concerns that it may not be feasible given the realities of sea cucumber fishing operations. AFMA did not pursue these initiatives further with industry in 2022, recognising the need to first focus on some of the more fundamental aspects of the opening such as daily reporting and empowering industry to agreeing on an appropriate timing for the opening.
7. An ongoing condition of the fishery remaining open is that reliable data collection continues, and preferably includes additional data such as CPUE, spatial footprint and size composition. AFMA considers that industry is broadly interested in pursuing logbook reporting and, as is the case for the Spanish mackerel fishery, would be willing to assist with sampling.
8. At its first meeting, the HCRAAG recommended that opportunities to undertake a scientific sub-sampling program to collect size and weight frequency data during black teatfish openings at key landing locations be explored. This recommendation was also supported by the Working Group as a high research priority and a research project was subsequently funded through the TSSAC process which saw the collection of sea cucumber length and weight data during the opening by four scientific observers on Erub and Mer Islands. Some limited sampling was also undertaken by Compliance Officers on Bourke Islet.
9. Continuous guidance and feedback is needed from industry and scientific members on how best to structure future sampling and data collection programs ensuring sufficient support and meaningful sampling. For example, training for fishers to take length measurements, complete logbooks and having data collection officers at key landing areas to support industry sampling as per the 2022 sampling program.
10. The Working Group is also invited to provide further advice on how best to improve voluntary reporting of area and effort information during future openings.

BACKGROUND

11. The 2022 black teatfish opening commenced on 9 May 2022. In line with decisions of the PZJA, the TAC was set at 20 tonnes and it was mandatory for fishers to report catches to a fish receiver daily and for fish receivers to report landings to AFMA daily. A comprehensive checklist of the management arrangements that applied to fishers and fish receivers during the opening are provided at **Attachment 3c**. Aside from data provided by fish receivers, and the size frequency sampling undertaken by observers no other data was collected, for example detailed effort information (such as reef location or hours fished).

12. The fishery went for four (3.5) days resulting in 17.06 t of the 20 t TAC being caught. The daily black teatfish catches are summarised in Table 1 below.

Table 1. Summary of daily black teatfish catches during the opening 9-12 May 2022

Fishing Day	Daily catch (kg)	Cumulative catch (kg)
9-May	4,193.85	4193.85
10-May	5,826.99	10,020.83
11-May	5,979.52	16,000.36
12-May (1/2 day of fishing)	1,055.41	17,055.76

13. The total catch across all sea cucumber species caught during the black teatfish opening was 19.09t, 89.3% of which was black teatfish (17.06t). A summary of the data collected during the black teatfish opening is provided in **Attachment 3a**.

Industry experience of the 2022 black teatfish opening

14. AFMA invited a number of fishers and fish receivers that participated during the opening to attend the HCRAAG's second meeting to discuss their experiences fishing for black teatfish. As well as sharing their on-water experiences, the industry members were able to ground truth the reported data and results of the analysis and help explain some of the gaps such as the location of catches that lacked corresponding area information. In the absence of logbook reporting in the sector, it will be especially valuable to get:
- an insight into fishing operations to better understand and interpret the catch and effort data reported,
 - ground truth the results of the data analysis with industry members' experiences and observations during fishing operations,
 - data collection and sampling strategies for future openings that are most likely to be successful,
 - general industry feedback on the opening.
15. Industry members that fished during the opening reported that it was beneficial to have Compliance fisheries officers on ground on Mer Island. As well as enforcing the regulatory arrangements for the opening, the compliance officers also supported fishers and fish receivers with the reporting and licencing requirements to be able to participate in the opening.
16. Industry members continue to support a timing of the black teatfish opening that coincides with favourable tides and is unlikely to overlap with Sunday (the Sabbath).
17. Starting the industry engagement and consultation process now will ensure that management, monitoring and reporting measures for future openings are well considered, should the PZJA agree to allow fishing for black teatfish on an ongoing basis.

TAC rationale – 2022 black teatfish trial opening

HCRAAG01 Recommendation

3. The HCRAAG had its inaugural meeting on 6-7 October 2022 and considered the outcomes of the 2021 black teatfish trial opening with a view to providing advice on the potential for the fishery to stay open in the future. Having regard for all available information and conditions 5-8 of the BDM Fishery Harvest Strategy, relating to the reopening decision rule that needed to be addressed,

following a trial opening the **RAG RECOMMENDED** a black teatfish opening in 2022 with a 20t TAC on the basis that:

- a. the 2021 trial reopening TAC of 20t was not overcaught (condition 5 of the HS);
 - b. data was collected satisfactorily during the opening (condition 6 of the HS);
 - c. updated modelling analysis, inclusive of 2021 catch data, confirmed that a 20t TAC is sustainable (conservative estimate of MSY being 21t) and would not lead to a decrease in black teatfish biomass after the first year of fishing (condition 7 of the HS). In contrast, the modelling found that annual catches of 30t could lead to a gradual depletion of the stock.
 - d. prior to a future black teatfish opening AFMA focuses on communication and education on improving voluntary reporting of area and effort data by fishers and fish receivers, including preparing fact/information sheets and organising a teleconference with all fish receivers as a cost effective way to discuss ways of improving voluntary reporting.
 - e. opportunities to undertake a sub-sampling program to collect size and weight frequency data during black teatfish openings at key landing locations be explored. Noting that the sampling program would need to be scientifically designed.
4. The [HCWAG01 meeting record](#) is available on the [PZJA website](#).

HCWG18 Recommendation

5. At its meeting on 28-29 October 2021, the HCWG18 considered HCWAG01's advice and recommendation on future black teatfish openings and the outcome of the 2021 black teatfish trial opening (HCWG18 meeting record provided as **Attachment 1.4b under Agenda Item 1.4**). The HCWG supported HCWAG's advice and **recommended** a black teatfish opening in 2022 with a 20t TAC, considering:
 - a. the outcomes of the updated CSIRO population modelling which confirmed that a 20t TAC is sustainable and would not lead to a consistent decline in black teatfish biomass after the first year of fishing. In contrast the modelling found that catches of 30t could lead to a gradual depletion of the stock.
 - b. industry member advice to ensure that all catch data continues to be captured during future openings.

TAC rationale – 2021 black teatfish trial opening

6. At its meeting on 21 February 2020, the Hand collectable Working Group (HCWG) considered very preliminary outcomes of the fishery independent sea cucumber dive survey conducted in November 2019 and January 2020 and recommended a trial reopening of the fishery for black teatfish, subject to a 15 tonnes TAC and daily reporting to AFMA ([meeting record is available on the PZJA website](#)). The PZJA's consideration in April 2020 of the HCWG's recommendation was delayed on TSRA's request to allow for a more complete CSIRO report on the stock status of black teatfish, and provide time for TSRA to consider options for filling the vacant position on the HCWG for a traditional inhabitant member for Maluialgal (inner western cluster).
7. Members of the HCWG met again on 7 August 2020. Due to unexpected changes in the availability of some traditional inhabitant members, the quorum requirements for the meeting¹ were not met.

¹ PZJA Fisheries Management Paper No. 1. Management Advisory Committees, Scientific Advisory Committees, Working Groups and Resource Assessment Group.

8. To support members advice on possible arrangements for a black teatfish opening the following was presented:
 - e. Preliminary² outcomes of the fishery independent dive survey which included: i) recorded densities across locations and within habitats; ii) standing stock population estimates; iii) length distributions; and iv) a comparison of results with previous surveys; and
 - f. Preliminary population modelling together with estimates of standing stock biomass above the legal-size limit (generally known as the available biomass).
9. All members reaffirmed previous HCWG advice that based on all available information, the black teatfish stock is likely to be well above the biomass limit reference (a pre-requisite under the harvest strategy for reopening a species closed to fishing). Advice from members is detailed in the meeting record [available on the PZJA website](#) with advice on a recommended reopening TAC summarised below.
 - g. The two traditional inhabitant members, AFMA and one scientific member (also a co-investigator on the current stock survey project), recommended a re-opening TAC of 20 tonnes. This recommendation was also supported by the TSRA Fisheries Portfolio Board member who is a Permanent Observer on the HCWG;
 - h. The TSRA member recommended a reopening TAC of 21 tonnes; and
 - i. A Scientific Member and the QDAF member recommended a reopening TAC of 15 tonnes.
10. Having consider the advice of the HCWG, the PZJA agreed to an opening TAC of 20 tonnes on the basis that the preliminary modelling work undertaken by CSIRO, although preliminary, found that across all model versions and sensitivity tests, 20 tonnes was shown to be sustainable. Although 20 tonnes (or 20.8t) is the estimated Maximum Sustainable Yield (MSY) for the preferred model, the MSY estimate was considered conservative due to the inputs used in the preliminary model.
11. The default reopening TAC for black teatfish prescribed in the harvest strategy is 15 tonnes. AFMA considered there was sufficient basis to depart from this default setting. The new modelling, albeit preliminary, gave insight into the productivity of the stock and importantly how it might respond to different levels of fishing exploitation. The preliminary modelling used the newly collected survey data and reported catch data. For these reasons, AFMA considered 20 tonnes to be consistent with the Harvest Strategy requirement for the starting TAC to be demonstrably conservative.
12. In the absence of other data or analysis the application of generally assumed conservative harvest rates of standing stock biomass estimates for sea cucumbers has been used. The standing stock biomass estimate derived from the recent survey was 818 tonnes. If applied, the rule of thumb harvest control rule of harvesting 5% of the total biomass estimate (818t) would have resulted in a TAC recommendation of 41 tonnes. The preliminary modelling indicated that catches above 30 tonnes would not be sustainable and would lead to a decline in the biomass after the first year of fishing.

² The results were considered preliminary at the time as the final report for the project was not due until December 2020 with further work on interpreting the results across the range of species surveyed to be undertaken.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
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Summary of Black teatfish opening catch data 9 – 12 May 2022

1. The black teatfish trial opening lasted for three and half days, resulting in a total catch of 19.09t of sea cucumber, 89.3% of which was black teatfish (17.06t). A summary of all sea cucumber catches during the black teatfish opening is provided in Table 1.

Table 1. Summary of all sea cucumber catches during the opening 9-12 May 2022

Species	9 May (Day 1)	10 May (Day 2)	11 May (Day 3)	12 May (Day 4)	Total catch by species (kg)
Black Teatfish	4,193.85	5,826.99	5,979.52	1,055.41	17,055.76
Blackfish	47.18	66.06	30.28	12.55	156.07
Curryfish - mixed	15.62	62.12	68.41		146.15
Prickly redfish	215.22	489.08	632.83	94.91	1,432.04
White Teatfish	56.57	107.36	106.33	29.82	300.08
Total catch by day (kg)	4,528.44	6,551.60	6,817.38	1,192.68	19,090.10

2. Apart from the last day, catches increased during the opening. Catches for 12 May were significantly low as fishing was only allowed until noon to manage the level of fishing effort and mitigate the risk of overcatch of the TAC.
3. A total of 11 fish receivers reported black teatfish during the opening from five different locations (Mer, Erub, Ugar Islands and Bourke and Memey Islets). Bourke and Memey Islets are uninhabited islands from which some fish receivers were permitted to operate during the black teatfish opening to help facilitate the daily catch landing and reporting requirements.
4. Of the 17.06 t of black teatfish caught, 39.6% (6.76t) was landed at Mer Island, 31.6% (5.4t) at Bourke Islet, 21.4% (3.64t) at Erub Island, 2.7% (0.47t) at Ugar Island and 4.6% (0.79t) at Memey Islet.
5. 62.6% (10.68t) of the landed black teatfish catch was reported as being salted, 18.9% (3.22t) as whole weight and 18.5% (3.16t) as wet gutted weight. For catch monitoring purposes, all reported catch was converted to wet gutted weight using the conversion ratios available for these processing methods.
6. The majority of the total catch (92.3%) was landed to eight (8) fish receivers, with over half of the catch (56.9%) landed to four (4) fish receivers.

Effort information (number of fishers and area)

7. Fishers reported as having fished for black teatfish in various areas as summarised in Table 2 below. A map of the reporting areas used in the catch disposal record is provided in Figure 1.

Table 2. Black teatfish catches by area during the 2022 opening 9-12 May

Area Fishery	Catch per area (t)
Great North East Channel (14)	0.33
Darnley (16)	3.77
Cumberland (17)	8.14
Seven Reefs (18)	0.59
Don Cay (19)	2.87
Barrier (20)	0.19
Not assigned	1.17
Total	17.06

8. A total of 37 fishing licences participated in the opening and landed black teatfish catch during the opening. It should be noted that individual licences or boats with high catch levels against them are for multiple boats that the fishers/fish receivers did not specify in the CDR page.
9. Based on the reporting and discussions with industry before and during the opening, AFMA believes that fishers mainly originated from the eastern and central region of the Torres Strait with some fishers travelling over from Waiben (Thursday Island).

Price and GVP information

2022 trial opening

10. The fishers/fish receivers/buyers that AFMA has had the opportunity to talk to advised paying a slightly higher price of approximately AUD36 for black teatfish during the 2022 trial opening compared to 2021. The increase in price may be reflective of the increase in operating costs due to higher fuel prices.
11. AFMA has been liaising with the Natural Resource Economics Team at the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) regarding the calculation and publication of gross value of production (GVP) for the BDM Fishery. Although yet to be published, ABARES have preliminarily estimated the GVP for the BDM Fishery for 2020-21 to be AUD642,000. AFMA will circulate the final GVP figures to the HCWG once they are published.

2021 trial opening

12. Some of the fishers/fish receivers and some of the buyers that AFMA had the opportunity to talk to last year advised that black teatfish prices during the 2021 opening ranged from approximately AUD26 to approximately AUD 30 or potentially even AUD 40 depending on the quality and the level of processing. More accurate price information would assist the PZJA in getting a better understanding of the value of the fishery.

Figure 1. Map of areas for Torres Strait Catch Disposal Reporting (TDB02)



Black teatfish trial fishery openings – 2021 & 2022

Nicole Murphy, Éva Plagányi and Tim Skewes



The data in this summary were gathered by AFMA logbooks and observers during the Black teatfish fishery openings in 2021 (April 30 to May 3) and 2022 (May 9 to May 12).

Thank you and appreciation to TSI fishers for providing their fishery data and AFMA Thursday Island and Observers Tamre Sarhan, Ben Lidell, David Schubert, Henry Oak and Stephen Hall.

This document provides a brief summary of some of the data in order to inform ongoing management.

Length frequency

A total of 1886 Black teatfish were sampled for size frequency measurements of length and width during the 2022 fishery season, with 1701 weights also recorded. Measurements of length, width and weight were also recorded for other sea cucumber species (Table 1).

Table 1. Number of sea cucumber species measured during Black teatfish opening in 2022.

Common name	Whole Length (mm)	Number
Black teatfish	<i>Holothuria whitmaei</i>	1886
White teatfish	<i>Holothuria fuscogilva</i>	29
Curryfish common	<i>Stichopus herrmanni</i>	44
Curryfish vastus	<i>Stichopus vastus</i>	33
Prickly redfish	<i>Thelenota ananas</i>	24
Burrowing blackfish	<i>Actinopyga spinea</i>	2

Length frequency measurements (whole) from previous sea cucumber surveys (Figure 1) and observer data (Figure 2) are shown below. Unfortunately, the pre-2020 population survey data aren't sufficiently comparable to the 2022 Observer data (as the latter are based on commercial catches and a Minimum Legal Size (MLS) restriction), but data from future fishery openings will allow more detailed comparisons such as of the median size of animals caught, and trends in growth.

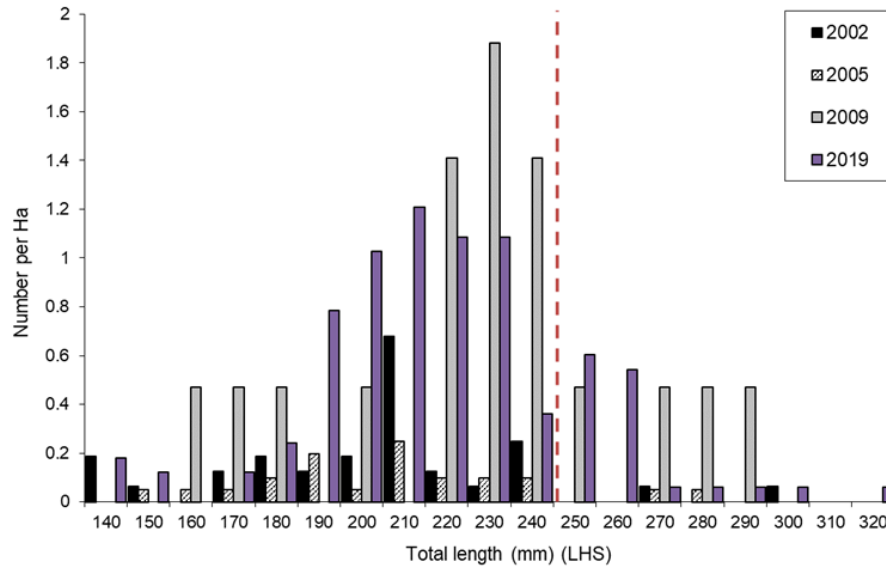


Figure 1. Length frequency for Black teatfish collected during population surveys in East Torres Strait in 2002, 2005, 2009 and 2019/2020. Minimum Legal Size (MLS) of 250 mm indicated; LHS = minimum size of bin range (Murphy et al. 2021).

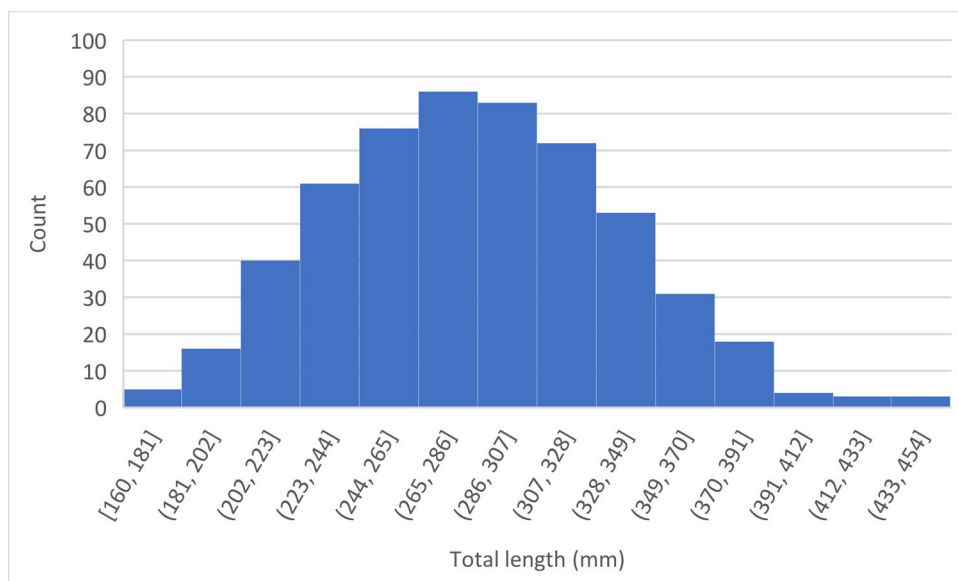


Figure 2. Length frequency measurements (whole) for Black teatfish for the 2022 fishery opening.

Black teatfish catch

Data analyses for 2021 and 2022 fishery openings

A summary of the total catch per area and per day, for 2021 and 2022 is shown in Table 2. Recorded weights have all been converted to standard units (wet-gutted weight) using the agreed conversion factors. The total Black teatfish catch for 2021 was 17.4 tonnes and for 2022 was 17.05 tonnes and hence below the TAC (Total Allowable Catch) limit of 20 tonnes, confirming that the trial openings for both years were successfully managed.

Whereas the total catch amounts were reliably reported in 2021, the majority (55%) of the catch did not include details such as the area caught. This limits the usefulness of the data to support additional analyses related to the sustainability and productivity of the stock. In 2022, catch amounts were again reliably reported and there was an improvement in reporting the area caught (logbook zone), with 68% of total records recording the corresponding area caught (Table 2).

*Catch error – 2021: A slight dating error exists that has implication for the total catch for Black teatfish to date – a catch entry was entered for the 2nd of April due to a dating error on the CDR. This resulted in the record not being captured in the data extract for the opening period (30th April – 3rd May 2021). The record amount was 181.95 kg and brings the total catch of Black teatfish to 17,615.47 kg.

Table 2. Sum of converted (gutted) weight (kg) for catch taken for logbook zones for each fishing day in years 2021 and 2022.

	Day	Warrior	GNE Channel	Darnley	Cumberland	Don Cay	Seven Reefs	Barrier	Unknown%	Grand total
2021	30-Apr	-	119.78	41.24	468.95	311.13	-	-	3075.51	4016.62
2021	1-May	-	141.19	551.31	1392.45	-	-	-	2820.29	4905.24
2021	2-May	-	67.14	276.20	1030.81	-	-	-	166.42	1540.57
2021	3-May	50.95	-	1010.19	2210.87	145.56	-	-	3553.51	6971.08
Total		50.95	328.12	1878.94	5103.08	456.69	-	-	9797.69	17615.47
	Day	Warrior	GNE Channel	Darnley	Cumberland	Don Cay	Seven Reefs	Barrier	Unknown%	Grand total
2022	9-May	-	-	985.82	1768.25	1229.02	-	-	210.75	4193.85
2022	10-May	-	331.00	1379.75	1948.39	631.25	324.11	-	873.56	5488.07
2022	11-May	-	-	1065.44	4024.48	641.80	270.01	185.23	-	6186.96
2022	12-May	-	-	335.02	397.09	371.24	--	-	83.54	1186.90
Total		-	331.00	3766.03	8138.22	594.13	2873.30	185.23	1167.85	17055.76

%Unknown: Fished area left blank in reporting.

Catch per day

In 2021, the largest catch was taken on day 4 and the least on day 3. For 2022, the largest catch was taken on day 3 and the least on day 4 (Figure 3).

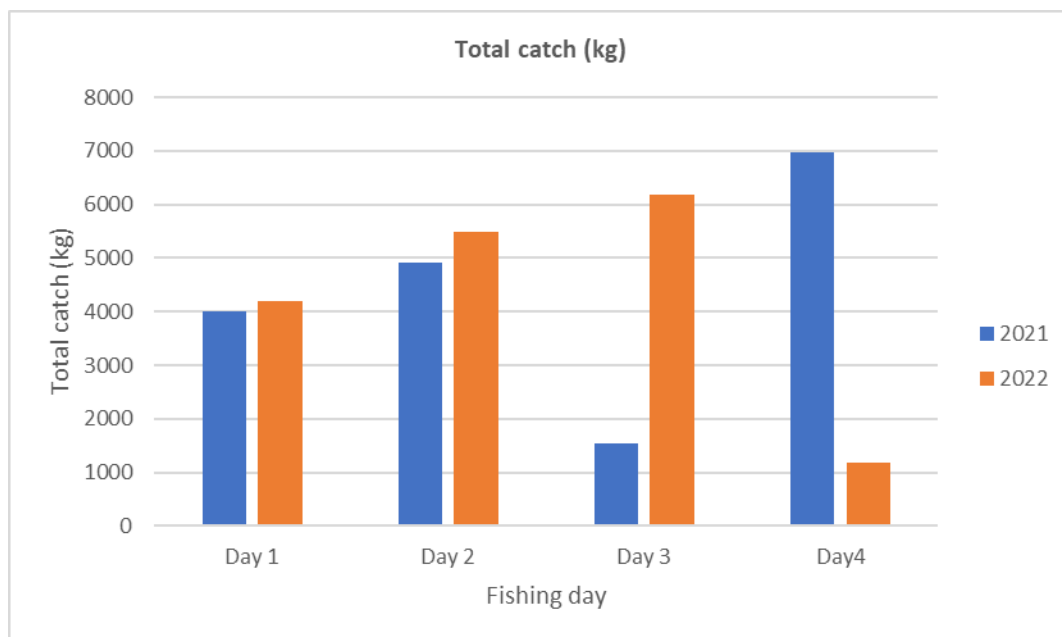


Figure 3. Total catch per day (gutted weight - kg).

The temporal pattern in catches as shown in Table 2 and Figure 3 suggest the following:

- No evidence of stockpiling as day 1 catches were not relatively large
- No evidence of declining catch after a few days, which would indicate depletion
- Low catch on day 3 - 2021 due to falling on the Sabbath
- Low catch on day 4 - 2022 due to fishery opening for a half day and some fishers choosing not to fish
- Cumulative catches were tracked and adhered to the management TAC
- The number of fishers participating in the fishery was only a fraction of the available fishing effort (i.e. potential TIB effort in Torres Strait) indicating possibly that fishing effort was controlled by local traditional “Island custom” management

Area fished

In 2021, the largest catch was taken from ‘Unknown’ area recorded in the catch data (Table 3; Figure 4). Following this opening, meetings stressed that it is important to improve communication for future fishing around the need to record location, as this limits the usefulness of the data.

In 2022, there was an improvement in recording location for catch (Table 3; Figure 4). The areas of Darnley, Cumberland and Don Cay received more effort, suggesting these areas may have contributed to the Unknown data in 2021. The areas of Seven Reefs and Barrier

were additionally fished—they were not in 2021. Further information as to why these areas were accessed would help scientific understanding of the information content of the data and inform on fisher behaviour.

Table 3. Total sum of converted weight (kg) for catch taken for logbook zones for each fishing day between years.

2021	Day	Warrior	GNE Channel	Darnley	Cumberland	Don Cay	Seven Reefs	Barrier	Unknown
	1	-	119.78	41.24	468.95	311.13	-	-	3075.51
	2	-	141.19	551.31	1392.45	-	-	-	2820.29
	3	-	67.14	276.20	1030.81	-	-	-	166.42
	4	50.95	-	1010.19	2210.87	145.56	-	-	3553.51
2022	Day	Warrior	GNE Channel	Darnley	Cumberland	Don Cay	Seven Reefs	Barrier	Unknown
	1	-	-	985.82	1768.25	1229.02	-	-	210.75
	2	-	331.000	1379.75	1948.39	631.25	324.11	-	873.56
	3	-	-	1065.44	4024.48	641.80	270.01	185.23	-
	4	-	-	335.02	397.09	371.24	-	-	83.54

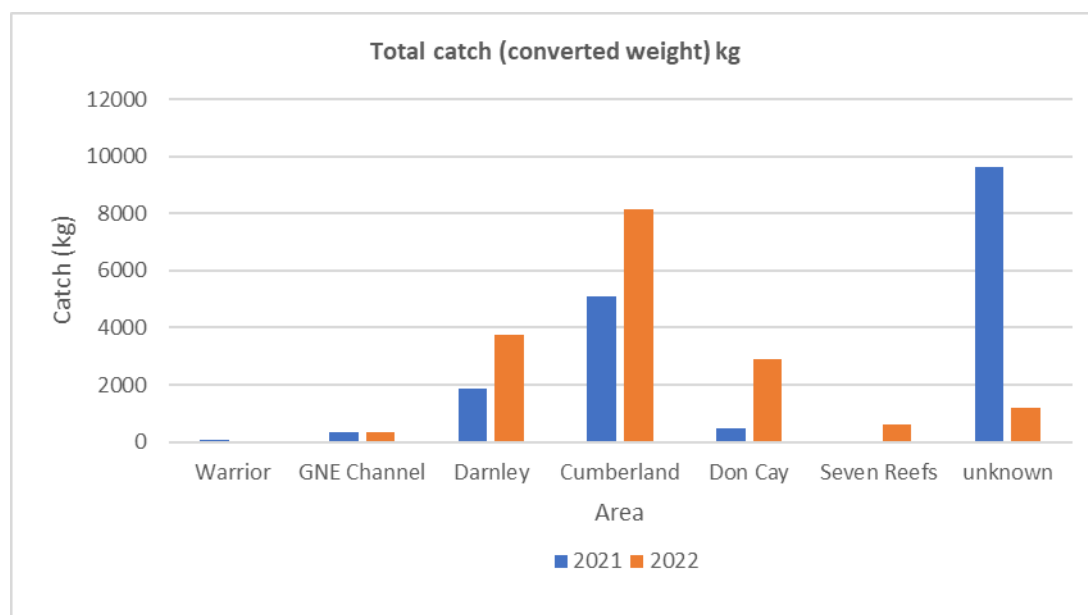


Figure 4. Total catch (converted weight - kg) for logbook zones between years.

Area fished across days

In 2021, most of the fishing effort was in the areas of Darnley and Cumberland, with similar effort across days (Figure 5).

For 2022, the majority of effort occurred at Cumberland, increasing across days. Effort was also seen at Darnley and Don Cay (Figure 5).

Travelling and processor location likely played a role in areas fished.



Figure 5. Total catch (converted weight - kg) for logbook zones for each fishing day for 2021 (top) and 2022 (bottom).

Sea cucumber stock survey 2019/2020

The 2019/2020 sea cucumber survey found that areas with highest average densities were in Barrier and Don Cay, which is consistent with earlier surveys, and is consistent with surveys in other regions (e.g. Great Barrier Reef has highest population density in outer shelf and barrier reef (Benzie and Uthicke, 2003; Knuckey and Koopman, 2016)).

The density in Cumberland in 2019/2020 was lower than in 2009 but still higher than historical surveys, and Seven Reefs had the highest density since surveys have been undertaken.

Darnley had the lowest density ever observed (though never a high-density zone in any year) and no Black teatfish were observed at the Great North East Channel zone (Figure 6; Murphy et al., 2021).

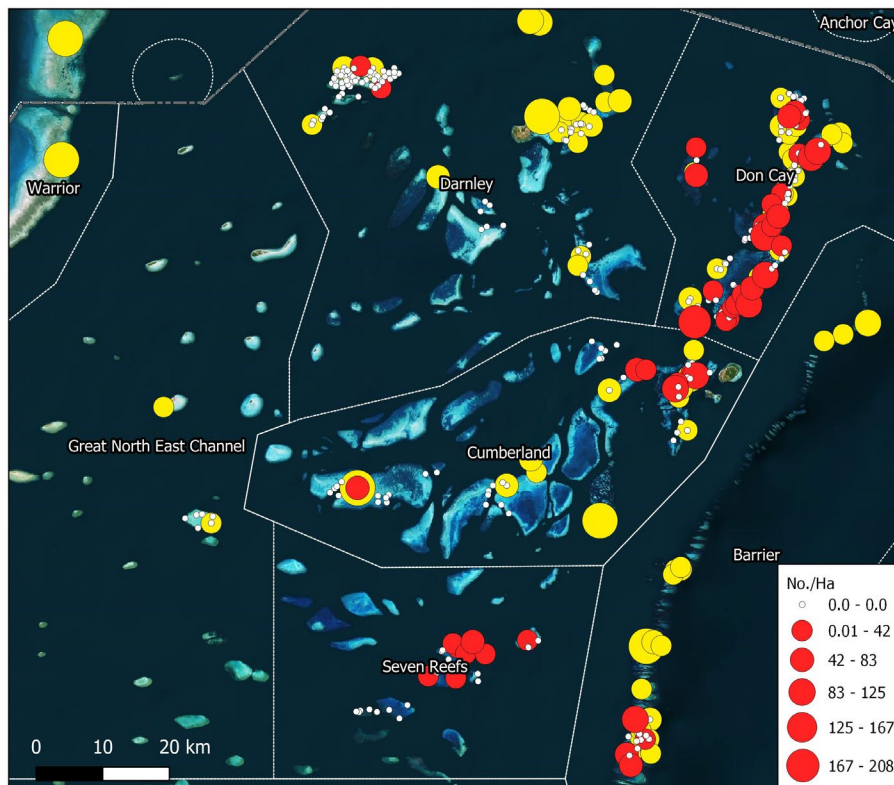


Figure 6. Density of Black teatfish (*H. whitmaei*) at individual survey sites during surveys in East Torres Strait from 1995 to 2009 (yellow) and 2019 (red).

Survey versus catch data

The 2022 catch is modest in comparison to the 2019/2020 survey biomass estimate, even if all the Unknown catch was taken from any of the fished zones (Figure 7).

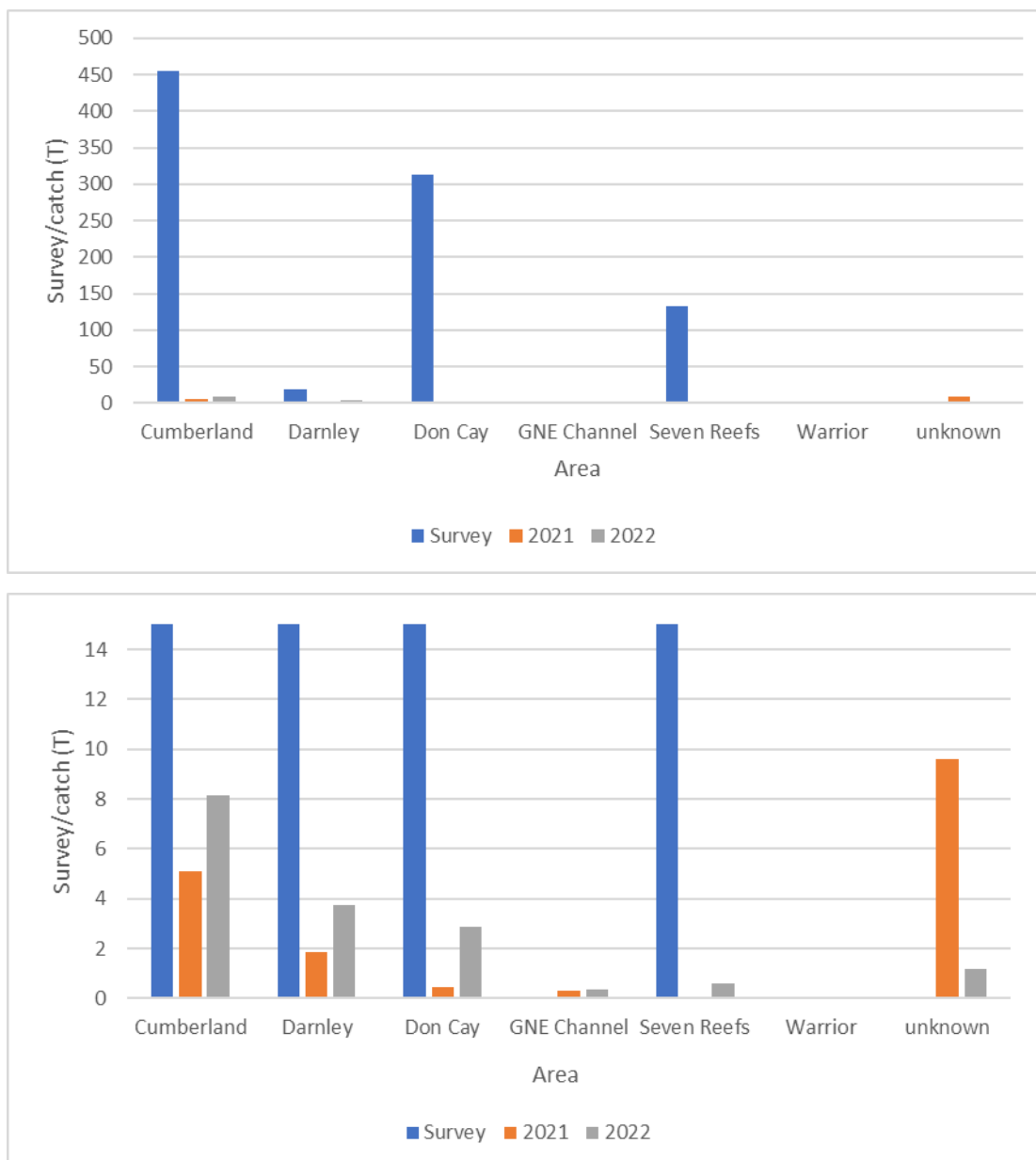


Figure 7. Survey estimates (gutted weight - t) and catch (gutted weight - t) for logbook zones (bottom graph is the same as the top with a reduced (Y) scale).

Total daily catch

In 2021, the area noted 'Unknown' in catch records showed consistent catch effort over days fished. Cumberland was also fished consistently and it is likely that Unknown was taken from this logbook zone (Figure 8).

For 2022, consistent catch effort was seen for Cumberland and Darnley, with Don Cay fished more intensely on the first day, with less (but similar) effort for the remaining days (Figure 8).

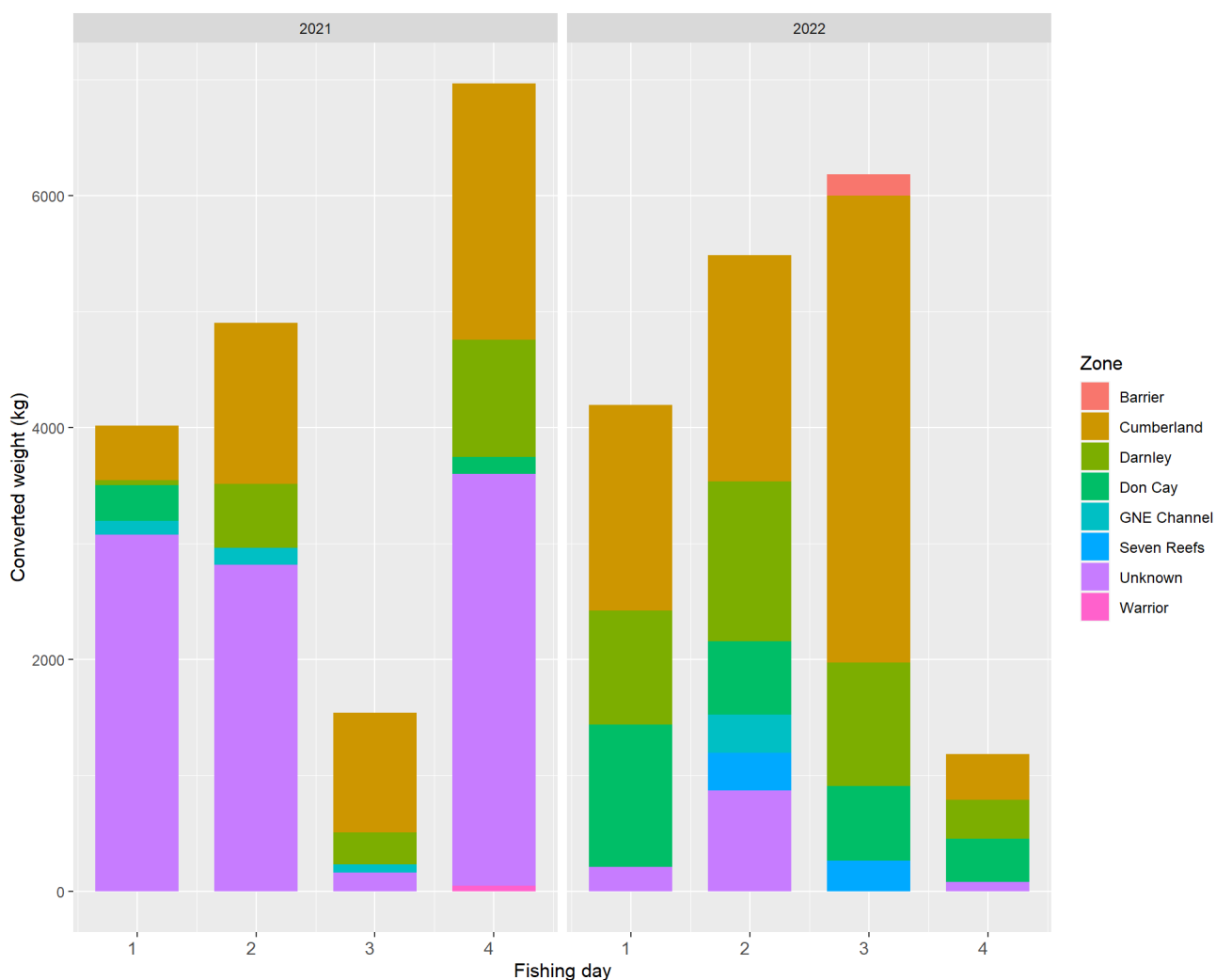


Figure 8. Total daily catch (converted weight – kg) across logbook zones for days fished, between years.

Processing state

In 2021, the majority of product landed at fish receivers was salted, with ~20% live landed for one zone (Unknown) only (Figure 9).

For 2022, a greater variety of product types were landed. Gutted catch was recorded solely for the area of the Great North East Channel, as well as Unknown, Darnley and Cumberland. There was also live product landed for Unknown, Cumberland and Don Cay, which wasn't the case in 2021 (Figure 9).

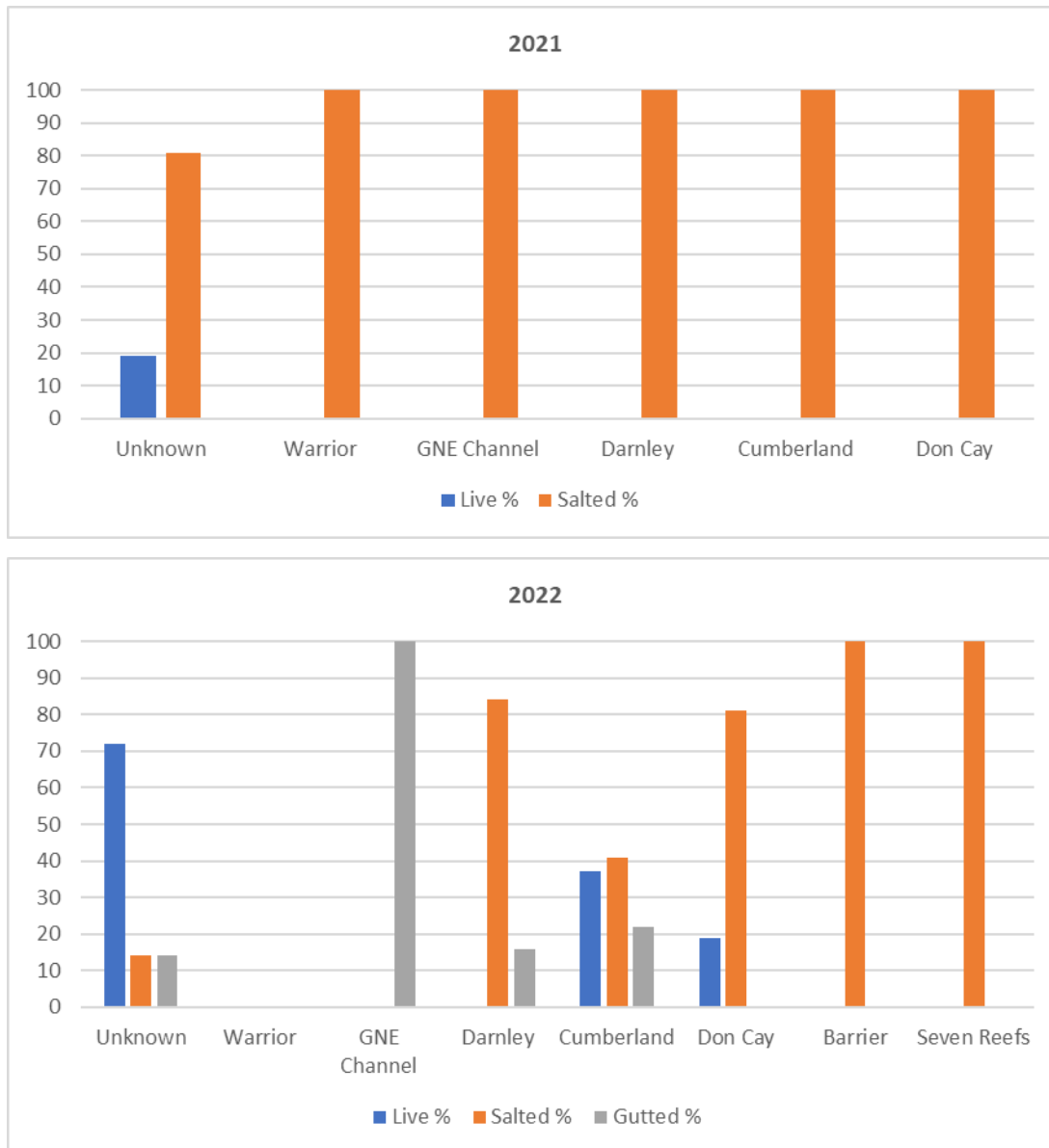


Figure 9. Percent product form of catch landed at fish receivers, also showing logbook zones for 2021 (top) and 2022 (bottom).

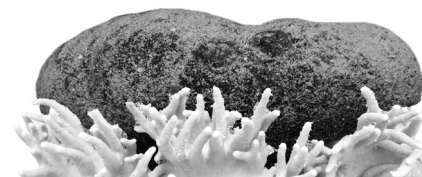
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Australian Government

Australian Fisheries Management Authority



Black teatfish trial opening Checklist for Fish receivers

Start date: 9 May 2022

Total Allowable Catch: 20 tonnes

BEFORE 9 May 2022

CHECK	Your new and existing licence conditions	<input type="checkbox"/>
RENEW	Your fish receiver licence if it has expired or is due to expire soon	<input type="checkbox"/>
UPDATE	Your contact details with AFMA: <ul style="list-style-type: none"> mobile phone number email premises where you will be receiving product, including if camping on an uninhabited island 	<input type="checkbox"/>
PLAN	Ahead and make sure you have : <ul style="list-style-type: none"> enough pages left on a Catch Disposal Record (CDR) book the ability to email, sms or fax an image/photo of your completed CDR to AFMA from your fish receiver premises mobile phone reception and internet connection 	<input type="checkbox"/>
NOMINATE	If required, an authorised agent to sign the fish receiver details section of the CDR. The same person cannot sign the fisher details section and the fish receiver section of the CDR.	<input type="checkbox"/>

DURING black teatfish season

REPORT DAILY	You must send an image/photo of your completed CDR electronically to AFMA on the same day you receive the catch. This means daily to: SMS: 0437 825 291 Email: blackteatfish@afma.gov.au Fax: (07) 4069 1277	<input type="checkbox"/>
CHECK	Your mobile phone, email and www.pzja.gov.au for AFMA messages on: 1. Daily catch update 2. When to stop receiving (the day after the TAC Date#)	<input type="checkbox"/>

AFTER TAC DATE DO NOT RECEIVE BLACK TEATFISH

#The TAC Date is the day that the Protected Zone Joint Authority (PZJA) or its delegate determines based on its reasonable belief that the TAC will be reached. You cannot receive fish the day after the TAC Date.

Black teatfish trial opening

Rules for Fish receivers



Fish receivers MUST

- ✓ Hold a current fish receiver licence.
- ✓ Ensure the receiver premises on the licence are up-to-date.
- ✓ Only receive catches from licenced fishers.
- ✓ Only receive catch at premises nominated on your fish receiver licence.
- ✓ Send an image/photo of your completed CDRs electronically to AFMA **on the same day** you receive the catch. This means **daily**.

Fish receivers MUST NOT

- ✗ Receive black teatfish **before** 9 May 2022.
- ✗ Receive black teatfish **after the TAC Date**.

How to report

Send an image/photo of your completed CDR electronically to AFMA on the **same day** you receive the catch. This means **daily** to:

SMS: 0437 825 291
Email: blackteatfish@afma.gov.au
Fax: (07) 4069 1277

For more information, contact AFMA

Thursday Island Office

Phone: (07) 4069 1990
Fax: (07) 4069 1277
Email: tistaff@afma.gov.au

AFMA Licensing

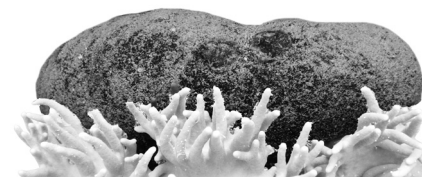
Phone: 1300 723 621
Phone: (02) 6225 5555
Email: licensing@afma.gov.au

Report illegal fishing to CRIMFISH on 1800 274 634



Australian Government

Australian Fisheries Management Authority



Black teatfish trial opening Checklist for Fishers

Start date: 9 May 2022

Total Allowable Catch: 20 tonnes

BEFORE 9 May 2022

CHECK	• Your new and existing licence conditions	<input type="checkbox"/>
	• That you have a Beche-de-mer (BD) entry on your licence	<input type="checkbox"/>
RENEW	Your TIB fishing licence if it has expired or is due to expire soon	<input type="checkbox"/>
UPDATE	Your contact details with AFMA:	<input type="checkbox"/>
	• mobile phone number	
	• email	
PLAN	Ahead with your licenced fish receiver – know who you are going to land to daily.	<input type="checkbox"/>
NOMINATE	If required, an Authorised Agent to sign the fisher details section of the Catch Disposal Record (CDR). The same person cannot sign the fisher details section and the fish receiver section of the CDR.	<input type="checkbox"/>

DURING black teatfish season

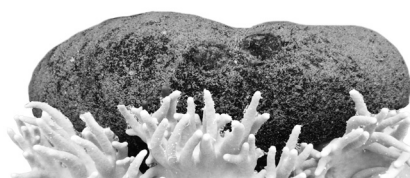
LAND CATCHES DAILY	Land your black teatfish catch to a licenced fish receiver on the same day the catch is taken. This means daily .	<input type="checkbox"/>
	Make sure you have mobile phone reception and internet connection to stay up to date with daily catch updates from AFMA via SMS and www.pzja.gov.au	
CHECK	Your mobile phone, email and www.pzja.gov.au for AFMA messages on: 1. Daily catch update 2. When to stop fishing (the day after the TAC Date [#])	<input type="checkbox"/>

**AFTER TAC DATE
DO NOT FISH FOR BLACK TEATFISH**

[#] The TAC Date is the day that the Protected Zone Joint Authority (PZJA) or its delegate determines based on its reasonable belief that the TAC will be reached. You cannot fish the day after the TAC Date.

Black teatfish trial opening

Rules for Fishers



Fishers MUST

- ✓ Hold a current TIB fishing licence with a Beche-de-mer (BD) entry.
- ✓ Make sure that all crew are traditional inhabitants*.
- ✓ Land black teatfish catches to a licenced fish receiver **on the same day** the catch is taken. This means **daily**.

*FAQs for Traditional Inhabitant identification verification can be found on www.pzja.gov.au

Fishers MUST NOT

- ✗ Fish for or stockpile black teatfish **before** 9 May 2022.
- ✗ Use hookah gear.
- ✗ Take black teatfish that are smaller than 25 centimeters (see ruler for length).
- ✗ Fish from a boat greater than 7m in length.
- ✗ Fish for black teatfish **after the TAC Date**.

For more information, contact AFMA

Thursday Island Office

Phone: (07) 4069 1990

Fax: (07) 4069 1277

Email: tistaff@afma.gov.au

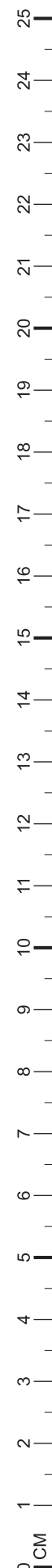
AFMA Licensing

Phone: 1300 723 621

Phone: (02) 6225 5555

Email: licensing@afma.gov.au

Report illegal fishing to CRIMFISH on 1800 274 634



Black teatfish minimum size = 25cm

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting 19 10 November 2022
TOTAL ALLOWABLE CATCHES (TACs) FOR THE 2023 FISHING SEASON	Agenda Item 4 FOR DISCUSSION & ADVICE

RECOMMENDATIONS

1. That the Hand Collectables Working Group (HCWG),
 - a. **NOTE** that on 19 November 2019 the Protected Zone Joint Authority (PZJA) agreed to adopt the Torres Strait Beche-de-mer (BDM) Fishery Harvest Strategy. Current total allowable catches (TACs) were agreed in line with the starting TACs recommended in the harvest strategy and have applied since 1 January 2020.
 - b. **NOTE** that all species assessed remain in the low tier of the harvest strategy as transition to the middle tier:
 - i. Requires at least two primary indicators; and
 - ii. Is not applicable during the initial years of HS implementation as insufficient detailed historical fishery data are available.
 - c. **NOTE** that at its meeting on 28-29 September 2022, the HCWG, having applied the harvest strategy to all new information available since its last meeting (this being catch data for the 2021 fishing season as outline in the species assessment sheets **Attachment 4a**):
 - i. **Recommended** no changes to current TACs for the 2023 fishing season.
 - ii. Upon the HCWG18's recommendation, **revisited** its advice to increase the curry fish vastus trigger limit from 15t to 30t and **recommended** that the trigger limit remain at 15t until such time there is new data to support an increase.
 - iii. **Noted** that no TACs or individual basket species trigger limits were exceeded during the 2021 fishing season, therefore low tier overcatch deduction provisions in the BDM harvest strategy do not apply.
 - d. Having **CONSIDERED** the HCWG advice, **DISCUSS and PROVIDE ADVICE** on recommended TACs for the 2023 fishing season commencing on 1 January 2023 (noting black teatfish will be considered under Agenda item 3).

KEY ISSUES

1. The BDM Fishery Harvest Strategy is based on a tiered framework which accounts for improvements in data and information. The HS applies to 18 species (inclusive of the 3 closed species). An overview of each harvest strategy tier is provided in the Background section below.
2. Current TAC's reflect the starting TACs recommended in the harvest strategy (Table 3 Starting HS TAC Recommendations).
3. Since the harvest strategy was agreed, a scientific survey has been undertaken and basic catch data has been collected for two full fishing seasons (2020 and 2021) through the fish receiver system. A summary of catch data as reported in the TBDO2 Catch Disposal Records is provided in **Attachment 4a**. Further a preliminary stock assessment was undertaken for black teatfish (please note black teatfish is to be considered by the WG under Agenda Item 3).

4. At its 18th meeting on 28-29 October 2021, the HCWG considered the latest information available, the BDM Harvest Strategy and the advice from the HCRAAG's first meeting, and recommended:
 - a. that the HCRAAG revisit its advice to increase the curryfish vastus basket trigger limit from 15t to 30t given the modest standing stock biomass from the survey, relative to the 60t TAC for the curryfish basket. The WG sought further detail from the RAG to justify its recommendation to increase the trigger limit.
 - b. that the HCRAAG review the deepwater redfish and hairy blackfish TACs in light of the biomass results from the survey.
 - c. that the HCRAAG assess golden sandfish in line with the BDM Harvest Strategy at a future meeting.

BACKGROUND

Application of the BDM Harvest Strategy by the HCRAAG and HCWG

5. The HCWG considered preliminary results of the scientific survey in August 2020 and were satisfied that the results did not raise immediate sustainability concerns that needed to be urgently addressed before the 2021 fishing season.
6. At its inaugural meeting on 6-8 October 2021, the HCRAAG applied the harvest strategy to the new information available for the fishery.
7. Noting that there are 18 species to assess, the HCRAAG reviewed 10 species selected on the basis of either being an identified target species under the harvest strategy and/or a species identified by CSIRO for further discussion as a result of the recent survey findings. The HCRAAG agreed to consider the remaining species (8) at their next meeting which occurred on 28-29 September 2022.
8. A summary of the HCRAAG01's advice on each species is outlined in the Species Assessment Sheet (SAS) (**Attachment 4a**). In summary the RAG recommended that:
 - a. all species assessed remain in the low tier of the harvest strategy. This is because a transition to the middle tier requires at least two primary indicators and is not applicable during the initial years of HS implementation as insufficient detailed historical fishery data are available. For the high tier to apply a time series of high-quality species-specific surveys together with a reasonable level of catch is required.
 - b. no change to TACs for any species assessed; and
 - c. change to the curryfish vastus trigger limit from 15t to 30 t in light of the additional information available for the species and the survey results indicating a more even relative abundance.
9. The HCRAAG01 also recommended the following short-medium term data, research, and analysis needs:
 - a. stock assessment modelling to assess the potential (and extent) for an increase to the white teatfish TAC.
 - b. consistent with the BDM harvest strategy and where there is sufficient information available, determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible.
 - c. ongoing data collection to better understand fishing practices for lollyfish on Poruma as there may be some evidence of home reef depletion.

Summary of each BDM harvest strategy tier

Low Tier

10. In the low tier, the minimum data needed for each species is the total catch taken each fishing season. The low tier has rules to guide:
 - a. what happens to a species if the TAC is over caught or a trigger limit for a species within a joint TAC is reached; and
 - b. what happens if there is no data reported for a species at all.
11. Depending on the information available, the low tier allows single species TACs to be maintained or reduced. For species with individual triggers, within a joint TAC, the low tier may allow changes to the joint TAC, or to individual species triggers (up or down).

Middle Tier

12. To transition to the middle tier, two or more primary indicators must be available. The harvest strategy states however that the middle tier is not applicable during the initial years of HS implementation as insufficient detailed historical fishery data are available.
13. For the purposes of the middle tier the primary indicators are:
 - a. Catch per unit effort;
 - b. Spatial footprint;
 - c. Average size; and
 - d. Catch proportion.
14. The information from these primary indicators will guide how much TACs should be varied. If the primary indicators suggest an increase is possible, there are pre-agreed rules that set a maximum level that the TAC can increase by before high-quality survey data is required (refer to Table 3 in the harvest strategy for the Max middle tier TAC increase).

High Tier

15. The high tier may be applied to all species if species-specific, high quality survey data becomes available. Under this tier, TACs may be adjusted upwards (in cases where there is evidence of scope to increase TACs) or downwards (in cases where there are concerns about the status of a fished species).

Closed Species

16. A species may be closed to fishing if it has been overfished, the TAC has been significantly over caught, or if fishing has been occurring but there is no reported catch. The harvest strategy has rules to guide how to re-open a fishery if enough information is available.



Australian Government

Australian Fisheries Management Authority

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Torres Strait Bêche-de-mer (BDM) Fishery

Species Assessment Sheets - 2022

Hand Collectables Resource Assessment Group (HCRAG) Meeting No.2
27-28 September 2022
Thursday Island

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Purpose

This document is intended to be used in conjunction with the *Torres Strait Beche-de-mer Harvest Strategy 2019* (the Harvest Strategy), applicable species stock assessments and annual catch and effort summaries.

The individual species assessment sheets (SAS) are aimed at guiding the Hand Collectables Resource Assessment Group's (HCRAAG) assessment of commercial sea cucumber species in the BDM fishery in line with the Harvest Strategy, and to determine the recommended biological and/or total allowable catches for the fishing season commencing on 1 January each year.

The SAS provide a stepped application of the harvest strategy decision rules to recommend RBCs and/or TACs for each species, taking into account the latest scientific and fishing information available. The SAS also provides a summary of the basic information on stock status and assessment details for each species.

This resource is also intended to be used by the HCRAAG to identify information gaps and research needs for each species that can feed into the TSSAC research need identification and prioritisation process for Torres Strait Fisheries.

Individual target species

White teatfish

HCRAAG Species Assessment Sheet						
Common names	White teatfish – <i>Holothuria fuscogilva</i>					
Pre-HS TAC	15 tonnes					
Status open/closed	Open					
Current TAC	15 tonne	Based on harvest strategy starting TAC				
Basket trigger	N/A					
Minimum size limit	32cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	880	142.9	Yes		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	No	Review current hookah prohibition		
Comments on scientific survey findings	CSIRO analysis: Deepwater survey undertaken for the first time in 2019/20. Confident that white teatfish population for East Torres Strait has been quantified. Survey trend for shallow reef population fairly constant over time. Review TAC – potential to increase, however some population modelling and/or fishery dependent data required. .					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAAG 1 meeting)	Beach price is \$30/kg (salted), \$40 - \$50/kg (gutted and salted)					
Any other changes in the fishery?	None identified					
Any other sources of mortality apart from fishing?	None identified					
Other information	Listed on Appendix II of CITES. Listed as vulnerable on the IUCN Red list due to a decreasing population trend globally.					
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	1.77	15	11.8 %	TAC: No	N/A
					Basket: N/A	
2021	1.96	15	13.1 %	N/A	N/A	

	2022	1.86	15	12.4%	N/A	N/A
Decision rules	No concerns from RAG and additional industry members regarding the total reported catch.					
Species specific data gaps and needs						
General need to improve area and effort reporting in catch disposal records.						
Species Specific Research and Priorities						
Consistent with the BDM harvest strategy and where there is sufficient information available, the RAG recommended a tactical research project to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible. Modelling analysis to inform a sustainable TAC increase for white teatfish.						
HCRAg 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)	
	2023					
Insert HCRAg 2 recommendations						

Prickly redfish

HCRAG Species Assessment Sheet						
Common names	Prickly redfish – <i>Thelenota ananas</i>					
Pre-HS TAC	15 tonnes (changed from 20 tonnes to 15 tonnes in 2017)					
Status open/closed	Open					
Current TAC	15 tonnes	Based on harvest strategy starting TAC				
Basket trigger	N/A					
Minimum size limit	35cm					
New information						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	461	253.3	Yes		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO analysis: Slight decline (in slope – density over time), suggesting some concern given reports of sustained high catches. Close monitoring recommended. Stock assessment needed.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Beach price is \$61-\$85/kg (clarify product type)					
Any other changes in the fishery?	Industry use a voluntary rotational harvesting approach.					
Any other sources of mortality apart from fishing?	None identified.					
Other information	On the list for possible CITES listing consideration in the future and listed as endangered on the IUCN red list.					
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	15.65	15	104.36 %	TAC: Yes	4.36%
					Basket: N/A	
	2021	14.85	15	99 %	N/A	N/A
2022	8.72	15	58.11%	TBA	TBA	
Decision rules	No concerns from RAG and additional industry members regarding the total reported catch.					

	Reported overcatch does not trigger any of the overcatch decision rules (refer to section 2.11.1.1 of the harvest strategy).				
	RAG advised that a TAC reduction may need to be considered if the species continues to be overcaught in subsequent fishing seasons.				
Species specific data gaps and needs					
General need to improve area and effort reporting in catch disposal records.					
Species Specific Research and Priorities					
Consistent with the BDM harvest strategy and where there is sufficient information available, the RAG recommended a tactical research project to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible					
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)
	2023				
Insert HCRA 2 recommendations					

Deepwater redfish

HCRAG Species Assessment Sheet						
Common names	Deepwater redfish – <i>Actinopyga echinites</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	5 tonnes	Based on harvest strategy starting TAC				
Basket trigger	N/A (previously 5t basket trigger limit)					
Minimum size limit	20cm					
New information						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	66	55	No evidence to support that the species is below the default LRP		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	No	HCWG to discuss		
Comments on scientific survey findings	CSIRO analysis: Catches low <u>relative to biomass</u> . <u>Increasing overall trend in density</u> . No concern for TAC.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Not targeted much due to low beach price of 3/kg (wet), \$7/kg (boiled) and \$80-\$100/kg (dried)					
Any other changes in the fishery?	None identified					
Any other sources of mortality apart from fishing?	None identified					
Other information	Assessed as Uncertain by ABARES in the 2020 Fishery Status Reports – given its low density it is unclear if catches of this species would impede effective recruitment and recovery of the species. The species is listed as vulnerable on the IUCN red list.					
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	0	5	0 %	TAC: No	N/A
					Basket: N/A	
	2021	0.031	5	0.61 %	N/A	N/A
	2022	0	5	0	TBA	TBA

Decision rules	No concerns from RAG and additional industry members regarding the total reported catch.				
Species specific data gaps and needs					
General need to improve area and effort reporting in catch disposal records.					
Species Specific Research and Priorities					
Consistent with the BDM harvest strategy and where there is sufficient information available, the RAG recommended a tactical research project to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible					
HCRAg 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)
	2023				
Insert HCRAg 2 recommendations					

Hairy blackfish

HCRAG Species Assessment Sheet						
Common names	Hairy blackfish – <i>Actinopyga miliaris</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	5 tonnes	Based on harvest strategy starting TAC				
Basket trigger	N/A (previously 5t basket trigger limit)					
Minimum size limit	22cm					
New information since the TAC was last considered (in this it was the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Landed (wet gutted) weight (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	15	-	<i>Insufficient information to assess the status of the stock in relation to the LRP</i>		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Limited	No	Yes	<i>HCWG to discuss</i>		
Comments on scientific survey findings	CSIRO analysis: Status still remains relatively unknown. Possible decline or natural variability. Stock assessment needed. Targeted survey sampling may need to be factored into future fishery surveys.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Has a low beach price of \$3 – \$7.50/kg but dry product can fetch up to \$80-100/kg. \$15/kg (frozen whole? Seek clarification from industry)					
Any other changes in the fishery?	None identified					
Any other sources of mortality apart from fishing?	None identified					
Other information	Assessed as Uncertain by ABARES in the 2020 Fishery Status Reports – given its low density it is unclear if catches of this species would impede effective recruitment and recovery of the species. The species is listed as vulnerable on the IUCN red list.					
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	1.4	5	28 %	TAC: No	N/A
					Basket: N/A	
	2021	0.5	5	10 %	N/A	N/A
	2022	0.58	5	11.6%	TBA	TBA

Decision rules	No concerns from RAG and additional industry members regarding the total catch.				
Species specific data gaps and needs					
General need to improve area and effort reporting in catch disposal records. Potential for cryptic behaviour to impact on surveys.					
Species Specific Research and Priorities					
Consistent with the BDM harvest strategy and where there is sufficient information available, the RAG recommended a tactical research project to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible					
HCRAg 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)
	2023				
Insert HCRAg 2 recommendations					

Greenfish (not assessed by HCRAAG)

HCRAAG Species Assessment Sheet						
Common names	Greenfish – <i>Stichopus chloronotus</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	40 tonnes	Based on harvest strategy starting TAC				
Basket trigger	N/A					
Minimum size limit	nil					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	739	N/A	RAG to discuss		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	No	RAG to discuss		
Comments on scientific survey findings	CSIRO analysis: Catches low. Generally increasing density trend. No concern for TAC.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Any other changes in the fishery?	*RAG members to provide advice. For example, fishing behaviour/market demand? *					
Any other sources of mortality apart from fishing?	*RAG members to provide advice*					
Other information	*RAG members to provide advice*					
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	0.015	40	0.04 %	TAC: No	N/A
					Basket: N/A	
	2021	0	40	0	N/A	N/A
2022	0	40	0	TBA	TBA	
Decision rules	Is the total catch reliable? *RAG members to provide advice*					
	Not overcaught so overcatch decision rules not triggered (refer to section 2.11.1.1 of the harvest strategy).					

	For species with an individual TAC, should the TAC be reduced or maintained (refer to section 2.11.1 of the harvest strategy)? <i>*RAG members to provide advice*</i>									
Species specific data gaps and needs										
<i>*to be completed at the meeting*</i>										
Species Specific Research and Priorities										
<i>*to be completed at the meeting*</i>										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)					
	2023									
<i>*General RAG comments*</i>										

Basket species – curryfish

Curryfish common

HCRAG Species Assessment Sheet						
Common names	Curryfish common – <i>Stichopus herrmanni</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	60 tonnes (Curryfish basket TAC)		Based on harvest strategy starting TAC			
Basket trigger	N/A					
Minimum size limit	31cm					
New information						
Latest scientific survey data	Year	Standing stock biomass (90th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	667	632.4	Yes		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO paper: Possible decline (noting fairly negative trend fitted to survey data). Stock assessment needed. Close monitoring recommended – part of 'Curryfish mixed' (catch split 50:50 between Curryfish species when not identified). Appears that the <i>herrmanni:vastus</i> split is changing over time, with higher proportion of vastus. Could be an identification problem with <i>S. Vastus</i> during the 1995/96 survey.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Beach price \$15-22/kg (boiled and salted), \$150/kg (dried)					
Any other changes in the fishery?	While common curryfish used to make up most of the catch in the past, industry reported noticing a generally even split between the two curryfish species with some regional differences.					
Any other sources of mortality apart from fishing?	None identified. Previously recorded high discard levels have reduced due to more appropriate species processing methods.					
Other information	Listed as vulnerable on the IUCN red list					
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	0.6 10.5 (mixed)	60	1 % 17.5 % (mixed)	TAC: No	N/A
					Basket: N/A	
2021	4.05	60	6.75% 11.15% (mixed)	N/A	N/A	

		6.69 (mixed)				
	2022	0.4 1.53 (mixed)	60	0.7% 2.55% (mixed)	TBA	TBA
Decision rules	No concerns from RAG and additional industry members regarding the total catch. The RAG agreed to consider the need for a trigger limit for the species.					
Species specific data gaps and needs						
RAG agreed it is a high priority to improve species differentiation in catch disposal records as well as general improvements to area and effort reporting.						
Species Specific Research and Priorities						
The RAG further noted the ongoing research need to develop conversion ratios for curryfish species. Consistent with the BDM harvest strategy and where there is sufficient information available, the RAG recommended a tactical research project to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible						
HCRAg 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)	
	2023					
Insert HCRAg 2 recommendations						

Curryfish vastus

HCRAAG Species Assessment Sheet						
Common names	Curryfish vastus – <i>Stichopus vastus</i>					
Pre-HS TAC	Part of the 80t basket species TAC					
Status open/closed	Open					
Current TAC	60 tonnes (Curryfish basket TAC)		Based on harvest strategy starting TAC			
Basket trigger	15 tonnes species trigger limit					
Minimum size limit	15cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	168	168	Yes		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO analysis: Higher ratio of curryfish vastus observed in 2019 survey. Close monitoring recommended – part of 'Curryfish mixed' (suggest splitting catch 50:50 between curryfish species when not identified).					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAAG 1 meeting)	Beach price \$15-22/kg (boiled and salted), \$150/kg (dried)					
Any other changes in the fishery?	Industry reported noticing a generally even split between the two curryfish species with some regional differences and increasingly more curryfish vastus.					
Any other sources of mortality apart from fishing?	None identified					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	0.15 10.5 (mixed)	60 (15t trigger limit)	0.25 % 17.5 % (mixed)	TAC: No	N/A
					Basket: No	
	2021	1.86 6.69 (mixed)	60 (15t trigger limit)	3.1% 11.15% (mixed)	N/A	N/A
2022	0.4 1.53 (mixed)	60 (15t trigger limit)	0.7% 2.55%	TBA	TBA	

				(mixed)		
Decision rules	No concerns from RAG and additional industry members regarding the total catch. The RAG recommended increasing the trigger limit to 30t.					
Species specific data gaps and needs						
RAG agreed it is a high priority to improve species differentiation in catch disposal records as well as general improvements to area and effort reporting.						
Species Specific Research and Priorities						
The RAG further noted the ongoing research need to develop conversion ratios for curryfish species. Consistent with the BDM harvest strategy and where there is sufficient information available, the RAG recommended a tactical research project to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible						
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)	
	2023					
Insert HCRA 2 recommendations						

Basket species

Elephant's trunkfish

HCRAG Species Assessment Sheet						
Common names	Elephant trunkfish – <i>Holothuria fuscopunctata</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of 50t basket species TAC		Based on harvest strategy starting TAC			
Basket trigger	15 tonnes					
Minimum size limit	24cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	451t	-	Not assessed		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO analysis: Catch rates low. Possible decline or natural variability. Stock assessment needed.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Beach price \$2/kg (wet-gutted)					
Any other changes in the fishery?	None identified					
Any other sources of mortality apart from fishing?	None identified.					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	No catch reported	50	-	TAC: No	N/A
					Basket: No	
	2021	No catch reported	50	-	N/A	N/A
2022	No catch reported	50	-	TBA	TBA	

Decision rules	No concerns from RAG and additional industry members regarding the total catch.									
Species specific data gaps and needs										
General improvements to area and effort reporting.										
Species Specific Research and Priorities										
None identified										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)					
	2023									
<i>Insert HCRA 2 recommendations</i>										

HCRAG Species Assessment Sheet						
Common names	Lollyfish – <i>Holothuria atra</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of 50t basket species TAC		Based on harvest strategy starting TAC			
Basket trigger	40 tonnes					
Minimum size limit	15cm					
New information since the TAC was last considered (in this it was at the implementation of the Harves Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	5,668	-	Yes		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO analysis: Noted catch increase. Possible decline or natural variability. Stock assessment needed.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Beach price \$2-\$5/kg (wet-gutted)					
Any other changes in the fishery?	Further information required from Poruma fishers on reduced catches to ascertain whether this is due to home reef depletion given its susceptibility to being caught.					
Any other sources of mortality apart from fishing?	None identified					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	1.3	50 (40t basket trigger limit)	2.6 %	TAC: No	N/A
					Basket: No	
	2021	0.42	50 (40t basket trigger limit)	0.84%	N/A	N/A
2022	0	50 (40t basket trigger limit)	TBA	TBA	TBA	
Decision rules	No concerns from RAG and additional industry members regarding the total reported catch.					

Species specific data gaps and needs					
General improvements to area and effort reporting.					
Species Specific Research and Priorities					
None identified					
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)
	2023				
<i>Insert HCRA 2 recommendations</i>					

Burrowing blackfish (not assessed by HCRAAG)

HCRAAG Species Assessment Sheet						
Common names	Burrowing blackfish – <i>Actinopyga spinea</i>					
Pre-HS TAC	Part of the 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of 50 tonne basket species TAC			Based on harvest strategy starting TAC		
Basket trigger	5 tonnes					
Minimum size limit	22 cm					
New information since the TAC was last considered (in this it was the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	N/A	N/A	RAG to discuss		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	N/A	N/A	N/A	RAG to discuss		
Comments on scientific survey findings	CSIRO paper (attachment B of agenda item 5): N/A					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Any other changes in the fishery?	*RAG members to provide advice. For example, fishing behaviour/market demand? *					
Any other sources of mortality apart from fishing?	*RAG members to provide advice*					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	No catch reported	50 (5t trigger limit)	No catch reported	TAC: No	N/A
					Basket: No	
	2021	No catch reported	50 (5t trigger limit)	No catch reported	N/A	N/A
2022	0	50 (5t trigger limit)	TBA	TBA	TBA	
Decision rules	Is the total catch reliable? *RAG members to provide advice*					
	Not overcaught so overcatch decision rules not triggered (refer to section 2.11.1.1 of the harvest strategy).					

	For species with individual triggers within a basket with a joint TAC, should the joint TAC or individual triggers be changed (up or down) (refer to section 2.11.1.2 of the harvest strategy)? <i>*RAG members to provide advice*</i>									
Species specific data gaps and needs										
<i>*to be completed at the meeting*</i>										
Species Specific Research and Priorities										
<i>*to be completed at the meeting*</i>										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)					
	2023									
<i>Insert HCRA 2 recommendations</i>										

Deepwater blackfish

HCRAg Species Assessment Sheet						
Common names	Deepwater blackfish – <i>Actinopyga palauensis</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of 50t basket species TAC	Based on harvest strategy starting TAC				
Basket trigger	0.5t					
Minimum size limit	22cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Landed weight (wet gutted) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	104	-	Not assessed		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Limited	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO analysis: Status still remains relatively unknown. Stock assessment needed. Targeted survey sampling may need to be factored into future fishery surveys.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAg 1 meeting)	Beach price \$15/kg (wet-gutted)					
Any other changes in the fishery?	None advised					
Any other sources of mortality apart from fishing?	None identified					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	0.17	50 (0.5t trigger limit)	0.34 %	TAC: No	N/A
					Basket: No	
2021	0.18	50 (0.5t trigger limit)	0.36%	N/A	N/A	

	2022	0.42	50 (0.5t trigger limit)	TBA	TBA	TBA
Decision rules	No concerns from RAG and additional industry members regarding the total reported catch.					
Species specific data gaps and needs						
General improvements to area and effort reporting.						
Species Specific Research and Priorities						
May benefit from a dedicated survey in the future.						
HCRAg 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)	
	2023					
Insert HCRAg 2 recommendations						

Golden sandfish (not assessed by HCRAAG)

HCRAAG Species Assessment Sheet						
Common names	Golden sandfish – <i>Holothuria lessoni</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of 50t basket species TAC		Based on harvest strategy starting TAC			
Basket trigger	0.5 tonnes					
Minimum size limit	22cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	Not included in 2019-20 survey	-	-	RAG to discuss		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	No	N/A	N/A	RAG to discuss		
Comments on scientific survey findings	N/A					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Any other changes in the fishery?	*RAG members to provide advice. For example, fishing behaviour/market demand? *					
Any other sources of mortality apart from fishing?	*RAG members to provide advice*					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	No catch reported	50 (0.5t trigger limit)	-	TAC: No	N/A
					Basket: No	
	2021	No catch reported	50 (0.5t trigger limit)	-	N/A	N/A
	2022	No catch reported	50 (0.5t trigger limit)	-	TBA	TBA
Decision rules	Is the total catch reliable? *RAG members to provide advice*					
	Not overcaught so overcatch decision rules not triggered (refer to section 2.11.1.1 of the harvest strategy).					

	For species with individual triggers within a basket with a joint TAC, should the joint TAC or individual triggers be changed (up or down) (refer to section 2.11.1.2 of the harvest strategy)? <i>*RAG members to provide advice*</i>									
Species specific data gaps and needs										
<i>*to be completed at the meeting*</i>										
Species Specific Research and Priorities										
<i>*to be completed at the meeting*</i>										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC (t)					
	2023									
<i>*General RAG comments*</i>										

Brown sandfish (not assessed by HCRAAG)

HCRAAG Species Assessment Sheet						
Common names	Brown sandfish – <i>Bohadschia vitiensis</i>					
Pre-HS TAC	Part of the 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of the 50t basket species TAC		Based on harvest strategy starting TAC			
Basket trigger	3 tonnes					
Minimum size limit	25cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	Not included in 2019-20 survey	-	-	RAG to discuss		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	-	-	-	RAG to discuss		
Comments on scientific survey findings	N/A					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Any other changes in the fishery?	*RAG members to provide advice. For example, fishing behaviour/market demand? *					
Any other sources of mortality apart from fishing?	*RAG members to provide advice*					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	No catch reported	50 (3t trigger limit)	N/A	TAC: No	N/A
					Basket: No	
	2021	No catch reported	50 (3t trigger limit)	N/A	N/A	N/A
	2022	No catch reported	50 (3t trigger limit)	TBA	TBA	TBA
Decision rules	Is the total catch reliable? *RAG members to provide advice*					
	Not overcaught so overcatch decision rules not triggered (refer to section 2.11.1.1 of the harvest strategy).					

	For species with individual triggers within a basket with a joint TAC, should the joint TAC or individual triggers be changed (up or down) (refer to section 2.11.1.2 of the harvest strategy)? <i>*RAG members to provide advice*</i>									
Species specific data gaps and needs										
<i>*to be completed at the meeting*</i>										
Species Specific Research and Priorities										
<i>*to be completed at the meeting*</i>										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)					
	2023									
<i>*General RAG comments*</i>										

Leopardfish (not assessed by HCRAAG)

HCRAAG Species Assessment Sheet						
Common names	Leopardfish – <i>Bohadschia argus</i>					
Pre-HS TAC	Part of the 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of the 50t basket species TAC			Based on harvest strategy starting TAC		
Basket trigger	40 tonnes					
Minimum size limit	30cm					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	508	-	RAG to discuss		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	No	RAG to discuss		
Comments on scientific survey findings	Catches low. Generally increasing density trend. No concern for TAC.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data	\$15/kg (gutted-salted), \$120/kg (dried)					
Any other changes in the fishery?	*RAG members to provide advice. For example, fishing behaviour/market demand? *					
Any other sources of mortality apart from fishing?	*RAG members to provide advice*					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	0.2	50 (40t basket trigger limit)	0.4%	TAC: No	N/A
					Basket: No	
	2021	0.2	50 (40t basket trigger limit)	0.4%	N/A	N/A
2022	0	50 (40t basket trigger limit)	TBA	TBA	TBA	

Decision rules	Is the total catch reliable? <i>*RAG members to provide advice*</i>									
	Reported overcatch does not trigger any of the overcatch decision rules (refer to section 2.11.1.1 of the harvest strategy).									
	For species with individual triggers within a basket with a joint TAC, should the joint TAC or individual triggers be changed (up or down) (refer to section 2.11.1.2 of the harvest strategy)? <i>*RAG members to provide advice*</i>									
Species specific data gaps and needs										
<i>*to be completed at the meeting*</i>										
Species Specific Research and Priorities										
<i>*to be completed at the meeting*</i>										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)					
	2023									
<i>*General RAG comments*</i>										

HCRAG Species Assessment Sheet						
Common names	Pinkfish – <i>Holothuria edulis</i>					
Pre-HS TAC	Part of 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of 50t basket species TAC		Based on harvest strategy starting TAC			
Basket trigger	N/A					
Minimum size limit	N/A					
New information						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?		
	2019/20	85	-	Not assessed		
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response		
	Yes	No	Yes	HCWG to discuss		
Comments on scientific survey findings	CSIRO paper: Possible decline or natural variability. Stock assessment needed.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Price data (as advised by industry at HCRAG 1 meeting)	Currently no market demand for the species					
Any other changes in the fishery?	None identified – this species is hardly fished					
Any other sources of mortality apart from fishing?	None identified					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	No catch reported	50	N/A	TAC: No	N/A
					Basket: N/A	
	2021	No catch reported	50	TBA	TBA	TBA
	2022	No catch reported	50	TBA	TBA	TBA
Decision rules	No concerns from RAG and additional industry members regarding the catch data.					

Species specific data gaps and needs					
N/A					
Species Specific Research and Priorities					
None identified					
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)
	2023				
<i>Insert HCRA 2 recommendations</i>					

Amberfish (not assessed by HCRAAG)

HCRAAG Species Assessment Sheet						
Common names	Amberfish – <i>Thelenota anax</i>					
Pre-HS TAC	Part of the 80t basket species TAC					
Status open/closed	Open					
Current TAC	Part of the 50t basket species TAC			Based on harvest strategy starting TAC		
Basket trigger	N/A					
Minimum size limit	N/A					
New information since the TAC was last considered (in this it was at the implementation of the Harvest Strategy)						
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)		Is standing stock biomass above the default limit reference point?	
	2019/20	478	-		RAG to discuss	
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance		Need for management response	
	Yes	No	No		RAG to discuss	
Comments on scientific survey findings	Catches low. No concern for TAC.					
Catch data	Available for 2020, 2021 and 2022 (as at 22 September 2022)					
Any other changes in the fishery?	*RAG members to provide advice. For example, fishing behaviour/market demand? *					
Any other sources of mortality apart from fishing?	*RAG members to provide advice*					
Other information						
Low Tier						
Total catch data	Fishing season	Catch (t)	TAC (t)	% TAC caught	TAC or basket trigger exceeded?	% of TAC overcatch
	2020	No catch reported	50	-	TAC: No	N/A
					Basket: N/A	
	2021	No catch reported	50	TBA	TBA	TBA
2022	No catch reported	50	TBA	TBA	TBA	
Decision rules	Is the total catch reliable? *RAG members to provide advice*					

	Not overcaught so overcatch decision rules not triggered (refer to section 2.11.1.1 of the harvest strategy).									
	For species with individual triggers within a basket with a joint TAC, should the joint TAC or individual triggers be changed (up or down) (refer to section 2.11.1.2 of the harvest strategy). <i>*RAG members to provide advice*</i>									
Species specific data gaps and needs										
<i>*to be completed at the meeting*</i>										
Species Specific Research and Priorities										
<i>*to be completed at the meeting*</i>										
HCRA 2 recommendations	Fishing season	RBC (t)	Overcatch to be discounted (t)	Other source(s) of mortality (t)	TAC/trigger limit (t)					
	2023									
<i>*General RAG comments*</i>										

Closed species

Surf redfish (closed)

HCRA Species Assessment Sheet				
Common names	Surf redfish – <i>Actinopyga mauritiana</i>			
Pre-HS TAC	0 tonnes			
Status open/closed	Closed since 2003 due to sustainability concerns			
Minimum size limit	22cm			
New information				
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?
	2019/20	20	6.7	RAG to discuss
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response
	Yes	No	No	RAG to discuss
Comments on scientific survey findings	Species remains closed – Harvest Strategy closed species rule applies.			
Catch data	This species is closed to fishing however ~200kg of catch was reported by a fisher in 2020. This matter was followed up by AFMA Compliance.			
Other information				
Re-opening Decision Rule (2.11.4 section of the harvest strategy) – this rule can only be applied if, using all available and reliable information, it can be established that the stock is above a limit reference point level.				
Species specific data gaps and needs				
to be completed at the meeting				
Species Specific Research and Priorities				
to be completed at the meeting				
General RAG comments				

Sandfish (closed)

HCRAG Species Assessment Sheet				
Common names	Sandfish – <i>Holothuria scabra</i>			
Pre-HS TAC	0 tonnes			
Status open/closed	Closed since 1998 due to sustainability concerns			
Minimum size limit	18cm			
New information				
Latest scientific survey data	Year	Standing stock biomass (90 th percentile) (t)	Standing stock biomass above min species size limit (t)	Is standing stock biomass above the default limit reference point?
	Planned for but not included in 2019-20 survey	unknown	unknown	RAG to discuss
	Survey adequate for species	Any unexpected results	Any concerns with biomass trend or absolute abundance	Need for management response
	-	-	-	RAG to discuss
Comments on scientific survey findings	No survey undertaken. Harvest Strategy closed species rule applies.			
Catch data	This species is closed to fishing			
Other information	Assessed as 'Overfished' but 'Not subject to overfishing' by ABARES in the Annual Fishery Status Reports as no recovery in overall density was observed between 1998 and 2010, and there is no other robust information to inform stock status.			
Re-opening Decision Rule (2.11.4 section of the harvest strategy) – this rule can only be applied if, using all available and reliable information, it can be established that the stock is above a limit reference point level.				
Species specific data gaps and needs				
to be completed at the meeting				
Species Specific Research and Priorities				
to be completed at the meeting				
General RAG comments				

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
FISHERY RESEARCH PRIORITIES	Agenda Item 5 For DISCUSSION & ADVICE

RECOMMENDATIONS

1. That the Working Group (the RAG):
 - a. **NOTE** that details of the outcomes of the 2022-23 funding round, and changes to the Torres Strait Scientific Advisory Committee (TSSAC) research cycle timeline were circulated to RAG members out of session on 2 September 2022 (refer to Agenda Item 1.5 – Out of session correspondence);
 - b. **NOTE** that AFMA sought advice from RAG and Hand Collectables Working Group (HCWG) members out of session on a proposal for the 2023-24 limited research budget funding cycle with approximately \$110,000 available to fund new research in the 2023-24 financial year.
 - i. The TSSAC has suggested releasing a limited call for research for a project relating to *Management Strategy Evaluation of Spanish mackerel for the Torres Strait Finfish Fishery*.
 - c. **NOTE** the current status of identified research priorities and needs for the Torres Strait Beche-de-mer Fishery (BDM Fishery) as previously advised by Hand Collectables RAG 1 and the Hand HCWG (**Table 1**).
 - d. **NOTE** the presentation by Scientific Member Steven Purcell on his work on socioeconomic studies and how they have informed fisheries management.
 - e. **NOTE** the background paper prepared by the TSRA (**Attachment 5d**) and the presentation by the TSRA Member Nicholas Richards on the dimensions of sustainability.
2. Having regard to **Table 1**, **DISCUSS** and **PROVIDE ADVICE** on research priorities for a rolling five-year research plan for Hand Collectable Fisheries (**Attachment 5a**) (to be updated following advice from HCRA 2 and HCWG 19) including advice on the feasibility, timing and indicative costing of essential, unfunded research project(s) to inform the TSSAC annual call for research funding proposals in 2024-25.
3. **NOTE** updates on other broader research priorities applicable across all Torres Strait Fisheries.

KEY ISSUES

Research priorities for Hand Collectable Fisheries

4. The HCRA met on 6-7 October 2021, and HCWG on 28-29 October 2021 to consider research priorities for Hand Collectable Fisheries and specifically, the 2022-23 TSSAC research funding round. The advice from both HCRA and HCWG was that:
 - a. the highest priority research needs for the BDM Fishery is to **determine the current status of sea cucumber stocks in relation to the BDM Harvest Strategy reference points**. This project is only possible where sufficient information is available.

- b. Additional **analysis on white teatfish** remains a high priority to develop a rationale on the status of the stock in relation to harvest strategy reference points and modelling analysis on a sustainable TAC increase.
 - i. This project was supported by the TSSAC and funded for the 2022-23 financial year. The results are expected to be presented at a future HCRAg meeting in 2023.
 - c. Undertaking representative **sampling of black teatfish** to collect size and weight frequencies during black teatfish openings also remains a high priority.
 - i. This project was also supported by the TSSAC for the 2022-23 financial year. The results of the 2022 sampling will be presented under Agenda Item 3.
 - d. The **development of curryfish conversion ratios** with industry based sampling also remains a high priority.
 - i. This project was supported by the TSSAC for the 2022-23 financial year. The results are expected to be presented at a future HCRAg meeting in 2023.
 - e. Subject to confirmation of support from Iama and Tudu Island Prescribed Body Corporates (PBCs), Gur A Baradharaw Kod Sea and Land Council (GBK), Traditional Owners and fishers, **undertaking a stock survey of sandfish at Warrior Reef** also remains a high priority to better understand its stock status.
 - i. As per an action item arising from HCRAg 1, AFMA wrote to Iama TO's, PBC and Fishers on 20 September 2022 seeking confirmation of support with an invitation to attend HCRAg 2.
- 5. The HCRAg had its second meeting on 27-28 September 2022 and re-affirmed that the highest research priorities for the Torres Strait Beche-de-mer Fishery for 2024-25 continue to be:
 - a. Undertaking representative **sampling of black teatfish** to collect size and weight frequencies during black teatfish openings
 - b. **undertaking a stock survey of sandfish at Warrior Reef**
- 6. HCRAg and HCWG also discussed socioeconomic knowledge gaps in the fishery, noting that data (including but not limited to those obtained from socioeconomic surveys on fishing effort, fishing activities, motivations of fishers, fishing costs, supply chain and value chain issues, trade issues, cultural issues, changes in fishing strategies, and fishing gear use can be used to strongly inform the management of the fishery. These discussions have since been reflected in **Table 1** and the RAG is invited to provide further advice to aid in developing an appropriate research scope for consideration for funding in the 2024-25 financial year.
- 7. Further detail on medium and lower research priorities are also outlined in **Table 1**.

Broader research priorities for Torres Strait Fisheries

- 8. The TSSAC also funds projects that are applicable across Torres Strait Fisheries. Two such projects that were funded in 2019-20 are the *Climate variability and change relevant to key fisheries resources in the Torres Strait – a scoping study* (the outcomes of which are to be presented under Agenda Item 5) and *Measuring non-commercial fishing (indigenous subsistence fishing and*

recreational fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods.

9. At their meeting on 6-7 April 2022, the TSSAC provided further support for extensions of both the climate change project and non-commercial catch project subject to potential co-funding opportunities from the Fisheries Research and Development Corporation (FRDC) and other avenues including the TSRA.
10. The climate change modelling project (an extension of the initial climate change scoping project) is hoped to be co-funded through a contribution from the TSRA (\$500,000) and the remainder of the funds are being considered by the FRDC. An outcome on FRDC funding is expected by soon.
11. Phase 2 of the non-commercial catch project (*Measuring non-commercial fishing catches (traditional subsistence fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods*) has also been supported for funding by the FRDC for funding in 2022-23, subject to conditions.
12. Although, as AFMA understands it, there is no non-commercial catch of sea cucumbers, it may still be relevant for the RAG to provide feedback to TSSAC on the outcomes and recommendations from this project. This is because the project relates to developing a catch data collection method for the region.

BACKGROUND

TSSAC Fisheries Strategic Research Plan 2018-2023 and rolling five-year fishery-specific research plans

13. TSSAC operates under a Strategic Research Plan (SRP) which guides priority setting for research in Torres Strait fisheries over a five-year period (**Attachment 5b**). The SRP specifies the research priorities and strategies summarised in **Table 2** that the PZJA intend to pursue in Torres Strait fisheries and provides background to the processes used to call for, and assess, research proposals. The research priorities can be broad, covering all topics within the SRP, some of which may be funded by AFMA, and some of which may require funding from other funding bodies.
14. There are 3 research themes within the SRP, under which the HCRAAG and HCWG could identify research priorities for Hand Collectable fisheries. There are several strategies under each theme and suggested ideas to help RAGs and Working Groups to think about the sorts of projects which may fit within these themes and strategies.
15. The TSSAC requires each fishery to develop a rolling five-year research plan, which fits into the themes identified in this SRP.
16. The TSSAC has an annual research cycle, which fits with the AFMA budgeting cycle (**Attachment 5c**).

Table colour key	Completed	Funded and underway	Scoped and/or costed	Not scoped/not costed
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Table 1. Overview and status update of research needs identified or discussed for Hand Collectable Fisheries at previous HCRAg and HCWG meetings and the rolling five-year research plan (*it does not include recommendations from survey or priorities that might be discussed during this HCRAg meeting*).

	Research activity	Detail	Status	Comments/questions	Latest RAG & WG advice
1	Status of BDM stocks in relation to harvest strategy reference points	Consistent with the BDM harvest strategy and where there is sufficient information available, a tactical research project is needed to determine the current status of sea cucumber stocks in relation to the harvest strategy reference points, noting that the first step is to define the reference points for the species for which it may be possible.	Not scoped/not costed		High priority
2	White teatfish modelling	Additional analysis on white teatfish to develop a rationale on the status of the stock in relation to harvest strategy reference points and modelling analysis on a sustainable TAC increase.	Funded and underway in 2022-23 FY		High priority
3	Black teatfish sampling 2022	Representative sampling to collect size and weight frequencies during the black teatfish openings.	Funded and underway in 2022-23 FY		High priority
4	Development of curryfish conversion ratios	Project to develop conversion ratios for curryfish with industry undertaking the sampling process.	Funded and underway in 2022-23 FY		High priority
5	Sandfish stock survey	Outstanding stock survey of Sandfish at Warrior Reef to better understand its status	Not scoped/not costed	Identified as a research need for the fishery by HCWG17 at its meeting 12 October 2020. Was part of the 2019-20 stock survey but did not proceed.	High priority subject to confirmation of support from Iama and Tudu Island PBC, GBK, Traditional Owners and fishers.

	Research activity	Detail	Status	Comments/questions	Latest RAG & WG advice
7	Socio-economic metrics	Collecting data on socioeconomic indicators for the fishery through recall surveys.	Not scoped/not costed		High priority. Subject to: <ul style="list-style-type: none"> further HCRAAG advice on the scope and additional work to be done to support it. more clarity on questions being asked, data required and indicative cost. Project may fall within the remit of ACR.
8	Management Strategy Evaluation (MSE) of the Beche-de-mer Harvest Strategy	1. Collate all data and biological information; 2. Update and extend the spatial multispecies TS BDM operating model developed earlier (or construct a new model); 3. Use MSE to evaluate how well the HS achieves the pre-specified objectives; 4. In consultation with stakeholders, use the MSE framework to investigate ways to improve the current HS.	Not scoped Est cost – \$130k	Requires 3-5 years of BDM HS implementation.	Medium priority and to be held off until the harvest strategy has been in place for a few years. Interacts with no.1
9	Supply chain	Better understanding of the supply chains as per other fisheries to better understand vulnerabilities and help develop an industry that is resilient to fluctuating export market conditions.	Not scoped/not costed		Not prioritised
10	Ecological Risk Assessment (ERA) – Torres Strait Pearl Shell Fishery	Conduct an ERA for the Torres Strait Pearl Shell (TSPF) Fishery	Not scoped Est cost - \$20,400	Identified as an essential research priority by HCWG in the rolling five-year research plan for Hand Collectable Fisheries	To be retained in research plan and activated when fishing for pearl oysters commences. There is some information on Pearl shell stock estimates from Tropical Rock Lobster surveys.
11	Understanding biological parameters of	Identifying gaps in knowledge of biological parameters of BDM species and investigating options for collaborative research	Not scoped/not costed		Low priority and proposed that it be addressed as the need arises.

	Research activity	Detail	Status	Comments/questions	Latest RAG & WG advice
	BDM species, including growth, mortality, size and breeding seasonality				There are conservative proxies that are best addressed through other avenues such as University students.
12	Stock Status Survey	To undertake a stock survey of all Torres Strait beche-de-mer species with a focus on deeper water species	Completed in 2019 - 2020	-	-
13	Ecological Risk Assessment (ERA)	Conduct an ERA for the TSBDM Fishery	Final report completed on 21 Dec 2021	The draft report was presented to HCRA 1	-
14	Climate Change impacts and vulnerability	Scoping study across all Torres Strait	Completed	-	-
15	Data analysis	Further analysis of catch data collected during the 2021 trial reopening of black teatfish to inform future openings and follow up work from the stock survey.	Completed	-	-

Table 2. Torres Strait fisheries strategic research themes, strategies and research activities

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	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> 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	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> 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	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> 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.	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> 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.

	TSSAC PROCESS	AFMA budget process	Example dates
July (START)	July - RAGs, WGs and MACs to update five year rolling research plan and specify their priority research needs for funding in the next financial year (12 months time). Provide to TSSAC EO by end July. Note this may require RAGs to consider priorities at November meeting the preceding year.		July 2023 (consider at December 2022 meetings)
August	Start to mid-August, Annual Research Statement (ARS; containing all Torres Strait fishery research priorities) and TSSAC papers sent for consideration before end August meeting. Late August - TSSAC meets (face to face or via teleconference) to finalise the PZJA ARS and agree on priorities/ scopes for the TSSACs call for research proposals.		August 2023
September	Early sept - call for research opens (6-8 weeks given due to more complex proposal for Torres Strait research).		September 2023
October	end October - proposals due		October 2023
November	RAGs and WGs to meet and consider research priorities for the next financial year funding round	AFMA DRAFT budgets due. Enter budgets based on budget estimates in project proposals	November 2023 (considering research priorities for 2025-26 financial year)
December	Mid December - RAG comments due on proposals (6 weeks)		December 2023
January	TSSAC papers sent ahead of meeting		January 2024
February	Early February- TSSAC meet face to face to consider research priorities for conditional support (priority to community consultation occurring). Mid-Feb – researchers notified of conditional support for project, which requires community consultation before final funding support is considered. Comments on proposals provided to researchers for amendment. Researchers to develop and provide community consultation package to TSSAC EO (2 weeks). TSSAC EO to send community consultation packages to relevant PBC, councillors and fishers associations (for	Early-mid Feb - budgets finalised, for consultation and final support. Submitted based on full proposals submitted.	February 2024

	TSSAC PROCESS	AFMA budget process	Example dates
	relevant projects). Pls to follow up with phone calls (2 weeks).		
March	Late March – researchers submit a summary of feedback from community consultation to TSSAC EO. .		March 2024
Early April	TSSAC meet via teleconference to discuss outcomes of community consultation. If no / minimal and supportive comments received only, then send out of session for consideration instead of teleconference. Mid-April – researchers notified of final endorsement of project and process for contracting. EO to work with research team to arrange drafting of contracts		April 2024

SUSTAINABILITY DISCUSSION BECHE DE MER FISHERIES

The Beche de Mer fishery in the Torres Strait has been through boom-and-bust cycles of uncontrolled and over exploited fishing for the past 150 years and more. Now it is a highly regulated and managed fishery with many species at high biomass levels, and with limited fishing effort applied, and focussed on a few species only. This transition from over exploitation to (highly?) conservative management needs to be looked at in the context of exactly what does sustainable fishing mean?

The scientists will say and with a solid basis, that a lack of data and uncertainty of the accuracy of fishery population dynamics models, leads us to the precautionary management approach. This favours ecologically sustainable development over economic sustainable development. Ultimately the decisions of fisheries management are made by the PZJA through the HCWG and the PZJA Steering Committee.

The presentation associated with this agenda item will explore six dimensions of sustainability for the successful management of BDM fisheries for optimal usage. These are:

- Fisheries Population Dynamics Effectively Managed
- Marine Ecology and Environment Not Threatened
- Social And Cultural Needs Addressed
- Resilient Market System Established
- Secure And Viable Livelihoods And Businesses
- Climate Change Resilience Through Adaptations And Mitigations

The intention of this agenda item is to consider these aspects of sustainability and to reflect on how our research and development activities and agenda addresses them. What is being left out of the sustainability dimensions discussion? It is also about thinking about how we can improve our market access, market information and processing knowledge of the species that have higher TACS and that are currently massively underfished. It is also to stimulate more thinking on the possible impacts of climate change and adaptation measures we need to prepare.

A paper is being prepared for discussion in relation to socio economic data collection *under item 7: socio economic data collection*, from the HCRAAG meeting #2, under Steve Purcell. This should be related to several issues discussed above on costs and returns for fishing, employment opportunities, skills and knowledge needs, business development needs, access to affordable finance, attitudes, and motivation to engage in fishing, women and youth participation and so on. In relation to this, TSRA will prepare a discussion paper for project scoping, on *Beche de Mer Market Development and Value Chain Strengthening*. This relates to item #9, Supply Chain in the BDM Research Priorities for BDM 2022-2027.

The TSRA discussion paper will be circulated as a draft at the HCWG meeting Nov 10. The paper will introduce and briefly discuss the current system of market development in BDM in the Torres Strait, from a market systems development perspective. This will cover off on constraints and opportunities along the value chain (supply chain), value transformation and the status of market information, market linkages and market access. It will not be a detailed value chain study or analysis but rather a snapshot of BDM value chain functions and conditions aimed at further discussion and planning with stakeholders. From the sustainability dimensions discussion it will focus on *Resilient Market System Established and Secure And Viable Livelihoods And Businesses developed*.

N. RICHARDS Fisheries Project Manager TSRA, October 20, 2022



Five-year Research Plan 2022/23 – 2026/27

Torres Strait Hand Collectable Fisheries

Beche-de-mer
Pearl shell
Crab
Trochus



**COMPILED BASED ON ADVICE FROM THE HAND COLLECTABLES
RESOURCE ASSESSMENT (HCRA) AND WORKING GROUPS
(HCWG)**

October 2021

ABOUT THIS PLAN

The Torres Strait Scientific Advisory Committee (TSSAC) seeks input from each fishery advisory body (Resource Assessment Group (RAG), Management Advisory Committee (MAC) or Working Group (WG)) to identify research priorities over five year periods from 2022/23 to 2026/27. This template is to be used by the relevant advisory body to complete their five-year plan. The plans are to be developed in conjunction with the TSSAC Five-year Strategic Research Plan (SRP) with a focus on the three research themes and associated strategies within the SRP.

All fishery five-year plans will be assessed by the TSSAC using a set of criteria, and used to produce an Annual Research Statement for all Torres Strait fisheries.

The TSSAC then develop scopes for the highest ranking projects in order to publish its annual call for research proposals. There are likely to be more scopes that funding will provide for so TSSAC can consider a number of proposals before deciding where to commit funding.

The fishery five-year plans are to be reviewed and updated annually by the Torres Strait forums to add an additional year onto the end to ensure the plans maintain a five year projection for priority research. Priorities may also change during the review if needed.

Table 1. Research priorities for Torres Strait Hand Collectable Fisheries for 2022/23 – 2026/27.

Proposed Project	Objectives and component tasks	Year project to be carried out and indicative cost						Evaluation	
		2022/23	2023/24	2024/25	2025/26	Notes on project timings	Other funding bodies	Priority essential /desirable	Theme
Black teatfish size sampling and stock assessment update	Design and conduct a black teatfish representative size sampling program during fishery openings in 2022 and 2023. Analyse size frequency data and catch data and update the stock assessment model.	~ \$40,000-\$80,000				Project needs to commence in 21/22 FY as size sampling needs to be conducted during black teatfish opening in 2022 (subject to PZJA approval)		Essential	1
White teatfish modelling	Stock assessment modelling for white teatfish to support the potential review of the current total allowable catch	~\$60,000						Essential	1
Determining conversion ratios for Curryfish species	Undertake field sampling of curryfish species (<i>Stichopus hermanni</i> and <i>S. vastus</i>) to develop conversion ratios for boiled and salted weight to gutted weight.	\$12,000				Seeking CSIRO advice as PIs on original proposal whether project can proceed in 22/23 FY.	5,129 (CSIRO in-kind)	Essential	1
Status of BDM stocks in relation to harvest strategy reference points	Determine if there is enough information available to assess the status of sea cucumber stocks in relation to the harvest strategy reference points.		Indicative cost TBA			Scope of project requires further consideration by the HCRA		Essential	1, 2
Sandfish stock survey	Outstanding stock survey of Sandfish at Warrior Reef to better understand its status.		~\$150,000			Subject to support of Iama/Tudu Traditional Owners for the project, to be sought in writing.		Essential	1
Follow up surveys of black and white teatfish	Follow up black and white teatfish surveys focusing on specific areas and potentially including areas not surveyed previously namely the deep water reefs of the South east and Barrier zones of Torres Strait.		~\$290,000			To be considered after another black teatfish opening		Desirable	1

Socio-economic	Collection and analysis of socio-economic data for the fishery from interview-based questionnaire surveys of fishers and other stakeholders involved in the fishing industry.					Needs to be informed by AFMA's review of participation data reported in CDRs. to date and by social science expertise Needs further consideration by the HCRAG and HCWG.		Essential	2, 1
Management Strategy Evaluation (MSE) of the Beche-de-mer Harvest Strategy	1. Collate all data and biological information; 2. Update and extend the spatial multispecies TS BDM operating model developed earlier (or construct a new model); 3. Use MSE to evaluate how well the HS achieves the pre-specified objectives; 4. In consultation with stakeholders, use the MSE framework to investigate ways to improve the current HS.			\$130k ^1		Will require 3-5 years of BDM HS implementation before MSE testing is achievable. However, can be undertaken sooner if external pressure requires (e.g. CITES Appendix II listing)		Essential	1
Supply chain	Better understanding of the supply chains as per other fisheries to better understand vulnerabilities and help develop an industry that is resilient to fluctuating export market conditions.					Yet to be scope and prioritised		Desirable	2
Ecological Risk Assessment (ERA)	Conduct an ERA for the Torres Strait Pearl Shell (TSPF) Fishery					Est cost is ~\$20,400 but there is no immediate ecological risk due to low - no fishing activity.	CSIRO (in-kind)	Desirable	1
Understanding biological parameters of BDM species, including growth, mortality, size and breeding seasonality	Identifying gaps in knowledge of biological parameters of BDM species and investigating options for collaborative research					Not costed – to be addressed as the need arises.		Desirable	1

1 Advice from CSIRO: Rough costing takes into account time needed to collate all fishery-dependent and fishery-independent data, develop and refine existing operating model and MSE framework, costs of attending at least 2 meetings to consult with stakeholders

Torres Strait Fisheries Strategic Research Plan 2018-2023

TORRES STRAIT
PZJA
PROTECTED ZONE
JOINT AUTHORITY



Australian Government
Australian Fisheries
Management Authority



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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.

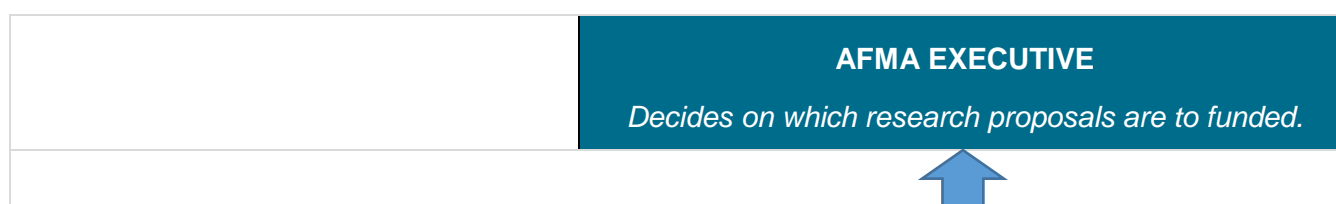
The roles of these different groups are less distinct than in the AFMA Commonwealth fisheries forums, as the working groups and MAC (there is currently only one MAC operating in Torres Strait) have a very similar function. There are now two RAGs within Torres Strait fisheries. Both Torres Prawn MAC and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

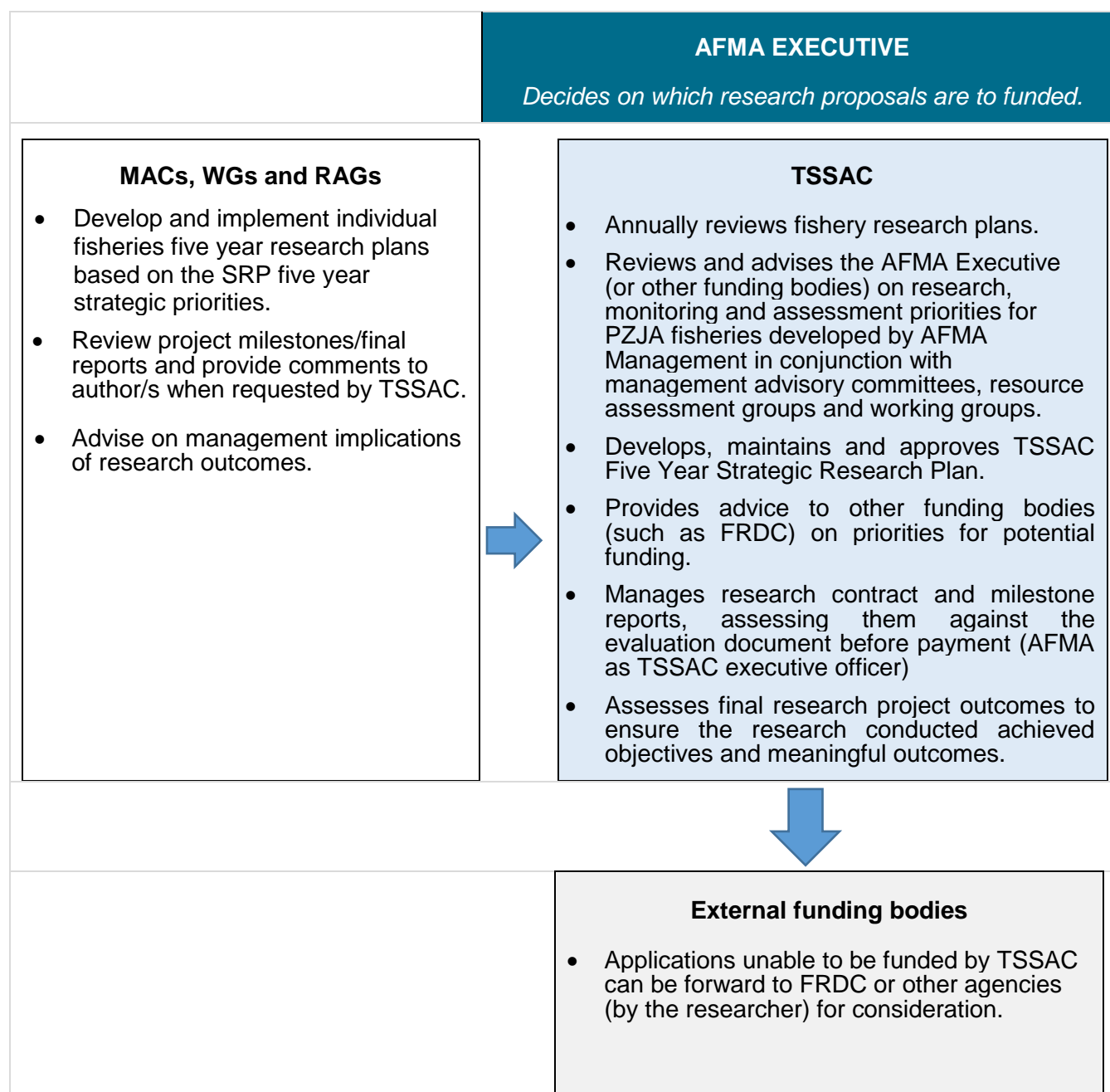
The collective scientific functions of these groups are to review scientific data and information and provide advice to the PZJA on the status of fish stocks, sub-stocks, species (target and non-target species) and the impact of fishing on the marine environment. This advice assists the Minister and 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.

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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TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No.19 10 November 2022
UPDATE ON NEW APPLICATION TO UNDERTAKE AQUARIUM FISHING IN THE TORRES STRAIT	Agenda Item 6 For NOTING

RECOMMENDATIONS

1. That the Working Group:

- a. **NOTE** the application from Aus Fish Coral Pty Ltd to undertake aquarium fishing in the Torres Strait (**Attachment 6a**).
- b. **NOTE** that the Torres Strait Fisheries Management Advisory Committee (TSFMAC), at its meeting on 11-12 November 2009, agreed to recommend to the PZJA:
 - i. that PZJA decision No 17.9.a.4 *"prohibiting the harvesting of sponges unless an appropriate authorisation is held, providing for a maximum of one in possession"* be revoked; and be replaced by
 - ii. a fisheries management instrument for the Sponge Fishery to prohibit the harvest of sponges unless an appropriate authorisation is held. Authorisation will only be issued for collection for Torres Strait Islander Sponge farms. *(No such instrument can be located)*.
 - iii. that a fisheries management instrument be developed to prohibit harvest of coral (Cnidaria) and live rock in the Torres Strait Protected Zone. *(this has been implemented through a fisheries management notice (and subsequent fisheries management instrument))*.
- c. **NOTE** that the taking of aquarium fish and other commercial species was already prevented through the relevant management notices;
- d. **NOTE** that the proposed fishing activity is not covered by established arrangements to manage and regulate the sustainable harvest of ornamental and aquarium species. Therefore, licence conditions and management arrangements that are consistent with the objectives of the TSFA and the requirements of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) must be developed before fishing activities can commence. This would involve AFMA taking a number of steps including:
 - i. developing an application to the Department of Agriculture, Water and the Environment seeking Part 13 and Part13A EPBC Act approval of the activity.
 - ii. seeking Hand Collectables Resource Assessment and Working Group advice on the requirements that need to be met to ensure the sustainability of the proposed activity, including management, monitoring and reporting arrangements.
 - iii. undertaking Native Title Notification of the proposed conditions.
- e. **NOTE** that Aus Fish Coral Pty Ltd presented to the HCRA 2 on 28 September 2022.
- f. **NOTE** that at the Protected Zone Joint Authority meeting on 4 October 2022, the Authority:
 - i. **AGREED** that as the current licence owners are not identified as verified traditional inhabitants, any commercial fishing activity undertaken with the use of these licences is akin to an expansion of effort and therefore inconsistent with the PZJA's policy of reserving expansion in the Torres Strait, where there is scope, for traditional inhabitants.

- ii. **AGREED** that the three licence packages are therefore inconsistent with the objectives of the Act, and the policies of the PZJA, and should not be renewed upon their next expiry dates.

BACKGROUND

2. At its meeting on 16 March 2022, the PZJA:

- a. **NOTED** AFMA has received an application for the permanent transfer of an inactive transferrable vessel holder (TVH) licence. This class of licence authorises the holder to commercially fish for Torres Strait species which are not covered by a fisheries management instrument. In the current case, the applicant has indicated an intention to fish for a number of ornamental aquarium species which fall in this category.
 - b. **NOTED** the TVH licence in question is one of 10 licences (9 fishing and 1 carrier class A) that had their fishery entries removed as part of a PZJA latent effort review process undertaken in 2004 in the Tropical Rock Lobster (TRL) and Finfish fisheries. All ten licences have continued to be renewed annually.
 - c. **NOTED** that the applicant is not an identified traditional inhabitant. As such, the proposed activity does not align with the current PZJA policy to reserve further expansion of effort for traditional inhabitants and the aspiration for a sustainable fishery that is 100 per cent owned by Torres Strait Islander and Aboriginal traditional owners.
 - d. **NOTED** that AFMA does not have the power to extinguish the entitlement to commercially fish conferred to the holders of the 9 TVH licences while they are in force without significant legal risk.
 - e. **NOTE** that AFMA, as the licensing delegate of the PZJA, intends to:
 - i. Approve the transfer of the licence and authorise the applicant to commercially fish subject to specific licence conditions to regulate the proposed activities.
 - ii. Seek advice from the Hand Collectables Working Group (HCWG) and Hand Collectables Resource Assessment Group (HCRAAG) on the policy parameters and additional conditions under which any continuing activity should occur.
 - f. **NOTED** AFMA separately intends to review the basis for the 10 licences to be issued in future noting the availability of development permits under Section 12 of the *Torres Strait Fisheries Act 1984* (TSFA) and the current policy setting of the PZJA and provide advice to PZJA on a recommended course of action.
 - g. Members also noted the importance of communicating with all licence holders about the likely future of the permits. Members noted that the application will raise a range of sensitivities and concerns, particularly for traditional inhabitant fishers, and highlighted the importance of a rigorous consideration process using PZJA's existing advisory mechanisms.
3. On 25 March 2022, in line with the intent outlined to the PZJA, AFMA approved the transfer of the licence as requested by the applicant, Aus Fish Coral Pty Ltd (Aus Fish Coral). In correspondence to Aus Fish Coral, AFMA noted that the proposed fishing activities are not covered by established arrangements to manage and regulate the sustainable harvest of ornamental and aquarium species. Therefore, licence conditions and management arrangements that are consistent with the objectives of the TSFA and the requirements of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) must be developed before fishing activities can commence. The correspondence noted that this may involve AFMA taking a number of steps including:
- a. submission of an application to the Department of Agriculture, Water and the Environment seeking Part 13 and Part13A EPBC Act approval.

- b. seeking Hand Collectables Resource Assessment and Working Group advice on the requirements that need to be met to ensure the sustainability of the proposed activity, including management, monitoring and reporting arrangements.
 - c. undertaking Native Title Notification of the proposed conditions.
- 4. Concurrently, AFMA wrote to all licence holders and advised:
 - a. The PZJA has reaffirmed its policy position on reserving expansion of effort in the Torres Strait, where there is scope, for traditional inhabitants.
 - b. It is AFMA's preliminary view that any commercial fishing activity undertaken with the use of these fishing licences is akin to expansion of effort and therefore, inconsistent with the PZJA's current policy settings.
 - c. AFMA intends to seek a PZJA decision on the ongoing role of these licences and whether they align with the policies of the PZJA and the objectives of the TSFA, and this may result in licenses not being renewed in the future.
- 5. Licence holders were invited to provide input on this matter prior to any recommendation being put to the PZJA. Nil feedback was received.
- 6. While the PZJA's decision is pending, AFMA acted in good faith with Aus Fish Coral and commenced preliminary work to consider the licence conditions, management and monitoring arrangements required to meet the objectives of the TSFA and the requirements of the EPBC Act.

Previous TSFMAC and HCWG discussions regarding aquarium fishing (2008 – 2009)

- 7. The TSFMAC, at its meeting on 11-12 November 2009, considered the HCWG's recommendation in 2008 to protect sponge and coral from harvest in Torres Strait and that there are currently no regulations in place for these species. The TSFMAC's consideration of this matter and subsequent recommendations to the PZJA are outlined in its meeting record provided as **Attachment 6b**.

KEY ISSUES

- 8. As per the commitment made at the PZJA meeting in March, AFMA completed a review of the basis of the 10 licences and the current PZJA policy setting and prepared advice for the PZJA's consideration.
- 9. At its meeting on 4 October 2022, the PZJA:
 - a. **AGREED** that as the current licence owners are not identified as verified traditional inhabitants, any commercial fishing activity undertaken with the use of these licences is akin to an expansion of effort and therefore inconsistent with the PZJA's policy of reserving expansion in the Torres Strait, where there is scope, for traditional inhabitants.
 - b. **AGREED** that the three licence packages are therefore inconsistent with the objectives of the Act, and the policies of the PZJA, and should not be renewed upon their next expiry dates.
 - c. **AGREED** for AFMA, as the licensing delegate of the PZJA to:
 - i. write to all affected licence holders advising them of the PZJA's decision above; and
 - ii. no longer issue the TVH fishing and carrier licences that do not have fishery entries upon their next expiry date.
- 10. AFMA is currently preparing advice to licence holders to alert them to the PZJA's decision.

Aus Fish Coral Pty Ltd

Torres Strait Fishing Licence 123480

Principle species	<p>Ornamental Clam</p> <ul style="list-style-type: none"> • Tridacna crocea (length 15cm or less) • Tridacna maxima (length 15cm or less) • Tridacna squamosa (length 15cm or less) • Tridacna derasa (length 15cm or less) <p>Ornamental Shrimp</p> <ul style="list-style-type: none"> • Lysmata spp • Stenopus spp • Urocaridella sp • Hymenocera picta <p>Ornamental sponge</p> <ul style="list-style-type: none"> • Trikentrion flabelliforme
Secondary species	<p>Gastropod</p> <ul style="list-style-type: none"> • Cerithium spp • Nassarius spp <p>Sea Star</p> <ul style="list-style-type: none"> • Fromia spp • Echinaster spp <p>Sea Urchin</p> <ul style="list-style-type: none"> • Mespilia spp • Lytechinus spp <p>Feather Star</p> <ul style="list-style-type: none"> • Class: Crinoidea
Fishing method	<ul style="list-style-type: none"> • Hookah; diving assisted by surface supply breathing apparatus and hand collection • Free diving; diving with breath hold only and hand collection • The use of handheld implements such as a hammer, chisel, barrier net, dip net
Primary markets	<p>Live ornamental - domestic market</p> <p>Live ornamental – export to Europe, Hong Kong, China, Japan, South Korea, USA</p>

Fishing area	Comprised of tidal waters within the Torres Strait Protected Zone (TSPZ) and the area declared under the TSF Act to be 'outside but near'
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Target Species

The most important species are ornamental clams (*tridacna* spp) and ornamental shrimp (*Lysmata* spp and *stenopus* spp) for example, *Lysmata amboinensis*, *Stenopus hispidus*. These species are important for both Australian and export markets.

Area

Torres Strait Protected Zone and the 'Outside but near' areas. Same as the Tropical Rock Lobster Fishery area.

Fishing method

Hookah diving or free-diving with the use of handheld implements. Harvest of clams takes place from 0-7m deep, ornamental shrimp from 0 to 20m deep.

Impact of Harvest

Some information is available from Cocos and Keeling islands about optimal and precautionary harvest rates for *Tridacna maxima*. The optimal harvest rate of *T. maxima* for Cocos (Keeling) Islands (total area of 14 square kilometres) is 55,271 individuals per year (see Assessment of the Western Australian Tycraft Giant Clam Wildlife Trade Operation April 2019).

Aus Fish Coral plans to harvest far less than the identified optimal harvest estimate for Cocos (Keeling) Island of *T. maxima*. The Torres Strait encompasses a far greater area (approximately 40,000 square kilometres). Aus Fish Coral is seeking to harvest a maximum of 5,000 *tridacna* individuals annually.

Recreational and Traditional Catch

Giant clams (*tridacna gigas*) are recognised as an important species for traditional fishing. It is proposed that these species are no take.

Bycatch

Highly selective multiple species fishery with no bycatch due to its hand collection fishing methods. Only target species will be harvested.



Australian Government

Australian Fisheries Management Authority



**TORRES STRAIT FISHERIES MANAGEMENT
ADVISORY COMMITTEE**

MEETING NO. 11

MINUTES

11-12 NOVEMBER 2009

BOWLS CLUB, THURSDAY ISLAND

CHAIR: MR JOHN POLLOCK

Prepared by the Australian Fisheries Management Authority on behalf of the Torres Strait
Protected Zone Joint Authority



Queensland
Government



AGENDA

1. Meeting Administration

- 1.1. Ratification of TSFMAC No.10 meeting record (AFMA) **For Decision**
- 1.2. Actions and/or business arising from previous TSFMAC meetings (AFMA) **For Discussion**

2. Hand Collectables Fisheries (TSHCF)

- 2.1. Outcomes from Hand Collectables Working Group (AFMA). **For Noting**
- 2.2. Community based harvest strategies for hand collectibles (AFMA) **For Decision**
- 2.3. Fisheries declarations for sponge and coral collecting fisheries (AFMA) **For Decision**
- 2.4. Results from 2009 survey of eastern Torres Strait (CSIRO/AFMA) **For Noting**

3. Turtle and Dugong Fisheries (TSTDF)

- 3.1. Turtle and dugong community based management plans (TSRA) **For Noting**
- 3.2. Fisheries Management Instruments to support Community Management Plans (TSRA) **For Noting**

4. Wildlife Trade Operation (WTO) Reassessment Outcomes and Ecological Risk Management

- 4.1. Recommendations for Beche-de-mer Fishery (AFMA) **For Noting**
- 4.2. Recommendations for Trochus Fishery (AFMA) **For Noting**
- 4.3. Recommendations for Finfish Fishery (AFMA) **For Noting**
- 4.4. Ecological Risk Management for the TRL Fishery (AFMA) **For Noting**
- 4.5. Notification of upcoming assessment for TRL fishery (verbal - AFMA) **For Noting**

5. Compliance

- 5.1. Domestic Compliance update (QB&FP) **For Noting**
- 5.2. Foreign Compliance update (AFMA) **For Noting**

6. Tropical Rock Lobster (TRL) Fishery

- 6.1. 2009 season summary (Jan – July): Australia and PNG (AFMA) **For Noting**
- 6.2. PNG Cross endorsement (QPIF) **For Noting**
- 6.3. Use of Cages (QPIF) **For Noting**
- 6.4. Outcomes and recommendations from the TRL RAG (AFMA) **For Noting**
- 6.5. Results from the tail-clipping and conversion factor project (AFMA/CSIRO) **For Noting**
- 6.6. TRL Handbook (AFMA) **For Noting**

7. Finfish Fisheries (Spanish Mackerel and Reef Line)

- 7.1. Outcomes from Finfish Working Group (AFMA) **For Noting**
- 7.2. Outline of Finfish Management Plan (AFMA) **For Decision**
- 7.3. Enhancing leasing in the Finfish Fishery (QPIF/TSRA) **For Discussion**
 - 7.3.1. Update of leasing for 2009/2010
 - 7.3.2. Inhibitions to leasing



7.3.3. Proposed use of leasing income

8. Outcomes from other meetings

8.1. TSSAC (AFMA) For Noting

8.1.1. TSSAC Strategic Research Plan and Operational Plan

8.1.2. TSSAC Terms of Reference

8.1.3. Requirements for PNG Nationals to work in the Torres Strait commercial fishing industry.

8.2. Bilateral fisheries talks between Australia and PNG (DAFF) For Noting

8.2.1. Identification of home reefs (TSRA)

8.3. TSPMAC No.7 (QPIF) For Noting

8.3.1. Prawn Fishery Management Plan. (Verbal – AFMA) **For Noting**

8.4. CFG meeting (TSRA) For Noting

8.5. PZJZ Consultative Group Membership (AFMA) For Noting

9. Other Business

9.1. Kailag Enterprise Sponge Farm (G Mosby) For Noting

9.1.1. Anchorages around Masig (QPIF/TSRA) **For Discussion**

9.2. 2009/10 PJZA Operating Budget (AFMA) For Noting

9.3. PJZA out of session decisions (DAFF) For Noting

9.4. Fishery Infringement Notices (QPIF) For Discussion

9.5. TSFMAC Membership (Verbal – AFMA) For Discussion

PZJA Standing Committee Forum

THE PZJA STANDING COMMITTEE ATTENDED THE TSFMAC TO PROVIDED A FORUM IN WHICH THE STANDING COMMITTEE COULD PROVIDE INFORMATION TO TSFMAC MEMBERS AND MEMBERS COULD ASK QUESTIONS OF THE STANDING COMMITTEE. THE AGENDA FOR THE FORUM WAS:

1. Update on the 5-year TRL Business Plan and progress of TRL Management Plan (DAFF)
2. PZJA Administrative Review update (AFMA)



DECISION RECORD – TSFMAC No. 11 (11-12 november 2009)

Agenda item 1

- 1.1.1** The TSFMAC **AGREED** to accept the minutes from TSFMAC No. 10 as a true and accurate record of the meeting.

Agenda item 2.2 – Community Based Harvest Strategies for hand collectibles

- 2.2.1** The TSFMAC **AGREED**, in principle,
 (a) to recommend to the PZJA the development of the community based harvest strategies; and
 (b) to the project plan for development of community based harvest strategies;
 for Torres Strait Hand Collectables Fisheries.

Agenda Item 2.3 – Fisheries declaration for sponge and coral collecting fisheries

- 2.3.1** The TSFMAC **AGREED** to recommend to the PZJA:
 (a) that PZJA decision No 17.9.a.4 “*prohibiting the harvesting of sponges unless an appropriate authorisation is held, providing for a maximum of one in possession*” be revoked; and be replaced by
 (b) a fisheries management instrument for the Sponge Fishery to prohibit the harvest of sponges unless an appropriate authorisation is held. Authorisation will only be issued for collection for Torres Strait Islander Sponge farms.
- 2.3.2** The TSFMAC **AGREED** to recommend to the PZJA that a fisheries management instrument be developed to prohibit harvest of coral (Cnidaria) and live rock in the Torres Strait Protected Zone.

Agenda Item 2.4 –Inclusion of *Pteria* in the Pearl Shell fishery

- 2.4.1** The TSFMAC **AGREED** to recommend to the PZJA that Fisheries Management Notice No. 069 be amended to include the genus *Pteria* by addition of the words “and genus *Pteria*” to 4.1 (a) of the FMN.

Agenda Item 6.3 –use of cages in TRL Fishery

- 6.3.1** The TSFMAC **AGREED** to recommend to the PZJA that:
 (a) a relevant mechanism be developed to monitor and manage the use of lobster holding cages in the TSPZ (ie. a fisheries management instrument) and discuss the detail to be included; and
 (b) a consistent short term approach be taken to monitoring the use of lobster holding cages across both the traditional (TIB) and non-traditional (TVH) sectors.

Agenda item 7.2 – Outline of Finfish Management Plan

- 7.2.1** The TSFMAC **AGREED** to recommend to the PZJA:
 (a) the process undertaken to develop the Finfish Management Plan outline;
 (b) the proposed timeline to implementation of a Finfish Management Plan for the Torres Strait;
 (c) the draft management objectives, in principle, to be included in the draft Management Plan;
 (d) the outline of the management plan with the exception of clauses related to transfer of TIB licences, Units of Fishing Capacity and Annual Catch Entitlements; and



(e) to consider further feedback from Community Fisher Group members facilitated by TSRA on transfer of TIB licences, Units of Fishing Capacity and Annual Catch Entitlements prior to release of a Draft Management Plan for public comment.

Agenda Item 7.4 – Net restrictions in Finfish Fishery

7.4.1 The TSFMAC **AGREED** to recommend to the PZJA that a fisheries management instrument be developed for the Torres Strait Finfish fishery to implement a mesh net size restriction for traditional fishing for finfish to the size of 4 inch mesh, 2.5m drop and 100m total length.

Agenda Item 8.5 – PZJA Consultative Group Membership

8.5.1 The TSFMAC **AGREED** to recommend to the PZJA the following people be appointed as members of the Hand Collectables Working Group:

- a) Maluwap Nona - Badu Island representative
- b) Rick Torelli - buyer representative
- c) Mika David - Warraber Island representative
- d) James Bon - Mer (Murray) Island representative

Agenda Item 9.1 – PZJA Out of Session Decisions

9.3.1 The TSFMAC **AGREED** to recommend that the PZJA reconsider recommendation 22.1.1.2(b) regarding the requirement for Master Fishermen Licences under the proposed simpler licensing arrangements that would remove the need for tenders to be licensed, taking into account the following:

- (i) that the TVH sector prefer to have a requirement for a Master Fisherman's Licence only for the primary vessel with no carrier boats licences or tender licences;
- (ii) that if (i) is not possible, the TVH sector wish that the original requirements are implemented, requiring a carrier boat licence and each tender licensed, with a Master Fisherman's Licence required for all vessels (primary and tender), however, it was noted that this may not be the view of all TVH fishers¹.
- (iii) the TIB sector would like a Master Fisherman's Licence to be required for all vessels (primary and tender) regardless of licensing requirements to maximise employment and capacity building for Torres Strait Islanders.

Subsequent to the meeting of TSFMAC #11, Ray Moore consulted with other TVH licence holders regarding this issue. The following views therefore take precedence over the previous views outlined in decisions 9.3.1:

- (i) that the TVH sector would like the requirement for a Master Fisherman's Licence for tender vessels to be removed;
- (ii) that if (i) is not possible, the TVH sector prefer the original requirements are implemented, requiring each tender to be individually licenced.

¹ This has been adopted as a draft recommendation contingent on further consultation with TVH stakeholders on (ii).



Agenda Item 9.5 – TSFMAC membership

9.5.1 The TSFMAC **AGREED** to recommend to the PZJA that the two TVH Finfish positions on the TSFMAC be replaced with one position for a lessee of a sunset licence with a Finfish endorsement or any other person with commercial interest in the Finfish Fishery.

9.5.2 The TSFMAC **AGREED** to recommend to the PZJA that the following people be appointed as members of the Torres Strait Fisheries Management Advisory Committee:

- a) Maluwap Nona –Badu Island representative
- b) Les Pitt – Darnley (Erub) Island representative
- c) Thomas Mooka – Dauan Island representative
- d) Pearson Wigness – Horn (Ngurapai) Island representative
- e) James Bon – Murray (Mer) Island representative
- f) John Wigness – St Pauls (Moa) representative
- g) Mika David – Warraber representative
- h) Gavin Mosby – Yorke (Masig/Kailag) Island representative
- i) Fisheries Policy Officer – TSRA

9.5.2 The TSFMAC **AGREED** to recommend that the PZJA **NOTE** resignations of the following people from the Torres Strait Fisheries Management Advisory Committee and that these positions will be vacant until appropriate replacements can be identified:

- a) Seriako Dorante – Hammond Island representative;
- b) Terrence Whap – Mabuiag Island representative;
- c) Raily Gibia – TRAWQ representative;
- d) Connie Young – Umagico representative

MAC recommendation resulting from the PZJA Standing Committee forum

9.6.1 The TSFMAC **AGREED** to recommend that the PZJA be advised through the TRL business planning process of:

- a) The potential, financial and economic value to the Torres Strait community of Torres Strait fisheries;
- b) The infrastructure and skills capacity needs for Torres Strait communities to optimise economic returns from Torres Strait fisheries;
- c) The effect of the recent structural adjustment/TVH buy-out in the TRL fishery on the capacity of non-TVH sectors to expand fishing effort;
- d) The financial and economic effects for Torres Strait communities of forthcoming changes to CDEP;
- e) Opportunities for maximised value-adding through partnerships between TIB and commercial sectors;

and that in light of the above information, PZJA members consider an approach to PZJA Agencies and Governments seeking a comprehensive program of further structural adjustment in the TRL Fishery and provision of infrastructure and skills needs aimed at enhancing economic self sufficiency in Torres Strait communities.



The following members and observers were in attendance at TSFMAC No 11:

Name	Representative organisation	Declaration of Interest
Mr John Pollock	Chairperson	Consultant
Dr Annabel Jones	AFMA	Manager, Thursday Island
Mr Malcolm Southwell	AFMA	Senior Manager, Northern Fisheries
Ms Samantha Emerick	AFMA – Executive Officer	Senior Fisheries Officer
Mr Neville Nakata	TSRA	Fisheries Co-ordinator
Mr Shane Fava	QDPI&F	Senior Fisheries Management Officer
Mr Phil Hughes	Proxy - TVH TRL Industry Representative	TRL Licence Holder
Mr Tony Vass	Proxy - TVH Finfish Industry Representative	Ex Mackerel Licence Holder
Dr Ray Moore	Industry TRL Representative	TRL Licence Holder
Mr Daniel Takai	Fish Receiver Representative	TRL Licence Holder Processor
Mr Les Pitt	CFG representative	TIB Licence holder
Mr Dennis Passi	CFG representative	TIB Licence holder
Mr William Stephen	CFG representative	TIB Licence holder
Mr Gavin Mosby	CFG representative	TIB Licence holder
Mr Francis Pearson	CFG representative	TIB Licence holder
Mr Mika David	CFG representative	
Mr Pearson Wigness	CFG representative	
Mr Yen Loban	CFG representative	TIB Licence holder
Mr Graham Hirakawa	CFG representative	
Mr Mica Newie	CFG representative	TIB Licence holder
Mr Jerry Babia	CFG representative	TIB Licence holder
Mr Dimas Toby	CFG representative	



Observers:

Name	Role
Mr Kenny Bedford	TSRA Fisheries Portfolio Member
Mr Steve Hall	TSRA - Fisheries Policy Officer
Ms Rebecca Williams	AFMA - supporting Executive Officer
Mr Lyndon Peddell	QB&FP
Mr Glenn Hurry ²	AFMA - PZJA Standing Committee
Mr Wayne See Kee ²	TSRA - PZJA Standing Committee
Mr Jim Groves ²	QDPI&F - PZJA Standing Committee
Mr Roland Pittar ²	DAFF - PZJA Standing Committee
Mr John Marrington ³	AFMA – Foreign Compliance
Mr Paul PakPoy ³	DAFF
Mr Damian Miley	TSRA Manager - Land and Sea Management Unit
Mr Brett Young ³	DFAT
Mr Adam Wade ⁴	AFMA - Fisheries Management Officer
Ms Shalana Uta ⁵	Student – Tagai College
Ms Stephina McKeown ⁵	Student – Tagai College

Apologies:

Name	Role
Mr Brett Arlidge	TVH TRL Industry representative
Mr Carl D’Aguiar	TVH Finfish Industry representative
Mr Shaun Hansen	TVH Finfish Industry representative
Mr Ian Cartwright	Scientific member –TSSAC Chair

² PZJA standing committee members only present on the afternoon of the 11/12/09 and part of the afternoon on the 12/11/09.

³ Present on the afternoon of the 11/11/09 only

⁴ Present on 12/11/09 only.

⁵ Present on morning of 12/11/09 only.



Action Items

#	Action Item	Agenda item	Responsibility
1	DAFF to formalize through the bilaterals the process for offsetting unused Australian allocation in PNG by subtracting an equal amount of the resource from PNG allocation in Australia. In addition, for DAFF to investigate if cross endorsed vessels may access the outside but near areas of the Protected Zone when fishing under cross endorsements.	11.1.2 Carried over from TSFMAC No.10	DAFF AFMA
2	Clarify whether the intent of the legal advice in relation to the movement of turtle and dugong out of Australian waters, which is considered illegal, includes the movement of turtle and dugong for traditional purposes.	11.1.2 Carried over from TSFMAC No.10	DEWHA via AFMA
3	Further consultations to be carried out with CFG representatives to gain a consensus on the inclusion of the following items prior to release of the draft Finfish Management Plan for public comment: a) Transfer of TIB licences; b) Transfer of units of fishing capacity. c) Transfer of Annual Catch Entitlements TSRA will facilitate the consultation with the CFG, assisted by AFMA	11.7.2	AFMA TSRA CFG
4	A research proposal to be developed for consideration by the TSSAC to investigate the feasibility of a fresh (whole fish on ice) and/or live market for coral trout facilitated by TSRA.	11.7.3	TSRA
5	CFG representatives to discuss with PNG cross endorsed operators the request to avoid Torres Strait community reefs when fishing in Australian waters under cross-endorsement. Consultation will be facilitated by TSRA.	11.8.2	CFG representatives TSRA
6	Feedback to be provided to the TSFMAC regarding progress of protection of the Kailag Sponge Farm at Masig from damage from vessels.	11.9.1	CFG Masig representative



Agenda Item 1.1 Ratification of TSFMAC No.10 meeting record

The TSFMAC members reviewed the minutes from the last TSFMAC meeting held in 2008 and agreed that they were an accurate record of the meeting.

1.1.1 The TSFMAC **AGREED** to accept the minutes from TSFMAC No.10 as a true and accurate record of the meeting.

Agenda Item 1.2 Actions and/or business arising from previous TSFMAC meetings

The TSFMAC noted the progress on action items and business arising from the TSFMAC No.10 and the following discussions were recorded.

Action Item 2 The Department of Agriculture, Fisheries and Forestry (DAFF) is seeking to have the process formalised for offsetting future Papua New Guinea (PNG) fishing effort transferred to the Australian area of jurisdiction through a proportionate reduction in fishing effort in the PNG area of jurisdiction at the bilateral meeting. This remains an ongoing task.

As part of the above action item, DAFF was also requested to seek legal opinion on whether PNG's 25% of the Australian allowable catch refers to the Protected Zone only, or to the Protected Zone plus the 'outside but near areas'. PNG allocation of the resource is determined on catch from the PZJA and outside but near areas, however, clarification is to be sought on whether cross endorsed PNG operations can access the outside but near areas to fish. PNG cannot make landfall in Australia so potential impacts for immigration and quarantine issues if such vessels were able to access areas near mainland Australia are not clear. DAFF were requested to investigate this issue further.

Clarification on access by cross endorsed PNG operations to the outside but near areas of the TSPZ to fish will be included to action item 2 TSFMAC #10 (**ACTION ITEM 1**).

Action Item 3 Queensland Department of Primary Industry and Fisheries (QDPI&F) have provided information regarding the process followed for Native Title approval to the Torres Strait Regional Authority (TSRA) Native Title Office who are happy with the process and outcomes.

Action Item 4 Finfish leasing arrangements are now in place and leasing is occurring.

Action Item 5 was to clarify whether Traditional Inhabitant (TIB) boats can be dual endorsed and carry additional product on board. There are issues surrounding the monitoring of compliance with gear restrictions if more than one species is targeted on a single trip. However, it is recognised that it is more efficient for fishermen to change target species in a trip and many TIB fishermen are often endorsed to target multiple species. TIB fishermen are also taking traditional species on commercial trips and there is no legislation preventing this.

The TSFMAC was advised that current legislation does not restrict TIB fishermen targeting multiple species as long as they comply with current gear regulations for each fishery targeted.

Action Item 6. The Department of the Environment, Water, Heritage and the Arts (DEWHA) is seeking legal advice on whether the movement of turtle and dugong out of Australian waters (considered illegal), includes the movement of turtle and dugong for traditional purposes. Restrictions regarding the movement of turtle and dugong out of Australian waters have been incorporated into the Erub Community Based management plan.

Agenda Item 2.1 Outcomes from Hand Collectables Working Group

The Committee noted the outcomes from the Hand Collectables Working Group Meetings No.2 and 3 and discussed the main recommendations at agenda item 2.2, 2.3 and 2.4.

Agenda Item 2.2 Community Based Harvest Strategies (CBHS) for hand collectables

The TSFMAC supported further development of CBHS with willing Torres Strait communities and encourage others to consider the initiative for their communities. The



TFSMAC agreed that development of CBHS would address DEWHA recommendations on the Strategic Assessments for the Torres Strait Trochus and Bêche-de-mer fisheries whilst also allowing communities to manage these fisheries in accordance with their aspirations.

The Committee noted that the development of community based harvest strategies is subject to availability of funds, PZJA agency resources and collaboration with communities. CBHS will initially be developed for five communities who indicated their support at the HCWG meeting.

2.2.1 The TFSMAC **AGREED**, in principle,

(a) to recommend to the PZJA the development of the community based harvest strategies; and

(b) to the project plan for development of community based harvest strategies;

for Torres Strait Hand Collectables Fisheries.

Agenda Item 2.3 Fisheries Declarations for sponge and coral collecting fisheries

The TFSMAC noted the HCWG recommendation to protect sponge and coral from harvest in Torres Strait and that there are currently no regulations in place for these species. The TFSMAC also noted the existing PZJA decision to register sponge as a Torres Strait Fishery with restrictions to be introduced through fisheries management instruments (FMI).

The TFSMAC noted the current views of the HCWG and agreed that they would like to restrict the harvest of sponge, except for sponge farms. The TFSMAC agreed to recommend to the PZJA that decision No 17.9.a.4 be amended to prohibit harvest of sponge except for Torres Strait operated sponge farms.

2.3.1 The TFSMAC **AGREED** to recommend to the PZJA:

(a) that PZJA decision No 17.9.a.4 “prohibiting the harvesting of sponges unless an appropriate authorisation is held, providing for a maximum of one in possession” be revoked; and be replaced by

(b) a fisheries management instrument for the Sponge Fishery to prohibit the harvest of sponges unless an appropriate authorisation is held. Authorisation will only be issued for collection for Torres Strait Islander Sponge farms.

The TFSMAC discussed the options available to protect coral from harvest in Torres Strait following the HCWG recommendation to restrict harvest of coral. Two options were available: 1) a coral fishery could be declared by the PZJA as for the sponge fishery and then a FMI developed to restrict harvest. Declaring a coral fishery would then require an amendment to the Torres Strait fisheries regulations which would increase the cost and resources required. 2) a FMI be developed restricting harvest of all Cnidaria species. This does not create a fishery and does not require amendments to regulations reducing the implementation time.

The TFSMAC agreed that coral fishery was not being sought at this time and that a FMI was sufficient to restrict harvest of all Cnidaria species. The prohibition should extend to live rock (hard substrate covered in coralline algae and other living organisms with a definition sought from Queensland legislation) as well as live and dead coral.

2.3.2 The TFSMAC **AGREED** to recommend to the PZJA that a fisheries management instrument be developed to prohibit harvest of coral (Cnidaria) and live rock in the Torres Strait Protected Zone.

Agenda Item 2.4 Inclusion of *Pteria* in the Pearl Shell Fishery

The harvest of *Pteria* (winged or penguin pearl shell) is currently not covered by regulations as the genus is not listed in FMN No. 069. This species is used to supply Australian pearl farms and there is some interest in harvesting this species in the Torres Strait. The TFSMAC agreed that FMN No. 069 should be amended to include this genus to provide some level of regulation.



2.4.1 The TSFMAC **AGREED** to recommend to the PZJA that Fisheries Management Notice No. 069 be amended to include the genus *Pteria* by addition of the words “and genus *Pteria*” to 4.1 (a) of the FMN.

Agenda Item 2.5 2009 survey of Hand Collectables in eastern Torres Strait results
The TSFMAC members noted with interest the interim results from the research project ‘*Sustainable harvest strategies for the Torres Strait Hand Collectable fisheries*’, carried out in 2009 by CSIRO. The initial report includes suggestions of increased Total Allowable Catch (TAC) for some high value species. It was noted that any changes to TAC for Bêche-de-mer would need to be in conjunction with sustainable management arrangements included in CBHS.

Concern was expressed by some members that researchers were not surveying all of the preferred fishing sites. It was explained that a representative number of sites with both high and low abundance of species of interest is needed so that accurate levels of abundance over all habitats in Torres Strait can be calculated as per accepted surveying methods.

Agenda Item 3.1 Turtle and dugong community based management plans
Rangers are currently employed or being recruited to implement the eight community based management plans endorsed by communities to date. Community based management plans for Turtle and Dugong are now being extended to the remaining communities in the Torres Strait. Assessment of the outcomes achieved so far by the Turtle and Dugong Management Plans will provide a mechanism for reviewing their effectiveness.

Further consultation with PNG traditional inhabitants is required to gain support for the Turtle and Dugong management arrangements and is being facilitated through TSRA.

Agenda Item 3.2 Fisheries Management Instruments (FMI) to support Community Management Plans

TSRA are currently investigating development of Fishery Management Instruments (FMI) or alternate arrangements for some of the strategies included in the Community Management Plans such as area closures. The TSFMAC recognised the benefits and disadvantages of legislative options (such as FMIs) compared to less formal management arrangements including voluntary compliance and community justice systems. The TSFMAC agreed to support the process where possible including community based options.

The work of previous turtle and dugong officers was acknowledged and consultation for the remaining plans will continue.



Agenda Item 4 Wildlife Trade Operation (WTO) Reassessment Outcomes and Ecological Risk Management

The Committee noted the information provided regarding WTO reassessment outcomes and DEWHA recommendations for the Torres Strait Bêche-de-mer, Trochus and Finfish fisheries. The TSFMAC noted the Ecological Risk Assessment (ERA) process carried out for the Torres Strait Tropical Rock Lobster (TRL) Fishery and that results indicate very low risk to any species from the fishery. This fishery is not required to conduct any further ERA at this time. The ERA report for the Torres Strait TRL fishery is publicly available on the AFMA website (www.afma.gov.au).

The TSFMAC noted the upcoming strategic assessment of the Torres Strait Lobster Fishery in 2010 and that a five year exemption from WTO endorsement would be sought by AFMA from DEWHA.

Agenda Item 5.1 Domestic Compliance update

The Committee noted the domestic compliance report provide by Queensland Boating and Fisheries Patrol (QB&FP). QB&FP are reviewing the methods used to deliver the compliance program in response to a number of on-going issues. Firstly, there has been a change in the dynamics of Torres Strait fisheries as fishermen are now targeting several fisheries in a single trip. There are also recurrent difficulties in distinguishing commercial catch from traditional catch which hinders the enforcement of management regulations.

QDPI&F and QB&FP are also investigating mechanisms to more efficiently manage compliance through fishery infringement notices (FINs) for small scale offences (discussed further at Agenda Item 9.4). There was no opposition to this initiative voiced by the TSFMAC.

There was some discussion regarding compliance of the use of cages in the TRL fishery and this was discussed further under Agenda Item 6.3.

Agenda Item 5.2 Foreign Compliance update

The Committee noted the foreign compliance report provide by AFMA. The Bêche-de-mer closures in all areas of PNG imposed by the National Fisheries Authority (NFA) are a positive move but PNG have limited resources to monitor and enforce the restrictions. AFMA foreign compliance will provide assistance where possible by providing monitoring information to PNG compliance staff.

Concerns raised by the TSFMAC on PNG cross endorsed vessel fishing in the TRL fishery were discussed. TSRA stated that relevant information is provided to communities by way of notices to provide awareness of the vessels entering the Australian jurisdiction. PNG cross endorsed vessels were boarded on their arrival in Australian waters and where possible at the end or during the trip. AFMA foreign compliance staff will try to conduct pre-season information sessions with the skippers of PNG cross-endorsed vessels in 2010 as a way to ensure that licence conditions are fully understood by the skippers.

Discussion on conditions required of cross endorsed vessels identified some ambiguous areas that require further investigation including the areas of the Torres Strait Protected Zone (TSPZ) that PNG cross-endorsed vessels can access, particularly the outside but near areas of the Australian jurisdiction (see action item 1). It was noted by the group that enforcement of conditions of cross endorsements was complicated somewhat by treaty obligations requiring cases to be prosecuted by PNG authorities.



Agenda Item 6.1 2009 Season summary (Jan-July): Australia and PNG

The TSFMAC noted the recorded catch up to June 30 2009 for the TRL fishery and the sector nominal allocation of the preliminary TRL TAC. General messages were that total catch for 2009 will be low compared to previous years as was expected from the low TAC recommended for 2009. PNG cross-endorsed vessels fishing in Australian waters did not fish up to their total allowable number of days in 2009.

Agenda Item 6.2 PNG cross endorsement

The TSFMAC noted that this was the first year that PNG cross-endorsed vessels have accessed Australian waters for a number of years. CFG representatives raised concerns regarding compliance and monitoring of PNG cross endorsed vessels. PNG cross-endorsed vessels are closely monitored by AFMA foreign compliance and were boarded during their trip. Logbook records were also checked against catch on-board the vessels when boarded. Consultation between Torres Strait Islanders and skippers of the cross-endorsed vessels will assist in communicating the request from Torres Strait Islanders to avoid Torres Strait community reefs discussed further at agenda item 8.2.1.

Concerns were also raised regarding monitoring of days of fishing rather than kilograms of product provide to PNG in the Australian fishery. Controlling effort (tender days) is considered a more effective way to monitor and enforce PNG access to the TRL fishery in Australian waters compared to monitoring catch. Estimates of catch per tender per day are used to convert allocated kilograms of lobster to a number of tender days. Information provided by PNG vessels fishing in Australian waters in 2009 resulted in updated catch rates for PNG fishers being used in catch sharing discussions and subsequently, the allocation of tender days to PNG for 2010 is significantly less than 2009.

PNG vessels are required to give notice to AFMA foreign compliance before entering Australian waters and nominate the number of dories used on each trip. This system has been effective in 2009 for monitoring the number of tender days used by PNG vessels.

Agenda Item 6.3 Use of cages

Cages are currently being used by both Traditional Inhabitant (TIB) and non-traditional inhabitant (TVH) sectors to hold live lobster. The use of cages to hold or transport live TRL is not regulated extensively under current legislation.

TVH representatives stated that the use of cages allowed smaller vessel operators (with boats <14m), that are unable to have live tanks on deck (due to the boat size) and are restricted from getting bigger boats under the current boat replacement policy, to move into the live fishery by using cages to hold and transport their lobster.

Cages could be used in a similar fashion by TIB fishers allowing them to market more of their catch as live lobster with significant increased returns for their catch. Some CFG representatives consider the use of cages to transport and hold lobster as a potential method of further development in the fishery. Other members feel that cages used for transporting lobster should be considered as a tender and licensed as such.

The PZJA have previously considered the use of cages and intended the issues associated with their use would be addressed under a TRL Fishery Management Plan.

The TSFMAC discussed the possible restrictions that could be included on the use of cages if they were regulated including size, prohibition on carrying any form of propulsion (motors), fuel and fishing gear.

The TSFMAC agreed that a clear description of a cage used to hold or transport TRL is needed and possible restrictions agreed to in order to better monitor the impact of the use of cages and mitigate effort creep in the fishery resulting from their use. Registration of cages would also allow compliance officers to clearly link the cage to a licence holder, enhancing compliance of relevant legislation including minimum legal size limits for commercial lobster and commercial fishing in fishery closures.



6.3.1 The TSFMAC **AGREED** to recommend to the PZJA that:

- (a) a relevant mechanism be developed to monitor and manage the use of lobster holding cages in the TSPZ (ie. a fisheries management instrument) and discuss the detail to be included; and
- (b) a consistent short term approach be taken to monitoring the use of lobster holding cages across both the traditional (TIB) and non-traditional (TVH) sectors.

Agenda Item 6.4 Outcomes and recommendations from the Tropical Rock Lobster Resource Assessment Group (TRLRAG)

The TSFMAC noted the major outcomes of the TRLRAG including the provisional TAC for 2010 being higher than 2009 indicating that next season will be a good year for TRL. The TSFMAC also noted that there will be no pre-season surveys in 2009 as the fishery will not be managed under quota in 2010. This means that a final TAC (based on the pre-season survey) will not be calculated for next year, although a provisional TAC is available. Mid-season surveys are planned for 2010 and CSIRO will work with AFMA and TSRA to undergo consultations on the surveys and other research relevant to the lobster fishery early in 2010.

Agenda Item 6.5 Results from the tail-clipping and conversion factor project

The TSFMAC noted the major outcomes from research on tail-clipping, tail-to-whole weight conversion factors and size frequency distribution carried out by CSIRO and AFMA in 2008 being:

- The tail-to-whole weight conversion factor of 2.677 is recommended and has been endorsed by the TRLRAG.
- Tail clipping does not impact lobster survival, tail fan state or quality.

Concerns were raised regarding how mortalities of lobster will be dealt with under the quota monitoring system and whether mortalities would be included as part of the allocated quota. The issue of mortality of product and higher grading will need to be discussed as part of a quota monitoring system in development of the TRL Management Plan.

Agenda Item 6.6 TRL handbook

AFMA is developing a handbook for the Torres Strait Tropical Rock Lobster fishery. The handbook is designed to be a resource for stakeholders and the wider public, detailing legislative and management information relating to the fishery as well as presenting biological and scientific information about the species. When complete, the handbook will be published and distributed to all Torres Strait TIB and TVH TRL licence holders and an electronic copy will be available via the PZJA website. It is expected that the TRL handbook will be available to fishers for the 2010 season.

Agenda Item 7.1 Outcomes from Finfish Working group (FFWG)

The TSFMAC noted the major outcomes from the recent FFWG meeting including in principal agreement to the Finfish Management Plan outline, objectives, performance indicators and timeline for implementation. As effort in the fishery is not high at the moment, Total Allowable Catch (TAC) or Total Allowable Effort (TAE) will not be recommended at the outset of the Finfish Management Plan and will only be recommended as a management mechanism if effort in the fishery increases.

Agenda Item 7.2 Outline of finfish management plan

The TSFMAC discussed the outline of the Finfish Management Plan as discussed with the FFWG. The TSFMAC agreed in principle to the management plan outline, however, there were some concerns raised by some CFG representatives regarding clauses in the outline relevant to transferring of licenses and units of fishing capacity. The concerns raised related to broader issues of allowing for capping of TIB licences requiring transferring between TIB fishers and the method of allocation quota to TIB fishers if TAC is introduced.

The TSFMAC endorsed, in principle, the outline of the plan and agreed the outline should be provided to a legislative drafter who will develop a draft management plan for consideration



in 2010. In the meantime, further consultations will be conducted with CFG representatives to gain a consensus of the disputed clauses prior to release of the draft plan. The outcomes from the consultation will be included in the draft management plan released for public comment. TSRA will facilitate the consultation with CFG representatives, assisted by AFMA (**ACTION ITEM 3**).

7.2.1 The TSFMAC **AGREED** to recommend to the PZJA:

- (a) the process undertaken to develop the Finfish Management Plan outline;
- (b) the proposed timeline to implementation of a Finfish Management Plan for the Torres Strait;
- (c) the draft management objectives, in principle, to be included in the draft Management Plan;
- (d) the outline of the management plan with the exception of clauses related to transfer of TIB licences, Units of Fishing Capacity and Annual Catch Entitlements; and
- (e) to consider further feedback from Community Fisher Group members on the FFWG facilitated by TSRA on transfer of TIB licences, Units of Fishing Capacity and Annual Catch Entitlements prior to release of a Draft Management Plan for public comment.

Agenda Item 7.3 Update of finfish leasing arrangements for 2009-10

The TSFMAC noted the low level of interest in leasing coral trout quota from TSRA in 2009/2010. The lack of leasing in this fishery has prompted investigation of options to stimulate interest in the fishery. Communities have requested assistance from the TSRA economic development unit to explore the logistic and business options in establishing a live coral trout fishery in the Torres Strait. The PZJA has previously agreed to remove the restriction on holding live fish on implementation of a Finfish Management Plan (21.2.1.2).

The TSFMAC requested that a research proposal be developed for consideration by the Torres Strait Scientific Advisory Committee (TSSAC) to investigate the feasibility of a fresh (whole fish on ice) and/or live market facilitated by TSRA (**ACTION ITEM 4**).

Agenda Item 7.4 Net restrictions

Restrictions on the sizes of nets used for traditional harvest of finfish (eg mullet) have been discussed for some time as a way to protect turtle and dugong from entanglement in large gauge nets. It is important that Traditional Inhabitants agree on the net sizes to be allowed to ensure that traditional fishing for finfish is not inhibited, but large gauge nets currently used under the premise of traditional fishing can be restricted.

The CFG members of the TSFMAC agreed that net sizes for the traditional harvest of finfish fishery be restricted to nets less than 4 inch mesh, 2.5m drop and 100m length and that these net sizes are to be implemented by amending current Fishery Management Notices.



- 7.4.1** The TSFMAC **AGREED** to recommend to the PZJA that a fisheries management instrument be developed for the Torres Strait Finfish fishery to implement a mesh net size restriction for traditional fishing for finfish to the size of 4 inch mesh, 2.5m drop and 100m total length.

Agenda Item 8.1 Outcomes of the TSSAC

The TSFMAC noted the outcomes of recent TSSAC meetings, in particular; development of a Strategic Research Plan; Operational Plan and suggested amendments to the Terms of Reference.

CFG representatives expressed interest in co-research opportunities for Torres Strait Islanders and the possibility to have formal recognition in publications, practical experience and engagement in research. It was suggested that the Torres Strait Islander representative on the TSSAC would need to raise these comments at the next TSSAC meeting. It was re-iterated that there are a number of hurdles to overcome in employing Torres Strait Islanders in research including OH&S and insurance considerations. However, engagement of Torres Strait Islanders is a priority of the TSSAC and research proposals are assessed against specific criteria relating to Torres Strait Islander engagement.

Agenda Item 8.1.3 Requirements for PNG Nationals to work in the Torres Strait commercial fishing industry

The TSFMAC noted the discussion related to PNG nationals working on Torres Strait Islander vessels. The group was advised that PNG Nationals would need to meet standard Department of Immigration requirements for foreigners working in Australia and this activity was not covered under traditional visits. CFG representatives expressed that there is a need to concentrate on up skilling TIB before employing PNG nationals.

There were concerns regarding trade of product between the Torres Strait and PNG and the legislation surrounding this. The Treaty allows for small level market trade but as the Treaty is not very descriptive there is some ambiguity over the definitions of “trade”. A DFAT observer at the meeting stated that communities should respect the spirit of the treaty with regard to trade as it is not enforceable by law and this discussion may be better raised though DFAT than the TSFMAC.

Agenda Item 8.2 Bilateral fisheries talks between Australia and PNG

The TSFMAC noted the information provided on the recent bilateral meeting held with PNG.

Bilateral talks were held with PNG in September 2009 to agree on catch sharing arrangements between the countries for a number of fisheries, particularly the lobster fishery. The discussion item of interest was the process for determining days of fishing provided to PNG. The Bilateral meeting record is still being finalised and will then be publicly available.

It was clarified that the TSFMAC can raise items on the bilateral agenda by writing formally to AFMA and DAFF.

Agenda Item 8.2.1 Identification of home/community reefs

TSRA has undertaken a process with Torres Strait Islanders to identify reefs considered to be community reefs and to request PNG cross endorsed vessels to avoid these reefs. Torres Strait Islanders were concerned about the lack of a formal agreement to administer this request. It is not possible to legislate such area closures for PNG vessels given obligations under the treaty as the closures would not apply to Australian fishers. Torres Strait Islanders would like PNG cross-endorsed vessels to respect these areas and voluntarily abide by the request. CFG representatives will be discussing this issue with PNG cross endorsed operators to increase awareness of these areas (**ACTION ITEM 5**).



The TSFMAC noted the information provided on the last TSPMAC including the low level of effort in the fishery in 2009 (2530 days), with decreased endeavour prawn catch but steady catch of tiger prawn. Overall, catch rates of tiger prawns have increased indicating that tiger prawn biomass is increasing. A harvest strategy for the fishery is being discussed.

CFG representatives expressed concern regarding marine debris from Torres Strait prawn vessels, trawling in the vicinity of the sponge farm at Masig and operators abandoning dropped nets trawlers and recovery of vessels that have sunk in recent incidents. These issues were further addressed at agenda item 9.1.1.

Agenda Item 8.3.1 Prawn Fishery Management Plan

The TSFMAC noted the update given on the management of the Torres Strait Prawn fishery. The Prawn Management Plan was implemented in February 2009 and caps the number of licences to 61 with the PZJA required to set a TAE each year. The current effective TAE for the Australian jurisdiction is 9200 which is consistent with the sustainable reference point for the fishery. Objectives of the plan are to:

- Ensure optimum utilisation of the fishery resources within the TSPF is consistent with the principals of ecologically sustainable development and exercise of the precautionary principle;
- Promote economic efficiency in the utilisation of the fisheries resources within the TSPF;
- Ensure cooperative, efficient and cost effective management of the Fishery;
- Manage the fishery's interaction with the marine environment including the incidental capture of non-target species and impacts on demersal habitats.

Agenda Item 8.4 CFG meeting

CFG meetings are facilitated by the TSRA and are aimed at providing a forum for all Community Fisher Group (CFG) representatives to discuss fisheries issues. Recent changes in the TSRA structure with fisheries management now included in the Land and Sea Management Unit has seen improvements in the CFG consultation process with meetings held more regularly and improved communication between constituents. A review of the CFG structure is currently underway and it is hoped that this process will lead to greater improvements in outcomes for Torres Strait Islanders and efficiencies in the future.

Agenda Item 8.5 PZJA Consultative Group Membership

8.5.1 The TSFMAC **AGREED** to recommend to the PZJA the following people be appointed as members of the Hand Collectables Working Group:

- e) Maluwap Nona - Badu Island representative
- f) Rick Torelli - buyer representative
- g) Mika David - Warraber Island representative
- h) James Bon - Mer (Murray) Island representative.

Agenda Item 9.1 Kailag Sponge farm

The TSFMAC noted the update provided on the Kailag Sponge Farm by the Masig representative. The farm is now managed by an independent entity, Kailag Enterprises. The sponge farm is progressing well with a total of 7444 sponges now stocked on the farm. Farming techniques continue to be refined and are now more efficient. A new system involving droplining is being trialed to reduce reliance on SCUBA to attend to the farm, and ways to reducing biofouling of the sponge housing are being investigated.

The community would like to express their thanks for support from TSRA and assistance from other CFGs.

Agenda Item 9.1.1 Anchorages around Masig

Concerns have been raised in a number of forums regarding marine incidents and fishing vessel debris in the vicinity of the Kailag sponge farm at Masig Island. To mitigate the threat,



the community has erected navigational buoys around the farm and a Notice to Mariners has been issued. The TSFMAC was informed that a written allegation of intentional damage to farm equipment has been referred to QB&FP. QDPI&F have written to all Torres Prawn licence holders alerting them to the location of the farm. An alternative anchorage site for vessels in the area has been offered by the community; however, more discussions need to be held on this matter.

The TSFMAC requested to be updated on the progress of protection of the Kailag Sponge Farm at Masig from damage from vessels (**ACTION ITEM 6**).

Agenda Item 9.2 PZJA Budget

The TSFMAC noted the changes in cost sharing arrangements between the Commonwealth and Queensland for the PZJA fisheries for the 2009-10 financial year. Approximately \$6 million has been allocated to manage PZJA fisheries during 2009-10. The 09-10 budget is down 2% from 08-09.

Agenda Item 9.3 PZJA decisions

The TSFMAC noted the PZJA decisions since the last TSFMAC meeting.

The TSFMAC raised some concern regarding a change from the TSFMAC recommendation to decision number 22.1.1.2(b) related to simplified licensing in the TRL fishery and Master Fisherman's Licence requirements and recommended the PZJA reconsider the decision.

Subsequent to the TSFMAC #11 meeting, Dr Ray Moore consulted with other TVH licence holders to ascertain a common view on this issue. After TSFMAC #10, there was a general understanding amongst the TVH sector that the meeting endorsed the recommendation that the Torres Strait licensing system was to be simplified in line with the QLD East Coast system. In this system, tenders are not required to be licenced, there is no requirement for a member of the crew to hold a Master Fisherman's licence with no processing/carrier licence required to move product from the tender to the primary vessel.

The TVH sector therefore prefers the removal of the requirement of Master Fisherman's Licence for tender vessels. If this is not possible then the consensus is that we would prefer to retain the existing status of individually licenced tender vessels.

9.3.1 The TSFMAC **AGREED** to recommend that the PZJA reconsider recommendation 22.1.1.2(b) regarding the requirement for Master Fishermen Licences under the proposed simpler licensing arrangements that would remove the need for tenders to be licensed, taking into account the following:

- (i) that the TVH sector prefer to have a requirement for a Master Fisherman's Licence only for the primary vessel with no carrier boats licences or tender licences;
- (ii) that if (i) is not possible, the TVH sector wish that the original requirements are implemented, requiring a carrier boat licence and each tender licensed, with a Master Fisherman's Licence required for all vessels (primary and tender), however, it was noted that this may not be the view of all TVH fishers⁶.
- (iii) the TIB sector would like a Master Fisherman's Licence to be required for all vessels (primary and tender) regardless of licensing requirements to maximise employment and capacity building for Torres Strait Islanders.

Subsequent to the meeting of TSFMAC #11, Ray Moore consulted with other TVH licence holders regarding this issue. The following views therefore take precedence over the previous views outlined in decisions 9.3.1:

- (i) that the TVH sector would like the requirement for a Master Fisherman's Licence for tender vessels to be removed;

⁶ This has been adopted as a draft recommendation contingent on further consultation with TVH stakeholders on (ii).



(ii) that if (i) is not possible, the TVH sector prefer the original requirements are implemented, requiring each tender to be individually licenced.

Agenda Item 9.4 Fishery Infringement Notices

There are no Fishery Infringement Notices (FINs) in the Torres Strait. Compliance officers currently refer all offences to the Department of Public Prosecution but this is not efficient for minor offences. FINs, similar to traffic tickets, would allow for efficient processing of minor offences. The introduction of FINs in the Torres Strait is being investigated by QDPI&F and QB&FP. There was no opposition recorded to this initiative and QDPI&F will investigate this option further in the future.

Agenda Item 9.5 TSFMAC Membership

Following restructure of the Finfish fishery, which effectively removed all TVH licences in the fishery and the introduction of leasing, the TSFMAC discussed the appropriateness of the current TSFMAC membership. The TSFMAC felt that the two TVH Finfish positions were no longer necessary and that one position for a lessee (holder of a sunset licence) or a similarly involved person would better represent the fishery.

9.5.1 The TSFMAC **AGREED** to recommend to the PZJA that the two TVH Finfish positions on the TSFMAC be replaced with one position for a lessee of a sunset licence with a Finfish endorsement or any other person with commercial interest in the Finfish Fishery.

9.5.2 The TSFMAC **AGREED** to recommend to the PZJA that the following people be appointed as members of the Torres Strait Fisheries Management Advisory Committee:

- a) Maluwap Nona –Badu Island representative
- b) Les Pitt – Darnley (Erub) Island representative
- c) Thomas Mooka – Dauan Island representative
- d) Pearson Wigness – Horn (Ngurapai) Island representative
- e) James Bon – Murray (Mer) Island representative
- f) John Wigness – St Pauls (Moa) representative
- g) Mika David – Warraber representative
- h) Gavin Mosby – Yorke (Masig/Kailag) Island representative
- i) Fisheries Policy Officer – TSRA

9.5.3 The TSFMAC **AGREED** to recommend that the PZJA **NOTE** resignations of the following people from the Torres Strait Fisheries Management Advisory Committee and that these positions will be vacant until appropriate replacements can be identified:

- a) Seriako Dorante – Hammond Island representative;
- b) Terrence Whap – Mabuiag Island representative;
- c) Raily Gibia – TRAWQ representative;
- d) Connie Young – Umagico representative

Agenda item 9.6 PZJA Standing Committee Public Forum

The PZJA Standing Committee (SC) held a public forum on the afternoon on the 11th November in conjunction with the TSFMAC. This provided an opportunity for members of the public and TSFMAC members to ask questions of the PZJA SC and discuss the TRL 5-year Business Plan and Administrative Review of the PZJA.

The PZJA SC also addressed uncertainty regarding the role of the Standing Committee in decision making within the PZJA consultative structure. The SC members indicated that their role is to make recommendations to the PZJA based on advice and information from all of the Torres Strait working groups, resource assessment groups and committees. As such, they are not a decision making body.



The discussions at the forum prompted the TSFMAC to make a recommendation to the PZJA with regard to the lobster fishery and future aspirations of stakeholders.

9.6.1 The TSFMAC **AGREED** to recommend that the PZJA be advised through the TRL business planning process of:

- f) The potential, financial and economic value to the Torres Strait community of Torres Strait fisheries;
- g) The infrastructure and skills capacity needs for Torres Strait communities to optimise economic returns from Torres Strait fisheries;
- h) The effect of the recent structural adjustment/TVH buy-out in the TRL fishery on the capacity of non-TVH sectors to expand fishing effort;
- i) The financial and economic effects for Torres Strait communities of forthcoming changes to CDEP;
- j) Opportunities for maximised value-adding through partnerships between TIB and commercial sectors;

and that in light of the above information, PZJA members consider an approach to PZJA Agencies and Governments seeking a comprehensive program of further structural adjustment in the TRL Fishery and provision of infrastructure and skills needs aimed at enhancing economic self sufficiency in Torres Strait communities.

Agenda item 9.7 Comments on TSFMAC meeting

At the end of the meeting, the Chair gave TSFMAC members the opportunity to comment on the meeting itself on how the meeting was run and possible suggestions for improvement. It was suggested that papers for noting may not be discussed at the TSFMAC unless requested by members to make more efficient use of time. Working groups are more appropriate forums for discussion of some issues raised in the papers for noting.

Next Meeting

TBC.



TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No. 19 10 November 2022
FUTURE MANAGEMENT PRIORITIES AND DATE FOR THE NEXT MEETING	Agenda Item 7 FOR NOTING

RECOMMENDATIONS

1. That the Working Group (WG):
 - a. **NOTE** that the HCWG18, at its meeting on 28-29 October 2021, recommended that the assessment and development of management options for the utilisation of white teatfish is a high short-medium term priority for the fishery, requesting AFMA consider directing resources towards this management activity (refer to the final record of the HCWG18 meeting provided at **Attachment 1.4b**). This priority item is yet to be progressed.
 - b. **NOMINATE** a date and a venue for the next meeting.
 - c. **NOTE** the summary of management priorities previously identified by the HCWG as outlined in **Table 3**, including the progress update against each priority.

KEY ISSUES

2. Having agreed priorities (WG issues to focus on) and a corresponding work plan aims to achieve a more efficient WG process.
3. Where possible, the WG should aim to prioritise and set a timeline for any identified items, having regard for resourcing. As far as practical AFMA proposes that a work plan be developed in-session.
4. The HCWG18, at its meeting on 28-29 October 2021, discussed management options for the utilisation of white teatfish provided advice on the:
 - a. relative priority of directing management resources to develop advice to the PZJA on management options to support the utilisation of the white teatfish TAC.
 - b. key considerations for assessing management options to help guide discussions with broader stakeholders; and
 - c. draft workplan proposed by AFMA to develop these management options (**Table 1**).
5. The HCWG18 further on 28-29 October 2021 and recommended that:
 - the assessment and development of management options for the utilisation of white teatfish is a high short-medium term priority for the fishery requesting AFMA consider directing resources towards this management activity.
 - an industry workshop be held to enable industry to develop its preferred management options for the utilisation of white teatfish, while acknowledging the need for AFMA's assessment of the administrative feasibility of the preferred management option(s).

6. AFMA scheduled the industry workshop for 15-17 February 2022 but again had to postpone due to the COVID-19 situation in the Torres Strait Region at the time and the advice from Queensland Health and the Torres Strait Shire and Regional Councils for businesses and agencies to:
 - consider returning to work-from-home arrangements, where practical.
 - reconsider non-essential travel into, within and out of the region to help reduce chances of further COVID-19 cases and transmission in the Torres Strait; and
 - refrain from hosting large gatherings and community consultations.
7. Other high priority activities (such as the 2022 black teatfish opening) and lack of sufficient resourcing continue to make it challenging to progress other priorities in the fishery but AFMA will continue to work with the HCWG and industry to re-schedule the workshop and progress this matter.
8. Subject to WG advice, AFMA proposes the next meeting be held around October/November 2023 (**Table 2**).
9. The WG may wish to note the summary of management priorities previously identified by the HCWG as outlined in **Table 3**. Progress against each priority is provided.

Table 1. Draft workplan to develop management options to support the utilisation of the white teatfish TAC (as considered by the HCWG18 on 28-29 October 2021).

Date	Activity	Note
Feb-April	AFMA to undertake a round of community meetings on a range of Torres Strait Fishery matters (details TBA).	
March	Industry management options workshop	<ul style="list-style-type: none"> • Expected outcome: industry participants to develop management options. • HCWG industry members to facilitate workshop. • HCWG industry members to assist AFMA with nominating fishers from the BDM Fishery to attend the workshop. • Malu Lamar to be invited to advise on native title matters. • Subject to the availability of facilities, convene in Eastern Islands. <p>(note subject to HCWG and a PZJA decision this workshop may also serve as a pre-black teatfish opening briefing)</p>
April/May	Black teatfish opening? Note HCWG advice on a future opening is pending	
June/July	HCRAg	If relevant, HCRAg to consider and provide advice on any data, assessment and potential stock impacts associated with each option.
July/Aug	HCWG	Having regard for any advice from the HCRAg, discuss and provide advice to the PZJA on a preferred management option.
Aug/Sep	Administration	AFMA to prepare draft arrangements to implement to the HCWG preferred management option. Note this will, at a minimum include remaking the Management Instrument for the Fishery.

Date	Activity	Note
Oct	Native Title Notification	If required, AFMA to undertake notification under section 24HA of the <i>Native Title Act 1993</i> .
Jan	PZJA	Consider management options having regard for HCWG advice, HCRAG advice, industry management options workshop advice and native title notification responses if undertaken.
TBA	Implementation	Implementation will depend on the nature of the management option agreed.

Table 2. Key dates for the BDM Fishery in 2023.

Key dates 2023	Activity
1 January	Start of BDM fishing season
Late January/early Feb	PZJA to make a decision on future black teatfish openings
TBA	Industry workshop to: <ul style="list-style-type: none"> • set dates for black teatfish opening • Management options for white teatfish (i.e. hookah) (refer to HCWG18) • Economic viability of current licencing arrangements (may require further thought) (refer to HCWG18)
TBA	Black teatfish opening (PZJA decision having regard for RAG and WG advice)
July/August (tentative)	HCRAG. Potentially consider outcomes of black teatfish outcomes, applying harvest strategy to remaining species, research priorities.
October/November (tentative)	HCWG. Potentially consider outcomes of black teatfish outcomes, applying harvest strategy to remaining species, research priorities.
30 November	WTO expires

Table 3. Comments relating to any progress against each management priority previously identified by the HCWG. Management priorities are listed chronologically and not in order of importance.

Management Priority			Progress to date and comments
1	HCWG9 June 2016	Development of a harvest strategy and recovery plans for overfished species	<p>Complete.</p> <p>CSIRO, together with AFMA, the HCWG and broader industry stakeholders have developed a Beche-de-mer Harvest Strategy.</p> <p>The BDM Harvest Strategy was endorsed by the PZJA in November 2019 and implemented on 1 January 2020.</p>
2	HCWG9 June 2016	Future management arrangements for Black Teatfish and White Teatfish	<p>Ongoing.</p> <p>The TSRA supported PZJA Traditional Inhabitant members to undertake cluster consultations in late 2019 which sought feedback from communities on the use of hookah to fish for white teatfish. Given the strongly divided community views on this matter, the HCWG recommended that it be further discussed at a Malu Lamar led broader industry workshop which was scheduled for April 2020 but did not proceed due to COVID-19 related restrictions.</p> <p>See also management priority #9</p> <p>Completed</p> <p>Fishing for black teatfish occurred on a trial basis during 30 April – 3 May 2021 in accordance with the BDM Harvest Strategy.</p>
3	HCWG9 June 2016	Review the size limits set for the Torres Strait Beche-de-mer Fishery taking into consideration the size limits in place for the Queensland and the Commonwealth Coral Sea Fishery	<p>Complete.</p> <p>This work was progressed under the Harvest Strategy project. Proposed changes to minimum size limits of beche-de-mer will be considered by the PZJA as part of the Harvest Strategy.</p>
4	HCWG9 June 2016	Review weight conversion ratios for gutted and dried beche-de-mer species	<p>Ongoing.</p> <p>This work was progressed under the Harvest Strategy project. Updates to weight conversion ratios are captured within the new Beche-de-mer Species Identification Guide.</p> <p>CSIRO is continuing to work with industry on understanding weight conversion ratios for curryfish species. A full proposal was developed and allocated funding in 2019/20 but did not proceed due to COVID-19.</p>
5	HCWG9 June 2016	Develop communication materials to assist industry members with the requirements of the new	<p>Complete.</p> <p>As part of the 2019 Fish Receiver System community visits, AFMA developed some educational material such as fact sheets and</p>

Management Priority			Progress to date and comments
		Fish Receiver System being implemented on 1 December 2017 and on current management arrangements and proposed future management priorities for the fishery.	<p>and frequently asked questions (FAQs) sheets on the FRS and harvest strategies for industry, as well as consulting on the draft BDM Harvest Strategy. A number of PZJA Traditional Inhabitant (TI) members also accompanied AFMA during the community visits and assisted in communicating the importance and benefits of the FRS.</p> <p>During the TSRA cluster visits in late 2019 and January 2020, PZJA TI members presented on each fishery, including management priorities and the FRS.</p> <p>AFMA and PZJA TI members undertook further community visits in late 2020 – early 2021 leading up to the black teatfish trial opening during which the FRS was also discussed and communication material provided.</p>
6	HCWG13 July 2018	Developing a Beche-de-mer management plan.	<p>Not progressed.</p> <p>The development and implementation of the BDM Harvest Strategy and mandatory fish receiver system was progressed as the highest immediate priority.</p> <p>Further consideration by the HCWG on the intended purpose of developing a statutory management plan for the BDM Fishery. A key purpose for implementing such a plan is to implement quota (or effort unit) management.</p>
7	HCWG13 July 2018	Continuing education and awareness training with the Fish Receiver System	<p>Ongoing.</p> <p>AFMA undertook a round of community visits in April and May 2019 to discuss the Fish Receiver System with industry and communities and AFMA continues to liaise with industry on how to improve reporting through the FRS.</p>
8	HCWG13 July 2018	Improving communication and engagement with industry on current management arrangements and proposed future management priorities for the fishery.	<p>Ongoing.</p> <p>In addition to the comments provided at #5 above, AFMA Thursday Island is continuing to work with the AFMA communications team to improve communications on a range of fisheries topics, including segments on Radio 4MW, the PZJA website and a fisheries notice board outside the AFMA Torres Strait office.</p>
9	HCWG14 October 2018	Some industry members expressed support for Malu Lamar to develop their own proposal on the use of hookah to fish for white teatfish and fast track the issue to the PZJA for	<p>Ongoing.</p> <p>AFMA stands ready to consider Malu Lamar's proposal and will work with Malu Lamar to undertake further industry consultation, and/or workshops similar to that undertaken in the lead up to the trial opening of black teatfish in 2021.</p>

Management Priority			Progress to date and comments
		consideration, separate to the work that the TSRA is undertaking in this regard.	See also management priority #2
10	HCWG15 August 2019	AFMA to arrange a half/full day future management priorities workshop in conjunction with the next Hand Collectables Working Group meeting. Participants to the meeting should include HCWG members, other industry stakeholders including factory processors and/or buyers and should also include discussions on pearl shell and trochus fisheries.	Ongoing. The highest priority for 2020-21 was the trial opening of black teatfish which occurred on 30 April – 3 May 2021. AFMA will continue to work with the HCWG and industry to progress discussions on future management priorities for Hand Collectables Fisheries. AFMA considers this a high priority.

TORRES STRAIT HAND COLLECTABLES WORKING GROUP	Meeting No. 19 10 November 2022
OTHER BUSINESS	Agenda Item 8 For DISCUSSION

RECOMMENDATIONS

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