



Australian Government

Australian Fisheries Management Authority

# Torres Strait Hand Collectables Resource Assessment Group

## Meeting No. 4

## 14 August 2024

## Meeting Record

Note all meeting papers and minutes are available on the PZJA webpage: [www.pzja.gov.au](http://www.pzja.gov.au)

# Contents

|   |  |    |
|---|--|----|
| 1 | Opening prayer, acknowledgment of country, welcome and apologies ..... | 3  |
| 2 | Adoption of agenda .....   | 3  |
| 3 | Declarations of interests .....  | 3  |
| 4 | Actions arising from previous meetings.....                            | 5  |
| 5 | Status of Wildlife Trade Operation approval and CITES listings .....   | 5  |
| 6 | Research priorities for 2025/26 .....                                  | 7  |
| 7 | Review of the BDM Fishery Harvest Strategy.....                        | 8  |
| 8 | Other business .....   | 9  |
| 9 | Next meeting.....  | 9  |
|   | List of attachments.....   | 9  |
|   | Summary of actions arising from HCRAg 4 .....                          | 10 |
|   | Summary of HCRAg 4 recommendations .....                               | 10 |

# 1 Opening prayer, acknowledgment of country, welcome and apologies

1. The meeting was opened in prayer at 0914. The Chair welcomed members and observers to the fourth meeting of the Torres Strait Hand Collectables Resource Assessment Group (the RAG) and provided an acknowledgment of country.
2. The Chair noted the following apologies: Jenny Keys (Queensland Department of Agriculture and Fisheries (QDAF) Member), Pabai Pabai (Traditional Inhabitant Member, Gudumalulgal) and John Tabo (Traditional Inhabitant Member, Kemer Kemer Meriam).

## 2 Adoption of agenda

3. The RAG adopted the draft agenda, noting that Agenda Item 8 was to be deferred to the next meeting. The adopted agenda is provided at **Attachment A**. Members and observers did not object to the meeting being voice recorded for the purposes of developing the meeting record.

## 3 Declarations of interests

4. The Chair advised members and observers, that as provided in the Protected Zone Joint Authority's (PZJA) *Fisheries Management Paper No. 1* (FMP1), all members must declare all real and potential conflicts of interest in Torres Strait hand collectables fisheries at the commencement of the meeting. Declared conflicts of interest are detailed in **Table 1** below.
5. Noting conflicts of interests in relation to Agenda Item 6, the scientific members removed themselves from the meeting while the remaining members discussed their participation in the agenda item. The remaining members recognised that although the scientific members have conflicts of interests when discussing research priorities and needs, they have research expertise and knowledge relevant to hand collectables fisheries that is valuable to the development of the RAG's advice on those priorities. They agreed that the scientific members should participate in the discussions but not in the making of the recommendations.

**Table 1. Declared conflicts of interest from each attendee.**

| Name                  | Position          | Declaration of interest  |
|-----------------------|-------------------|--|
| <b>Members</b>        |                   |  |
| Delahay Miller        | Chair             | No interests in Torres Strait fisheries.   |
| Tim Skewes            | Scientific Member | Independent consultant. Previously employed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO).<br>Previous principal scientist and co-investigator for Torres Strait Scientific Advisory Committee (TSSAC) and Torres Strait Regional Authority (TSRA) funded projects focused on the sea cucumber, tropical rock lobster (TRL), finfish and traditional fisheries in the Torres Strait.<br>Member on the TSSAC.<br>Involved in the TSSAC endorsed research project 'Measuring non-commercial fishing catches (traditional subsistence fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods' which is funded by the Fisheries Research and Development Corporation (FRDC). |
| Dr Eva Plaganyi-Lloyd | Scientific Member | Employed by CSIRO and from time to time CSIRO receives funding to undertake research relating to Torres Strait fisheries as well as other Australian and international fisheries.  |

| Name                     | Position                                  | Declaration of interest   |
|--------------------------|---|---|
|                          |   | <p>Scientific Member on the TRL and Northern Prawn RAGs.</p> <p>Lead scientist for PZJA funded TRL research projects conducted by CSIRO.</p> <p>Co-investigator on the TSRA funded project 'Understanding climate variability and change relevant to key fisheries resources in the Torres Strait and adaptation and mitigation strategies'.</p>  |
| Professor Steven Purcell | Scientific Member                         | <p>Scientific Member on the Hand Collectables Working Group (HCWG).</p> <p>Employed full-time by Southern Cross University as a teaching-research academic. 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.</p> <p>Specialist in sea cucumber ecology and fisheries.</p> <p>Currently involved in a sea cucumber population assessment in French Polynesia in partnership with Ginger-Soproner and CREOCEAN.</p> <p>As of 2023, acting as the global focal point on Sustainable Use within the International Union for the Conservation of Nature (IUCN) Species Survival Commission's Sea Cucumber Specialist Group.</p> <p>2023–2025 contracted by ADECAL-Technopole as the Scientific Member on a sea cucumber fishery advisory committee in New Caledonia.</p> |
| John (Toshie) Kris       | Traditional Inhabitant Member, Maluialgal | <p>TIB licence holder with TRL and Spanish mackerel entries.</p> <p>ZK Fisheries member.</p>  |
| Nicholas Pearson         | Traditional Inhabitant Member, Kulkalgal  | <p>TIB licence holder with beche-de-mer (BDM) and TRL entries. Family owns a TRL and BDM commercial fishing company.</p> <p>Member of the TSRA Board and ZK Fisheries.</p>  |
| Graham Hirakawa          | Traditional Inhabitant Member Kaiwalagal  | <p>TIB licence holder with Spanish mackerel, pearl shell and TRL entries.</p>   |
| Steven Harris            | AFMA Member                               | <p>Employed by AFMA, no pecuniary interests or otherwise.</p>   |
| Adam White               | TSRA Member                               | <p>Employed by TSRA, no personal pecuniary interests or otherwise.</p> <p>TSRA holds finfish and TRL quota on behalf of Traditional Inhabitants.</p>  |
| <b>Executive officer</b> |   |   |
| Natalie Couchman         | Executive Officer, AFMA                   | <p>Employed by AFMA, no pecuniary interests or otherwise.</p>   |
| <b>Observers</b>         |   |   |
| Ian Butler               | ABARES                                    | <p>Employed by the Australian Bureau of Agriculture and Resource Economics (ABARES), Department of Agriculture, Forestry and Fisheries (DAFF). No pecuniary interests or otherwise.</p>   |
| Yen Loban                | TSRA Board Member                         | <p>TSRA Board Member.</p> <p>Chair of the TSRA Fisheries Advisory Committee.</p> <p>Chair of Zenadth Kes Fisheries Ltd Board.</p>   |

## 4 Actions arising from previous meetings

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6. The RAG noted the status of the actions arising from previous HCRAg meetings.

## 5 Status of Wildlife Trade Operation approval and CITES listings

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7. The RAG noted a presentation from the Executive Officer regarding the status of the Wildlife Trade Operation (WTO) approval for the Torres Strait Beche-de-mer Fishery (the BDM Fishery) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (**Attachment B**). Members noted:
  - a. the EPBC Act, administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW), requires the periodic assessment of the environmental performance of all commercial fisheries, including those in the Torres Strait. Wildlife Trade Operation (WTO) approval under the EPBC Act is necessary for Australian commercial fisheries to be able to legally export commercially wild caught seafood from Australia. The RAG noted that such approvals may be subject to conditions. The BDM Fishery was last assessed in late 2023 and received WTO approval for three years subject to conditions being addressed during the period of the approval. There are currently 15 conditions, most recently updated in May 2024.
  - b. Various conditions focus on species that have been listed under Appendix II of the *Convention on the International Trade of Endangered Species of Wild Fauna and Flora* (CITES), specifically black teatfish (*Holothuria whitmaei*), white teatfish (*H. fuscogilva*), prickly redfish (*Thelenota ananas*) and amberfish (*T. anax*). CITES is an 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 may still be traded internationally provided the trade, has been determined to be non-detrimental to the survival of the species in the wild.
  - c. The conditions under the BDM Fishery WTO approval fall into a number of categories:
    - i. five standard reporting conditions;
    - ii. three research related conditions, which are to be focus of discussions at this meeting;
    - iii. a range of other conditions, of which specific advice is to be sought from the RAG at their next meeting.
8. The RAG discussed the impacts of climate change and how this should be considered in future research projects. A scientific member advised that the work being undertaken through the CSIRO climate change project, funded by the TSRA, will develop models that will simulate plausible projections of climate change impacts on Torres Strait fisheries. The results from the climate change project will be presented at future RAG meetings for consideration in how it can be integrated into existing species-specific assessments and management. Research to date shows, that while sea cucumbers are vulnerable to the impacts of climate change, there is still time to adapt current assessments and management before the impacts play out.
9. The RAG also discussed condition 6 of the WTO approval for the BDM Fishery which requires a multi-species survey of sea cucumbers in the Torres Strait to be undertaken. Scientific members questioned why there was a requirement to undertake another broadscale survey of the BDM Fishery at this time, noting the last survey was only undertaken in 2019/20 and the cost of undertaking such a survey is high in relation to the value of the fishery and available funding. The AFMA member shared the assessment report for the fishery which provided DCCEEW's rationale for the condition. It was noted that DCCEEW have an expectation that surveys be undertaken every 3-5 years, despite this not being required under the Torres Strait Beche-de-mer Fishery Harvest Strategy (the Harvest Strategy). The AFMA member advised that advice from the RAG on survey frequency would support further discussions with DCCEEW on this condition.

10. In relation to condition 9 of the of the WTO approval for the BDM Fishery, which requires the formulation of processing conversion factors for amberfish and prickly redfish, a scientific member advised that New Caledonia have recently undertaken work to formulate processing conversion factors for these species and this work may be able to be drawn on to meet this condition. Professor Steven Purcell agreed to contact the New Caledonia Economic Development Agency (ADECAL) to seek further information on the work undertaken with regards to the formulation of processing conversion factors for amberfish and prickly redfish.

**Action arising 1 – Professor Steven Purcell to contact ADECAL to seek further information on the work undertaken with regards to the formulation of processing conversion factors for amberfish and prickly redfish.**

11. In relation to condition 13 of the of the WTO approval for the BDM Fishery, a scientific member advised that stock assessment modelling for prickly redfish would provide increased certainty that the current TAC is biologically appropriate and precautionary. The scientific member noted that this is not currently included in the BDM Fishery's list of research priorities and suggested it should be. This was supported by another scientific member who noted that New Caledonian authorities have had to recently implement a restrictive TAC (9 tonnes) for prickly redfish due to overharvesting. The Torres Strait prickly redfish stock is similar in nature and would benefit from further assessment. Scientific members discussed that undertaking Management Strategy Evaluation (MSE) of the fishery's Harvest Strategy and stock assessment modelling for prickly redfish are a higher priority (because of the ability to integrate all information, account for a broad range of uncertainties pertaining to sea cucumber population dynamics and to evaluate the efficacy of alternative management rules) than the multi-species survey required under condition 6 of the WTO approval and that these alternative projects would better address current uncertainties in the management of sea cucumber stocks in the fishery.

12. The RAG discussed the implications if conditions of a WTO approval are unable to be met. The Executive Officer advised that the WTO approval for the BDM Fishery may not be renewed if conditions are not met, meaning approval to export product from the fishery would be lost resulting in a loss of market access. The majority of the fishery's product is exported. The RAG discussed their concerns that conditions have been imposed without consideration of uncertainties and priorities identified by the RAG. The RAG agreed for AFMA to write to DCCEEW to raise the following:

- a. Extensive and world leading research has been undertaken in the last decade which supports the sustainable management of the fishery (e.g. initial MSE testing of key elements of the fishery's Harvest Strategy, stock assessment modelling for key target species, repeated surveys, preliminary climate change research). CSIRO offered to present on these developments over time as well as recent research outcomes, should DCCEEW find this of value (e.g. webinar);
- b. Further guidance is needed from DCCEEW regarding the scope of the multi-species survey required under condition 6 of the WTO approval and what DCCEEW envisaged were the gaps they were seeking to be filled by requiring the survey. For example, does DCCEEW require that the survey target specific species (e.g. CITES listed species, species whose status is uncertain (deepwater redfish and blackfish species), closed species (surf redfish)). This advice is needed in order to refine the scope for the survey, which is currently very broad and logistically complex (and hence also expensive relative to the value of the fishery);
- c. Advice on whether DCCEEW will consider an alternative approach to undertaking a multi-species survey. RAG advice is that MSE of the fishery's Harvest Strategy and population modelling for prickly redfish would better address current uncertainties in the management of sea cucumber stocks in the fishery at this time, noting limited research funds available to undertake any projects. The outcomes of the MSE would inform a survey to better target uncertainties;
- d. Seeking DCCEEW attendance at the next RAG meeting to discuss the fishery's WTO conditions.

**Action arising 2 – AFMA to write to DCCEEW to raise the RAG's concerns regarding the WTO conditions for the BDM Fishery.**

13. The RAG also agreed that DCCEEW should be invited to attend the next HCRAAG meeting to discuss EPBC Act requirements and matters regarding the WTO approval for the BDM Fishery.

**Action arising 3 – DCCEEW to be invited to attend the next HCRAAG meeting.**

14. The RAG further discussed the need to raise the awareness across industry and communities of the requirements for fishery assessments under the EPBC Act, the requirements under CITES, the requirement for WTO approval before fishery product can be exported, the WTO conditions that are currently imposed on Torres Strait fisheries and the implications for fisheries if these conditions are not met. The RAG agreed AFMA and the TSRA to develop a communications strategy to build awareness of these issues.

**Action arising 4 – AFMA and the TSRA to develop a communications strategy to build awareness of WTO approval requirements and implications if they are not met.**

## 6 Research priorities for 2025/26

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15. The RAG was invited to consider research priorities for funding in 2025/26 for inclusion in the rolling Five-Year Research Plan for Hand Collectables Fisheries for 2025/26 to 2029/30 (the Research Plan).
16. The RAG noted that ABARES Fishery Status Reports are an important source used by DCCEEW in undertaking their assessments of fisheries under the EPBC Act. ABARES use biomass estimates both historical and from the most recent survey as a key input to their assessments of sea cucumber stocks in the BDM Fishery. There is an emerging issue regarding the estimates of the influence of fishing and ongoing reliable assessments of stock biomass and status are challenged by climate change. If a survey is not undertaken regularly, and other data are not collected to inform the status of stocks, then the uncertainty around estimates used in assessments increases.
17. The RAG discussed that AFMA submissions for the re-assessment of fisheries under the EPBC Act need to more clearly explain where there may be uncertainties in the management of stocks and identify research priorities that address these uncertainties. This will allow DCCEEW to make better informed assessments and assist when they are formulating conditions.
18. The RAG also discussed, that under the Harvest Strategy, a survey may not be needed so regularly if better fishery-dependant data (data provided by fishers) was collected. The middle tier of the Harvest Strategy allows fishery-dependant data to be used to monitor and assess the status of stocks and adjust annual TACs. It was noted that the *Torres Strait Fisheries Act 1984* does not currently permit the PZJA to make logbooks mandatory. As a result, the fishery relies on the voluntary provision of spatial and effort data via catch disposal records. The quality of current voluntary submissions could be improved.
19. The RAG discussed that further work is needed on this issue. It was explained by a Traditional Inhabitant member that there are sensitivities for fishers in providing confidential data (e.g. location), including indigenous cultural and intellectual property (ICIP) rights. The AFMA member noted that the BDM Fishery is operating in the shadow of much larger issues going on in DCCEEW. There will be challenges to making the case for alternative approaches and finding solutions to collect better fishery-dependant data may be a better tactic. A scientific member suggested further analysis be undertaken out-of-session to examine more closely the fishery-dependent data that is collected and how it can be used. The Executive Officer noted there is a WTO condition requiring middle tier management for prickly redfish, which requires the collection and use of fishery-dependant data. There is merit in this suggestion and it should be discussed at next meeting.
20. The RAG discussed research priorities for 2025/26 for inclusion in the Research Plan (**Attachment C**). A number of research priorities were identified as essential for funding in 2025/26 due to the WTO conditions for the BDM Fishery, including:
  - a. a scientific stock survey of sea cucumber stocks in the eastern Torres Strait was identified as the highest priority. The survey is required to commence by May 2026;
  - b. as per discussions under the previous agenda item, two alternative research priorities were identified to be a higher priority than the survey, specifically population modelling on prickly

redfish and MSE of the BDM Fishery Harvest Strategy. However, the final ranking of these priorities is pending DCCEEW consideration. A survey will need to be undertaken if the alternative approach is not endorsed;

- c. an Ecological Risk Assessment (ERA) for the BDM Fishery is required to be completed by December 2026. AFMA will look to fund this priority through the AFMA fisheries budget.

21. The scientific stock survey of sandfish and other sea cucumber species on Warrior Reef remains an essential research priority, however lower ranked than the priorities identified above, if it cannot be completed in the current 2024/25 financial year.
22. The RAG discussed the essential priority concerning collecting data on socio-economic indicators in the BDM Fishery, which has been in development for some time. The RAG agreed that the priority should remain as essential, however, the scope requires further development and this will be placed on the agenda for discussion at the next meeting. The RAG will be asked to provide further advice on the social and economic data and information needs for the BDM Fishery, including how this data and information is to be used to inform the management of the fishery. Professor Steven Purcell agreed to provide a presentation (presented at a previous meeting) at the next meeting for further consideration by the RAG.

**Action arising 5 – The scope concerning collecting data on socio-economic indicators in the BDM Fishery to be placed on the agenda for discussion at the next meeting. To inform the development of the scope, Professor Steven Purcell to provide a presentation on the collection of social and economic data and information, and how this data and information can be used to inform the management of fisheries.**

23. The RAG discussed the black teatfish size sampling data analysis priority. Advice was sought on the frequency of analysis needed. The RAG recommended this project be undertaken in 2025/26 with the next meeting to consider how often this analysis needs to be undertaken from 2026/27 onwards.
24. The RAG discussed the priority concerning the review of minimum legal size (MLS) limits in the BDM Fishery. The priority was identified as essential. The RAG agreed that AFMA would discuss with scientific members out-of-session the best approach to take for this project, for consideration at the next meeting.

**Action arising 6 – AFMA to discuss with scientific members out-of-session the best approach for the review of MLS limits in the BDM Fishery.**

25. With regards to the remaining priorities, the RAG identified them as desirable with equal ranking.
26. Noting the previously identified conflicts of interests, the scientific members removed themselves from the meeting while the remaining members finalised the recommendation concerning research priorities for 2025/26. **The remaining members recommended the priorities detailed in Attachment C proceed to TSSAC for their consideration.**
27. The RAG considered three proposals received in response to two scopes released in a special call for research on 30 May 2024 for potential funding in 2024/25. Tim Skewes declared a conflict of interest in relation to one proposal. The scientific member removed themselves from the meeting while the remaining members considered the proposal. Proposals were assessed against the TSSAC criteria with comments provided to TSSAC for further consideration.

## **7 Review of the BDM Fishery Harvest Strategy**

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28. The RAG noted that at its last meeting, AFMA was tasked with developing TAC undercatch carryover provisions for black teatfish to allow for up to 10% of the current fishing season's TAC, if not caught, to be carried over from the current season to the subsequent season. The RAG was invited to consider the proposed amendment to the BDM Fishery Harvest Strategy to insert new wording under section 2.11.1.1 (Low Tier Catch-Based Decision Rule), specifically:
  - a. *For black teatfish, if the current fishing season's TAC is not fully caught, then up to 10% of the current fishing season's TAC, if not caught, can be carried over from the current fishing season to the next fishing season. The undercatch amount cannot be carried over for more than one fishing season.*



29. The RAG requested the wording be clarified to make it clear that only the amount that is undercaught up to 10% of the current fishing season's TAC can be carried over, not up to 10% of the current fishing season's TAC if any amount is undercaught. For example, if only 5% of the current fishing season's TAC is undercaught, then only the amount equating to that 5% can be carried over. The RAG also requested that the fishing season be specified.

**Action arising 7 – AFMA to update wording of the proposed amendment as requested by the RAG and circulate to members for their input prior to undertaking public consultation.**

30. The TSRA member questioned why the whole undercatch amount in a fishing season cannot be carried over. The Executive Officer clarified that 10% has been applied in other Commonwealth fisheries and is a precautionary starting point. The scientific members advised, that from a biological perspective, carrying over the whole undercatch amount in a fishing season to the next is unlikely to pose a sustainability risk for black teatfish. Traditional Inhabitant members supported pursuing this approach.

31. **The RAG recommended public consultation be undertaken on the proposed amendment, with the next meeting to further consider whether the whole undercatch amount in a fishing season can be carried over to the next season.**

## 8 Other business

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32. No other business was raised by members for discussion.

## 9 Next meeting

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33. The RAG noted that the next meeting will be held in Cairns from 17-18 September 2024. The meeting closed at 1330.

## List of attachments

**Attachment A – Adopted agenda**

**Attachment B – Presentation on WTO conditions**

**Attachment C – Five-Year Research Plan for Hand Collectables Fisheries for 2025/26 to 2029/30**

## Summary of actions arising from HCRAG 4

| Item # | Action   | Responsibility            |
|--------|--|---------------------------|
| 4.1    | Professor Steven Purcell to contact ADECAL to seek further information on the work undertaken with regards to the formulation of processing conversion factors for amberfish and prickly redfish.  | Professor Steven Purcell  |
| 4.2    | AFMA to write to DCCEEW to raise the RAG's concerns regarding the WTO conditions for the BDM Fishery.  | AFMA                      |
| 4.3    | DCCEEW to be invited to attend the next HCRAG meeting.   | AFMA                      |
| 4.4    | AFMA and the TSRA to develop a communications strategy to build awareness of WTO approval requirements and implications if they are not met.   | AFMA + TSRA               |
| 4.5    | The scope concerning collecting data on socio-economic indicators in the BDM Fishery to be placed on the agenda for discussion at the next meeting. To inform the development of the scope, Professor Steven Purcell to provide a presentation on the collection of social and economic data and information, and how this data and information can be used to inform the management of fisheries. | AFMA                      |
| 4.6    | AFMA to discuss with scientific members out-of-session the best approach for the review of MLS limits in the BDM Fishery.  | AFMA + Scientific Members |
| 4.7    | AFMA to update wording of the proposed amendment as requested by the RAG and circulate to members for their input prior to undertaking public consultation.  | AFMA                      |

## Summary of HCRAG 4 recommendations

| Agenda Item # | Recommendation   |
|---------------|--|
| 6             | The remaining members recommended the priorities detailed in Attachment C proceed to TSSAC for their consideration.  |
| 7             | The RAG recommended public consultation be undertaken on the proposed amendment, with the next meeting to further consider whether the whole undercatch amount in a fishing season can be carried over to the next season. |

## 4<sup>th</sup> meeting of the Hand Collectables Resource Assessment Group (HCRAg 4)

14 August 2024 – 0900-1200

Microsoft Teams (please refer to the meeting request for joining details)

### Agenda

| Agenda Item  | Action required | Speaker     | Time                      |
|--|-----------------|-------------|---------------------------|
| 1. Opening prayer, acknowledgement of country, welcome and apologies   | Information     | Chair       | <b>0900</b><br>4 minutes  |
| The Chair will welcome HCRAg members and observers to HCRAg 4.   |                 |             |                           |
| 2. Adoption of agenda  | Decision        | Chair       | <b>0904</b><br>1 minute   |
| The HCRAg is invited to consider and adopt the draft agenda.   |                 |             |                           |
| 3. Declarations of interests   | Decision        | Chair       | <b>0905</b><br>10 minutes |
| HCRAg members and observers are invited to declare any real or potential conflicts of interests and decide whether a member may or may not be present during the discussion of or decisions made on matters which are the subject of a conflict.   |                 |             |                           |
| 4. Actions arising from previous meetings  | Discussion      | AFMA        | <b>0915</b><br>5 minutes  |
| The HCRAg is invited to note the status of action items arising from previous meetings.  |                 |             |                           |
| 5. Status of Wildlife Trade Operation approval and CITES listings  | Information     | AFMA        | <b>0920</b><br>20 minutes |
| The HCRAg is invited to note the status of the re-assessment of the export approval for the Torres Strait Beche-de-mer Fishery (BDM Fishery) under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> , including the assessment of species that have been listed under the <i>Convention on International Trade in Endangered Species of Wild Fauna and Flora</i> . |                 |             |                           |
| 6. Research priorities for 2025/26   | Recommendation  | AFMA        | <b>0940</b><br>80 minutes |
| The HCRAg is invited to review the draft five-year research plan for Torres Strait hand collectable fisheries and recommend research priorities to the Torres Strait Scientific Advisory Committee for funding in 2025/26 and beyond. The HCRAg may also be asked to consider any proposals received as a result of a call for research released in May 2024.                              |                 |             |                           |
| 7. Review of the BDM Fishery Harvest Strategy  | Recommendation  | AFMA        | <b>1100</b><br>20 minutes |
| The HCRAg is invited to consider proposed amendments to the BDM Fishery Harvest Strategy to give effect to carryover of undercaught TAC for black teatfish.  |                 |             |                           |
| 8. Other business  | Discussion      | All members | <b>1120</b><br>5 minutes  |
| The HCRAg is invited to nominate any other business for discussion.  |                 |             |                           |
| 9. Next meeting  | Discussion      | AFMA        | <b>1125</b>               |

| Agenda Item  | Action required | Speaker | Time      |
|--|-----------------|---------|-----------|
| The HCRAAG is invited to discuss a suitable date for the next meeting. |                 |         | 5 minutes |

**The Chair must approve the attendance of all observers at the meeting. Individuals wishing to attend the meeting as an observer must contact AFMA ([fisheriesTI@afma.gov.au](mailto:fisheriesTI@afma.gov.au)).**

**The meeting will be recorded for the purpose of developing the meeting minutes and will be deleted once the meeting minutes have been finalised.**

# HCRAG

14 August 2024

Agenda Item 5 – Status of WTO approval and CITES listings



Australian Government

Australian Fisheries Management Authority





# What are you being asked to consider?

- Consider the latest Wildlife Trade Operation (WTO) conditions for the BDM Fishery
- Provide advice on how to best meet these conditions (e.g. inclusion in research plan)



# Standard reporting conditions

| Details   | Deadline           |
|---|--------------------|
| DCCEEW to be informed of any intended material changes to management arrangements | Ongoing            |
| DCCEEW to be informed of any legislative changes                                  | Ongoing            |
| Annual report in November, including catch and effort data                        | November each year |



# Research related conditions

| Details   | Deadline                |
|---|-------------------------|
| Processing conversion factors for amberfish – to be discussed with DCCEEW | 25 May 2025             |
| Survey of sea cucumber stocks in Eastern Torres Strait                    | Commence by May 2026    |
| ERA for BDM Fishery   | December 2026           |
| Population modelling for prickly redfish and amberfish                    | If want to increase TAC |





# Other conditions

| Details   | Deadline    |
|---|-------------|
| 15t TAC for prickly redfish, unless population modelling suggests otherwise     | Immediate   |
| 10t TAC for amberfish, unless population modelling suggests otherwise           | 25 May 2025 |
| Processing conversion factors for prickly redfish – to be discussed with DCCEEW | 25 May 2025 |
| Interagency discussions between AFMA and QDAF                                   | 25 May 2025 |
| Demonstrate TACs for prickly redfish and amberfish are appropriate              | 25 May 2025 |
| Manage prickly redfish as a middle-tier species – to be discussed with DCCEEW   | 25 May 2025 |



# Other conditions

| Details  | Deadline    |
|--|-------------|
| 50cm size limit for prickly redfish and amberfish, unless scientific evidence suggests otherwise – to be discussed with DCCEEW | 25 May 2026 |
| Review spatial management for effectiveness in managing risk of localised depletion  | 25 May 2026 |



# Esso

# Five-year Research Plan 2025/26 – 2029/30

## Torres Strait Hand Collectables Fisheries

Beche-de-mer  
Pearl shell  
Crab  
Trochus



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

**14 August 2024**

## **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 2025/26 to 2029/30. 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 2025/26 – 2029/30.**

| Project   | Objectives and component tasks   | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings | Other funding bodies | Evaluation                     |                        |       |
|---|--|--|---------|---------|---------|---------|--------------------------|----------------------|--------------------------------|------------------------|-------|
|   |  | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |                          |                      | Priority essential / desirable | Priority ranking (1-5) | Theme |
| <b>APPROVED RESEARCH (RECENTLY COMPLETED OR UNDERWAY)</b>   |  |  |         |         |         |         |                          |                      |                                |                        |       |
| Research to support Beche-de-mer fisheries in Torres Strait (AFMA project 2021-0815)  | <ol style="list-style-type: none"> <li>Undertake new stock assessment modelling for white teatfish to allow species TAC to be reviewed under the Torres Strait Beche-de-mer Harvest Strategy.</li> <li>Develop processing conversion ratios for curryfish, with industry to undertake the sampling process.</li> </ol>   | -  | -       | -       | -       | -       | Completed June 2023      | CSIRO in-kind        | Essential                      |                        | 1     |
| Black teatfish size sampling and stock assessment update (AFMA project 2023-0800)   | <ol style="list-style-type: none"> <li>Advise on size frequency sampling program for black teatfish during the 2023 fishery opening.</li> <li>Re-run black teatfish model using updated data: new data (size frequency), historical size frequency (survey) data and fishery catch data.</li> </ol>  | -  | -       | -       | -       | -       | Completed June 2024      | CSIRO in-kind        | Essential                      |                        | 1     |
| Modelling climate change impacts on key fisheries resources in the Torres Strait to co-develop adaptation and mitigation strategies | <ol style="list-style-type: none"> <li>Provide up-to-date evidence-based information to fishers and managers about current and future risks to fisheries associated with climate change.</li> <li>Investigate the impacts of climate change scenarios on fisheries/species in the short (2 year), medium (5 year) and long-term (20 years), also considering socio-economic and livelihood metrics.</li> <li>Scientific results will be used to inform stakeholders and co-develop adaptation strategies via workshops.</li> </ol> | \$178k   | \$29k   | -       | -       | -       | Commenced November 2023  | Funded by the TSRA   | Essential                      |                        | 1     |

| Project   | Objectives and component tasks   | Year project to be carried out and indicative cost |          |          |          |          | Notes on project timings   | Other funding bodies                 | Evaluation  |                        |       |
|---|--|--|----------|----------|----------|----------|--|--------------------------------------|---|------------------------|-------|
|   |  | 2025/26  | 2026/27  | 2027/28  | 2028/29  | 2029/30  |  |                                      | Priority essential / desirable                                      | Priority ranking (1-5) | Theme |
| Black teatfish size sampling program  | 1. Representative sampling to collect size and weight frequencies during the black teatfish openings.  | \$30-40k   | \$30-40k | \$30-40k | \$30-40k | \$30-40k | Annual sampling to be undertaken by the AFMA observer program, in partnership with communities   | Funded via the AFMA fisheries budget | Essential   |                        | 1     |
| <b>RESEARCH NEEDS FOR 2025/26</b>   |  |  |          |          |          |          |  |                                      |   |                        |       |
| Scientific stock survey of sea cucumber stocks in the eastern Torres Strait | 1. Undertake a survey of sea cucumber stocks in the eastern region of the BDM Fishery. The survey is to focus on commercially important species, including but not limited to black teatfish, blackfish species, curryfish species, deepwater redfish, greenfish, prickly redfish, surf redfish and white teatfish. The survey is to include deep-water habitats (>20 metres). Survey outputs are to be available in a form suitable for use under the BDM Fishery Harvest Strategy. Given the BDM Fishery is a multi-species fishery, survey priority should be given to those target species which are actively fished (in particular those where annual catch is approaching the TAC), closed species and where there are concerns as to the uncertainty of a species stock status. Of important note, there are a number of species (deepwater blackfish, deepwater redfish, hairy blackfish and surf redfish) |  |          |          |          |          | Condition of BDM Fishery WTO approval, to commence by May 2026<br><br>AFMA to seek advice from DCCEEW on species that should be targeted in the survey and whether alternative approach (e.g. prickly redfish population modelling, MSE testing) can be considered in lieu of a survey | Researcher in-kind                   | Essential, pending advice from DCCEEW (see notes on project timing) | 1                      | 1     |

| Project                                 | Objectives and component tasks   | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings  | Other funding bodies | Evaluation  |                        |       |
|---|--|--|---------|---------|---------|---------|---|----------------------|---|------------------------|-------|
|   |  | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |   |                      | Priority essential / desirable                                      | Priority ranking (1-5) | Theme |
|   | <p>which are not effectively surveyed under the existing protocols. Proponents should consider this in preparing a proposal.</p> <ol style="list-style-type: none"> <li>2. Produce stock size estimates and distribution data, and assess the fishery status for each sea cucumber stock in the eastern region of the BDM Fishery. Again, given the BDM Fishery is a multi-species fishery, priority for stock size estimates should be given to target species which are actively fished (in particular those where annual catch is approaching the TAC), closed species and where there are concerns as to the uncertainty of a species stock status.</li> <li>3. Use survey data and apply the BDM Fishery Harvest Strategy to make recommendations on total allowable catches and re-opening of closed species.</li> <li>4. Map important habitat variables, especially those relevant to fishery production.</li> </ol> |  |         |         |         |         |   |                      |   |                        |       |
| Population modelling on prickly redfish | <ol style="list-style-type: none"> <li>1. Undertake new stock assessment modelling for prickly redfish to allow species TAC to be reviewed under the Torres Strait Beche-de-mer Harvest Strategy.</li> </ol>   |  |         |         |         |         | AFMA to seek advice from DCCEEW on whether alternative approach (e.g. prickly redfish population modelling, MSE testing) can be considered in | Researcher in-kind   | Essential, pending advice from DCCEEW (see notes on project timing) | 2                      | 1     |



| Project   | Objectives and component tasks  | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings  | Other funding bodies | Evaluation  |                        |       |
|---|---|--|---------|---------|---------|---------|---|----------------------|---|------------------------|-------|
|   |   | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |   |                      | Priority essential / desirable                                      | Priority ranking (1-5) | Theme |
|   |   |  |         |         |         |         | lieu of a survey  |                      |   |                        |       |
| Management Strategy Evaluation of the Torres Strait Beche-de-mer Fishery Harvest Strategy | <ol style="list-style-type: none"> <li>Collate all data and biological information.</li> <li>If sufficient information is available, define species-specific reference points for key species and determine the current status of stocks in relation to those species-specific reference points.</li> <li>Revise and update the spatial multi-species operating model developed for earlier projects (or construct a new model).</li> <li>Use Management Strategy Evaluation (MSE) to evaluate how well the Torres Strait Beche-de-mer (BDM) Fishery Harvest Strategy achieves the pre-specified objectives, including performance against the new species-specific reference points as appropriate.</li> <li>In consultation with stakeholders, use the MSE framework to investigate ways to improve the current BDM Fishery Harvest Strategy. For example, investigate options for BDM Fishery licence holders to make arrangements for a process that would allow the under-catch of the black teatfish TAC each year to be harvested in a way that disseminates benefits broadly, while safeguarding against an over-catch of the TAC.</li> </ol> |  |         |         |         |         | Requires 3-5 years of BDM Fishery Harvest Strategy implementation, Harvest Strategy implemented in 2020<br><br>AFMA to seek advice from DCCEEW on whether alternative approach (e.g. prickly redfish population modelling, MSE testing) can be considered in lieu of a survey | Researcher in-kind   | Essential, pending advice from DCCEEW (see notes on project timing) | 2                      | 1, 2  |
| Ecological Risk Assessment for  | <ol style="list-style-type: none"> <li>Conduct an Ecological Risk Assessment (ERA) for the</li> </ol>   |  |         |         |         |         | Condition of BDM Fishery  | To be funded via     | Essential   | 1                      | 1     |

| Project  | Objectives and component tasks   | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings   | Other funding bodies   | Evaluation  |                        |       |
|--|--|--|---------|---------|---------|---------|--|--|---|------------------------|-------|
|  |  | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |  |  | Priority essential / desirable  | Priority ranking (1-5) | Theme |
| the Torres Strait Beche-de-mer Fishery   | Torres Strait Beche-de-mer Fishery.  |  |         |         |         |         | WTO approval. Last ERA delivered December 2021   | the AFMA fisheries budget<br>Researcher in-kind                |   |                        |       |
| Scientific stock survey of sandfish and other sea cucumber species on Warrior Reef | <ol style="list-style-type: none"> <li>1. Undertake a survey of sea cucumber stocks on Warrior Reef area with a focus on sandfish and other commercially important sea cucumber species (e.g., deepwater redfish and hairy blackfish). Observations on other commercially relevant hand collectable species known to occur on Warrior Reef (e.g., trochus, pearl shell) should also be collected where possible. Survey outputs are to be available in a form suitable for use under the BDM Fishery Harvest Strategy.</li> <li>2. Seek to collaborate with the PNG National Fisheries Authority to undertake a full-scale survey, to include the proportion of the sandfish stock found on Warrior Reef in the PNG Western Province Beche-de-mer Fishery.</li> <li>3. Produce stock size estimates and distribution data, and assess the fishery status for each sea cucumber stock on Warrior Reef.</li> <li>4. Use survey data and apply the BDM Fishery Harvest Strategy to make recommendations on total allowable catches and re-opening of closed species.</li> </ol> |  |         |         |         |         | Subject to confirmation of support from lama and Tudu Island Traditional Owners, GBK, fishers and other relevant stakeholders. Initial engagement to be led by the TSRA regarding support for the project to be followed by subsequent consultation by AFMA on the draft project scope and potentially proposal following HCRAG review | Co-funding to be sought from the PNG NFA<br>Researcher in-kind | Essential, pending funding decision on proposals received for 2024/25 | 3                      | 1     |

| Project  | Objectives and component tasks   | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings   | Other funding bodies | Evaluation                     |                        |       |
|--|--|--|---------|---------|---------|---------|--|----------------------|--------------------------------|------------------------|-------|
|  |  | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |  |                      | Priority essential / desirable | Priority ranking (1-5) | Theme |
|  | <ol style="list-style-type: none"> <li>5. Map important habitat variables, especially those relevant to fishery production.</li> <li>6. Seek to engage Torres Strait Islanders directly in the project, including providing for economic opportunities (e.g., employment).</li> </ol>  |  |         |         |         |         |  |                      |                                |                        |       |
| Collecting data on socio-economic indicators in the Torres Strait Beche-de-mer Fishery | <ol style="list-style-type: none"> <li>1. In consultation with the HCRAG and HCWG, determine the key social and economic data and information needs for the Torres Strait Beche-de-mer (BDM) Fishery, including the purpose/objectives for collecting it, how it is to be used and the frequency of collection.</li> <li>2. Design a practical and cost-effective data collection method (e.g. interview-based survey of fishers and fishery workers), to collect the social and economic data and information needs identified for the BDM Fishery.</li> <li>3. Collect the identified social and economic data and information using the designed method.</li> <li>4. Provide a report on the outcomes of the data collection program, including: <ol style="list-style-type: none"> <li>a. analyses of the collected data and information. For example, an analysis of differences in key socio-economic indicators (e.g. dependency, fishery income, target species and catch rates) among fisher types and locations within the fishery. Analyses to be undertaken to be informed by advice from the HCRAG and HCWG;</li> </ol> </li> </ol> |  |         |         |         |         | Project may fall within the remit of ARC. Scope to be discussed by the HCRAG in September 2024 | Researcher in-kind   | Essential                      | 3                      | 2     |

| Project  | Objectives and component tasks   | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings   | Other funding bodies   | Evaluation   |                        |       |
|--|--|--|---------|---------|---------|---------|--|--|--|------------------------|-------|
|  |  | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |  |  | Priority essential / desirable                                 | Priority ranking (1-5) | Theme |
|  | <ul style="list-style-type: none"> <li>b. an assessment of how the data collection method met the objectives;</li> <li>c. how the social and economic data and information collected is to be used/applied;</li> <li>d. recommendations for further extension (e.g. incorporation into the management framework for the BDM Fishery);</li> <li>e. future data collection needs.</li> </ul> |  |         |         |         |         |  |  |  |                        |       |
| Black teatfish size sampling data analysis                   | <ul style="list-style-type: none"> <li>1. Analysis of size data collected during black teatfish openings.</li> </ul>   |  |         |         |         |         | Frequency of analysis from 2026/27 onwards to be reviewed by the HCRAG in September 2024 | May be funded via the AFMA fisheries budget, depending on cost | Essential  | 3                      | 1     |
| Review of minimum legal size (MLS) limits in the BDM Fishery | <ul style="list-style-type: none"> <li>1. Undertake a review of literature relevant to the setting of minimum legal size (MLS) limits in the BDM Fishery, and recommend changes as appropriate.</li> <li>2. Seasonality of black teatfish.</li> </ul>  |  |         |         |         |         | Approach to be reviewed by the HCRAG in September 2024                                   | May be funded via the AFMA fisheries budget, depending on cost | Essential  | Not assigned           | 1     |
| Processing conversion factors for amberfish                  | <ul style="list-style-type: none"> <li>1. Formulate processing conversion factors for amberfish.</li> </ul>  |  |         |         |         |         | Condition of BDM Fishery WTO approval, to be implemented by May 2025                     | Researcher in-kind   | Desirable, pending review of research from other jurisdictions | 1                      | 1     |
| Targeted scientific stock                                    | <ul style="list-style-type: none"> <li>1. Undertake targeted small-scale surveys for those species which are not surveyed effectively</li> </ul>   |  |         |         |         |         | Not critical for specific year   | Researcher in-kind   | Desirable  | 1                      | 1     |

| Project   | Objectives and component tasks  | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings  | Other funding bodies | Evaluation                     |                        |       |
|---|---|--|---------|---------|---------|---------|---|----------------------|--------------------------------|------------------------|-------|
|   |   | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |   |                      | Priority essential / desirable | Priority ranking (1-5) | Theme |
| survey of sea cucumber stocks in the eastern Torres Strait  | using the current survey methodology.   |  |         |         |         |         |   |                      |                                |                        |       |
| Spawning period for black teatfish  | 1. Conduct gonad staging of black teatfish to determine the species' spawning period/s in the Torres Strait.  |  |         |         |         |         | Not critical for specific year  | Researcher in-kind   | Desirable                      | 1                      | 1     |
| Understanding biological parameters of sea cucumber species, including growth, mortality, size and breeding seasonality | 1. Fill identified gaps in knowledge of biological parameters of sea cucumber species and investigate options for collaborative research. The MSE research project (listed above), if undertaken, will inform the parameters that are a priority. |  |         |         |         |         | Not critical for specific year<br><br>To be addressed as the need arises. Conservative proxies currently in use. Research need is best addressed through other avenues such as PhD projects and through QLDRAC given similar projects were recently funded by FRDC for finfish species in Queensland. Recent research undertaken on | Researcher in-kind   | Desirable                      | 1                      | 1     |

| Project  | Objectives and component tasks   | Year project to be carried out and indicative cost |         |         |         |         | Notes on project timings   | Other funding bodies   | Evaluation                           |                        |       |
|--|--|--|---------|---------|---------|---------|--|--|--------------------------------------|------------------------|-------|
|  |  | 2025/26  | 2026/27 | 2027/28 | 2028/29 | 2029/30 |  |  | Priority essential / desirable       | Priority ranking (1-5) | Theme |
|  |  |  |         |         |         |         | some parameters, to be considered further by HCRAG   |  |                                      |                        |       |
| Supply chain   | 1. Better understanding of the value chains of sea cucumbers and sea cucumber products from Torres Strait and opportunities for improving economic returns to fishers. |  |         |         |         |         | Not critical for specific year   | Researcher in-kind   | Desirable                            | 1                      | 2     |
| Ecological Risk Assessment for the Torres Strait Pearl Shell Fishery | 1. Conduct an Ecological Risk Assessment (ERA) for the Torres Strait Pearl Shell Fishery (TSPF).   |  |         |         |         |         | Not critical for specific year, only needed when effort in the TSPF increases above negligible levels. There is some information on pearl shell stock estimates from tropical rock lobster surveys | To be funded via the AFMA fisheries budget<br>Researcher in-kind | Desirable (only once TSPF is active) | Not assigned           | 1     |