## PZJA Torres Strait Finfish Fishery Working Group

**FFWG Meeting** 

7-8 December 2022

Pearls Building Thursday Island

**Meeting Record** 

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

https://www.pzja.gov.au/torres-strait-finfish-groups



Australian Government Australian Fisheries Management Authority

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## **1** Preliminaries

## 1.1 Acknowledgement of Traditional Owners, Welcome, and Apologies

- The 7-8 December 2022 meeting of the Protected Zone Joint Authority (PZJA) Torres Strait Finfish Fishery Working Group (FFWG, WG hereafter) commenced at 0845 hrs. WG Chair, Mr Nicholas McClean, welcomed members and observers and acknowledged the Traditional Owners of the various lands of which members were participating from.
- 2. All members were present at the commencement of the meeting.
- 3. Apologies were received from permanent observers: the representative for Malu Lamar Ned David, industry observer Egon Stewart, and a representative for PNG NFA.
- 4. The Chair sought consent from the WG to record the meeting for the purpose of ensuring an accurate record. The Chair advised that the recording is kept secure and is deleted once the final meeting record is published. There were no objections to the meeting being recorded.
- 5. The WG held a minute's silence to pay their respects, acknowledging the passing of a community member whose funeral was being held on the day of the meeting.

### 1.2 Adoption of Agenda

- 6. The WG were invited to adopt the draft agenda **(Attachment A)**. Members requested two items be added to the agenda for discussion under 'other business':
  - Mr Rocky Stephen to provide an update on biological sampling consultation.
  - A proposed 'bait net' fishery
- 7. The WG agreed to these additional items and adopted the draft agenda with no further changes.

### **1.3** Declarations of Interests

- 8. Consistent with the Protected Zone Joint Authority Fisheries Management Paper No. 1 (FMP 1), which guides the operation and administration of PZJA consultative forums, the WG noted the requirement to declare all interests, perceived or real. Each member declared their interest in the fishery as documented in Table 1 (below). In line with the Australian Fisheries Management Authority (AFMA) standard for declaring potential conflicts of interest in Commonwealth WGs and RAGs to best protect the integrity of advice, members with grouped interests (industry, research, TSRA, AFMA) were sequentially asked to leave the room to allow the remaining WG members to:
  - freely comment on the declared interests
  - agree if the interests precluded the members from participating in any discussions and
  - agree to any methods to treat the declared interest (e.g. the member provides preliminary input but leaves the room when any advice is formed).
- 9. The WG noted that, in addition to the process under this item, it remained the obligation of all members to update their declarations throughout the meeting as required.
- 10. The WG then discussed how to best acknowledge the Traditional Ownership status of Traditional

Inhabitant (TIB) members in the meeting record. It was suggested to include this information in the declaration of interests section for all future meetings. TIB members raised the importance of involving Traditional Owners from each cluster nation across all PZJA advisory groups. TIB members advised that it should be clearly defined during advisory group meetings whether a particular member is speaking as a TIB fisher providing expert advice, or speaking as a Traditional Owner representing their cluster nation.

11. The WG agreed to include the Traditional Ownership status of TIB members within the register of declared interests in **Table 1**.

#### **Research interests**

- 12. Members with declared research interests left the room to enable free discussion of these interests (Nicholas McClean, David Brewer, Michael O'Neill, Trevor Hutton).
- 13. The remaining WG members agreed that there may be perceived conflict of interests in relation to providing advice on future research priorities. However, it was noted that these members were appointed to the WG for their scientific expertise.
- 14. Noting that potential conflicts need to be monitored on an ongoing basis, the remaining WG members agreed that research members should participate in all agenda items and advice being formed. However, members may be asked to leave the room during the final recommendation stage for research priorities should a perceived conflict of interest be identified.
- 15. Members with research interests re-joined the WG and were advised of the remaining members' consideration of their declared interests.

#### Industry members' interests

- 16. Members with declared commercial fishing interests in the fishery left the room to enable free discussion of these interests (Rocky Stephen, Harry Nona, Gavin Mosby, Terrence Whap, Nicholas Richards).
- 17. The remaining members agreed that industry members are required for their expertise throughout all agenda items, and that their advice represents the fishery as a whole.
- 18. The final TAC recommendations was identified as one potential agenda item where a conflict may arise. However, it was noted that the current catch allowance system is an 'Olympic TAC', which limits the perceived benefit to individual operators.
- 19. The remaining members agreed that industry members should be present during all items of discussion, noting that perceived conflicts of interest must be monitored throughout the meeting.
- 20. Members with commercial fishing interests re-joined the WG and were advised of the remaining members' consideration of their declared interests.

#### **Government agencies interests**

- 21. Members and observers with interests related to the business of the TSRA, AFMA, QDAF, and ABARES left the meeting (Chris Boon, Emma Freeman, Rocky Stephen, Nicholas Richards, Jeff Ikin, Brooke D'Alberto).
- 22. The remaining WG members discussed the declared interests of the government agency members. It was noted that the TSRA had declared their holdings of Sunset licences and revenue generated from leasing these entitlements on behalf of Traditional Inhabitants.
- 23. Consistent with advice from earlier WGs and RAGs, it was noted that it is important to maintainan

awareness of this potential perceived conflict and ensure members acted in the interest of the fishery.

- 24. The remaining members noted AFMAs interest was managing the fishery in a sustainable way, guided by the objectives of the Torres Strait Fisheries Act 1984.
- 25. The WG agreed that government agency members should be present during the discussion and final recommendations of all agenda items.
- 26. Government agency members re-joined the WG and were advised of the remaining members' consideration of their declared interests.

**Table 1:** Attendance and declarations of interests of members and observers to the 7-8 December 2022meeting of the PZJA Finfish Fishery Working Group.

Name	Position	Declaration of interest		
Nicholas McCLean	Independent Chair	<ul> <li>Fisheries social science researcher working at University of Technology Sydney</li> <li>Currently undertaking FRDC funded research to develop an Indigenous engagement strategy for Commonwealth fisheries</li> <li>As a fisheries consultant, may apply for funds for Torres Strait fishery research projects in the future where consistent with his role as Chair.</li> </ul>		
Rocky Stephen	Traditional Inhabitant Industry Member	<ul> <li>Traditional Owner (Kemer Kemer Meriam), Ugar.</li> <li>Councillor for Ugar.</li> <li>Chairperson of Kos and Abob Fisheries Ugar.</li> <li>Works with brother in a commercial fishing business on Ugar (Brother Bear Fisheries).</li> <li>Eastern cluster representative on the PZJA Finfish RAG &amp; Working Group.</li> <li>Traditional inhabitant member - Torres Strait Prawn Management Advisory Committee.</li> <li>TSRA Board member for Ugar</li> <li>TSRA Finfish Quota Management Committee.</li> <li>TSRA Board Fisheries Advisory Committee member.</li> <li>Member of Zenadth Kes Fisheries company.</li> </ul>		
Gavin Mosby	Traditional Inhabitant Industry member	<ul> <li>Traditional Owner (Kulkalgal), Masigal.</li> <li>TIB licence holder</li> <li>Member of the TS Prawn MAC</li> <li>ZK fisheries board member</li> <li>Member of local fishing association</li> </ul>		
Harry Nona	Traditional inhabitant Industry member	<ul> <li>Traditional Owner (Kaureg).</li> <li>Fulltime fishermen</li> <li>TIB licence holder</li> </ul>		
Terrence Whap	Traditional inhabitant Industry member	<ul> <li>Traditional Owner (Maluialgal), Mabuiag.</li> <li>Member of the PZJA TRL working group</li> </ul>		

		<ul> <li>President of the local fisherman's association in Maluialgal</li> <li>PBC Director</li> <li>TSRA Board Member and Ranger</li> </ul>
Michael O'Neill	Scientific Member	<ul> <li>Principal fisheries scientist working with the Queensland Government (Department of Agriculture and Fisheries, Fisheries Queensland) in the stock assessment program.</li> <li>Principal scientist for TSSAC three-year project for Spanish mackerel stock assessment work.</li> <li>Coinvestigator on the TSSAC finfish age-length monitoring project.</li> <li>Member of PZJA Finfish RAG and Working Group.</li> </ul>
David Brewer	Scientific Member	<ul> <li>Director – Upwelling P/L (David Brewer Consulting).</li> <li>Chair - Torres Strait Finfish RAG</li> <li>Scientific member – Torres Strait Finfish Working Group</li> <li>Scientific member – Northern Prawn Fishery RAG</li> <li>Current consultancies with Quandamooka Yoolooburrabee Aboriginal Corporation, Newcrest Mining Ltd.</li> <li>Co-investigator on the current Torres Strait 'Non- commercial catch' project.</li> <li>As a fisheries consultant, may apply for funds for Torres Strait fishery research projects in the future where consistent with his role as Chair.</li> </ul>
Jeffery Ikin	QDAF member	<ul> <li>Manager of the east coast Spanish mackerel fishery.</li> <li>No pecuniary interests or otherwise.</li> </ul>
Chris Boon	AFMA Member	• Employed by AFMA, no pecuniary interests or otherwise.
Elissa Mastroianni	Executive Officer (AFMA)	• Employed by AFMA, no pecuniary interests or otherwise.
Nicholas Richards	TSRA Member	<ul> <li>Employed by TSRA – Project Manager (Fisheries).</li> <li>No pecuniary or vested interests in Torres Strait fisheries as an individual.</li> <li>Notes that TSRA holds finfish fishing licences on behalf of Traditional Inhabitants.</li> </ul>
Permanent Observe	rs	
Trevor Hutton	Scientific Permanent Observer (CSIRO)	<ul> <li>Employed by CSIRO.</li> <li>Principle investigator for past FF harvest strategy project.</li> <li>Could have interests relating to future research projects within the Finfish Fishery.</li> </ul>
Casual Observers		
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Emma Freeman	AFMA	• Employed by AFMA, no pecuniary interests or otherwise.
Brooke D'Alberto	ABARES	• Employed by ABARES, no pecuniary interests or otherwise.

### **1.1** Review of Action Items from Previous WGs

- 27. The WG noted an update from the WG AFMA member on the status of action item as detailed in the agenda paper.
- 28. The AFMA member advised that the one outstanding action item, *AFMA to arrange a Biosecurity officer to present to the WG on invasive fish species*, was unable to be actioned for the current meeting. This was due to the availability of Biosecurity staff at the time of the meeting.
- 29. The WG agreed that this item remains an important action to retain. It was noted that advice has been received from the national Biosecurity agency that an officer will be available to attend a future meeting.
- 30. The WG noted additional advice from a TIB member that TSRA Rangers are currently conducting routine monitoring for invasive aquatic species throughout the Torres Strait. The WG expressed interest in organising for a TSRA representative to present on this project work at a future meeting. It was further suggested that monitoring data from this program could be reviewed by the Finfish Fishery Resource Advisory Group (RAG).
- 31. The TSRA member agreed to an action item to liaise with Stanley Lui of the TSRA Ranger program to organise a presentation on invasive species monitoring for a future meeting.

**Action 1:** TSRA member to liaise with Stanley Lui of the TSRA Ranger program to organise a presentation on invasive species monitoring for a future meeting.

- 32. The WG noted advice from a TIB member on two further action items to be considered by the WG:
  - Dr Leo Dutra (CSIRO) to present on current Torres Strait climate change research in person at a future meeting.
  - TSRA to develop a communications plan to disseminate fisheries information into communities.
- 33. The WG noted that a future presentation from Dr Leo Dutra is an outstanding action item from the RAG. The WG noted that this item would also offer significant relevance to the WG and agreed that this could be pursued for a future meeting. It was raised that such a presentation would offer a sound basis for further community consultation. The harvest strategy workshop scheduled for March 2023 was flagged as a potential option, subject to availability of Dr Dutra and workshop programming.
- 34. TIB members also identified a future need for an infographic poster to summarise relevant climate change research as an additional communications tool for community engagement. The WG noted that this could be pursued with relevant researchers in collaboration with the TSRA on an ad-hoc basis in 2023.
- 35. The WG then discussed a future communications plan to be developed by the TSRA through the Fishery Advisory Committee. This was identified as a need by TIB members to develop a consistent and efficient system for communicating fisheries advice and information to communities. TIB members flagged a need to ensure adequate Traditional Owner representation when engaging in consultations

across all fisheries. The TSRA member advised the WG that the proposed communications plan will be shared with all PZJA advisory groups to provide input.

## **1.2** Out of Session Correspondence

36. The WG noted the out-of-session correspondence since the last WG meeting (25 November 2021) as detailed in the agenda paper. The WG noted that minor comments were received on the previous meeting's record, with amendments made accordingly. The WG agreed to accept the previous meeting record.

## 2 Updates from Members

### 2.1 Industry and Scientific Updates

- 37. Traditional Inhabitant members provided the following updates to the WG on developments within the Torres Strait Finfish Fishery since the last major WG meeting (25 November 2021):
  - a) Reports from the Maluligal and Kaiwalagal Kaureg clusters that there are ambitions to extend the recently opened 'western line' area to provide additional fishing opportunity to these communities. The WG noted the intention from a TIB member to initiate discussions within these Cluster Nations to explore the option to open these waters to line fishing (reef line), noting that Spanish mackerel fishing is currently permitted in this area.

Advice was sought from scientific members on what is required to ensure the sustainability of this proposed activity. The WG noted that high quality catch data would allow sustainability to be monitored. Spatial surveys of species distribution would also improve upon the current understanding of the coral trout stock, noting Traditional knowledge of the varying behaviour between individual species.

The WG supported the ambition of TIB members to engage in future community consultation and education to explore the proposed opening of the Reef Line fishery in Maluligal and Kaiwalagal Kaureg waters.

b) There is a need for further community consultation with TIB coral trout fishers and receivers to support the collection of individual species data. The WG noted that the majority of catch data for coral trout currently received through the Fish Receiver System is 'pooled' data comprising the four main species. The AFMA member offered to provide laminated identification guides to support fishers and receivers report coral trout by individual species (to be provided at future consultation meetings).

The WG noted further advice from TIB members that daily logbook reporting should continue to be endorsed during community consultation, with the intention to introduce mandatory logbook reporting for the TIB sector. This could be addressed though an 'all in one' logbook/CDR form as discussed at FFRAG 12 meeting. This was highlighted due to the identified data need for the fishery to improve upon the available TIB catch data. Such data would be made available for a future stock assessment for coral trout.

c) TIB members are collaborating with the TSRA on building a list of key stakeholders for future consultations. TIB members also identified an ambition to investigate how to incorporate Traditional knowledge into future harvest strategies. The WG noted advice from a scientific

member that an example of a fishery which is planning to incorporate Traditional Knowledge into a harvest strategy is the Morton Bay Traditional pearl shell fishery (Quandamooka people).

- 38. The WG noted the following updates from scientific members:
  - a) There is research currently being conducted in the QLD east coast fisheries, focussing on the following subjects:
    - Close-kin mark-recapture study (index of abundance for Spanish mackerel).
    - The application of VMS data to improve upon CPUE analysis.
    - Shark depredation.
  - b) New recreational monitoring tools are also being investigated in QLD, such as:
    - Boat ramp cameras to quantify effort.
    - Utilising satellite data.
    - Further development of recreation fishing Apps (including for shark depredation).

## 2.2 Government Agencies Update

#### AFMA update

39. The WG noted AFMA updates as detailed in the agenda paper. The WG considered the following updates in detail:

#### WTO approval

The WG noted that the 2022 Wildlife Trade Operation annual report was submitted on 1 November 2022, for the current WTO approval which expires on 30 November 2023. The WG noted that condition 8 of the approval, to develop a harvest strategy for the finfish fishery, is yet to be resolved. The WG agreed that adequate meeting time should be allocated to this agenda item on day two of the meeting.

The WG noted that condition 6 of the WTO, to review current management arrangements for the take of sharks, also requires final review within the current WTO approval period. The WG agreed that as the current arrangements are in line (as practicable) with Commonwealth best practice, that further discussion on this agenda item during the current meeting should be considered a low priority amongst other agenda items.

#### Proposed Torres Strait climate change project

Since the time that the meeting papers were released, there are no further updates on the proposed Torres Strait climate change project, which is pending a funding decision from the FRDC. The AFMA member agreed to inform the WG OOS on any further updates for this project as they become available.

#### Community consultation on commercial fishing without a boat

The WG noted that AFMA is conducted a round of community consultation in June-September 2022 to discuss the proposed development of a licence for Traditional Inhabitants to fish without the use of a boat. The WG expressed interest in review a report from AFMA once the consultations are completed, noting that one community is yet to be consulted (Ugar). TIB

members endorsed the potential benefits of such a license, including increased opportunity for women and young people to participate in the industry. However, it was raised that any such system must be tailored to suit different families and communities and ensure that it can co-exist with existing cultural values and Native Title considerations.

#### **QDAF** Update

40. The WG noted the following updates from the QDAF member:

#### East Coast Spanish Mackerel Fishery

The WG noted that the 2020 stock assessment for the QLD east coast Spanish mackerel fishery was released in December 2021. Two rounds of public consultation were conducted in 2022 to appraise various management options in response to an estimated stock biomass of 17%. The resultant management arrangements were implemented in October 2022, which included closures to protect against the overharvesting of spawning fish. A second round of management arrangements are due to be introduced on 1 July 2023, included reduced recreational and commercial catch limits. Future decision making for the fishery will be guided by the East coast Spanish mackerel fishery harvest strategy 2023–2028 (provided in the meeting papers).

The WG also noted updates regarding black jewfish management, the United Nations Reef Review, and developments in the QDAF fisheries reform program. Items of key interest included the United Nations report suggesting phasing out gillnet fishing in the GBR Marine Park, monitoring of bycatch in the recreational sector, and a review of coral harvesting.

#### TSRA update

41. The WG noted the following updates from the TSRA member:

#### The WAPIL project (Fishing for our Future)

The WG noted that progress that stalled significantly, mostly due to land access issues for facilities. The program is being reviewed, with the objective to broaden the scope of the program to include seafood processing and business skills development. Changes to the program are to be announced in early 2023.

#### Torres Strait Climate Change Study

The WG noted that advice is pending from the FRDC regarding co-funding approval for the proposed Torres Strait climate change study (CSIRO). The TSRA remains committed to provide \$500,000 funding should the project be approved for funding by the FRDC.

#### ABARES observer update

42. The WG noted the following updates from the ABARES observer:

#### Fishery Status Reports 2022

The ABARES fishery status reports for 2022 have been released and distributed to members. Chapter 15 of the reports covers the Torres Strait Finfish Fishery. Coral trout and Spanish mackerel are both listed as not subjected to overfishing and not overfished. However, it was noted that due to the length of time since the last formal stock assessment, the status for coral trout is almost becoming classed as 'uncertain'.

The WG noted that while the updated standardised CPUE time series for coral trout adds certainty to the stock status, there is an increased priority to either review the preliminary assessment conducted in 2019 or undertake a new assessment for the fishery.

## 2.3 Papua New Guinea National Fisheries Authority Update

43. The WG noted that PNG NFA were unable to attend the meeting and that no update was provided.

## 2.4 Native Title Update

- 44. The WG noted that a representative for Malu Lamar was unable to attend the meeting, and that no update was provided.
- 45. The WG acknowledged the recent native title claim in which the Federal Court recognised a large area of land and sea in the Torres Strait/Cape York region as belonging to the Kemer Kemer Meriam and Kulkalgal Nations and Kaurareg, Ankamuthi and Gudang Yadhaykenu people.

## **3** Total Allowable Catch Advice

### 3.1 Spanish Mackerel Total Allowable Catch Advice for the 2023-24 Season

#### Reviewing the 2022 stock assessment results and recommendations from FFRAG 12

- 46. The WG noted a presentation by scientific member Dr Michael O'Neill under the funded project "*Torres Strait Spanish mackerel stock assessment*" (project number 200815) (**Attachment B**). This presentation included Recommended Biological Catch advice received from FFRAG 12 (3-4 Nov 2022).
- 47. The WG noted that the median 2021-22 spawning biomass/unfished biomass derived from the 2022 stock assessment was **31%** (custom model). This is an increase in estimated biomass compared to 29% in 2020-21. This follows an upward trend since an estimated biomass of 23% in 2019. The WG noted the standardised catch rates have continued to improve throughout this period.
- 48. The WG noted Dr O'Neill's progress regarding the appraisal of transitioning to a stock synthesis modelbased assessment beyond 2023. The WG supported the workplan for a RAG scientific sub-group to meet in early 2023 to review and discuss the final considerations in the development of a future stocksynthesis assessment.
- 49. The WG noted that the stock assessment and RBC calculation process was the same as the process used by the RAG in 2021, whereby the RAG endorsed a range of data inputs and treatments. Six individual stock assessment model runs were conducted based on these inputs.
- 50. Five potential RBC figures (**Table 2**) were derived from the mean of the results from the six stock assessment model runs. These figures represent a series of fishing mortality 'F' values which denote different 'rebuilding' scenarios, ranging from maximum sustainable yield (MSY) to F60 (rebuild stock to 60% of virgin biomass). These scenarios were simulated over a projected 12-year timeframe.

**Table 2:** RBC options considered by the RAG at FFRAG 12 (3-4 November 2022), derived from the 2022Torres Strait Spanish Mackerel Stock Assessment.

No.	Name of RBC approach 1941 custom model	% of <u>all</u> simulations below S <sub>20</sub> over 12 years and 6 analyses Assuming average recruitment and constant RBC	Median RBC tonnes Over 6 analyses
1	Constant F <sub>MSY</sub>	12.7%	137
2	Constant F <sub>40</sub>	12.2%	132
3	Constant F <sub>48</sub>	10.3%	102
4	Constant F <sub>50</sub>	9.9%	95
5	Constant F <sub>60</sub>	8.9%	67

- 51. The WG noted that the FFRAG recommended an RBC of 95 tonnes. This figure was the 'F50' value, which the stock assessment model estimated would build the stock to 48% virgin biomass over 12 years. This was the same result as last year.
- 52. The RBC figure was selected considering the '90% risk criterion' of the Commonwealth Fisheries Harvest Strategy Policy (CFHSP) (used by the RAG as a guide), which requires that harvest strategies maintain the biomass of the stock above the limit reference point (LRP: 20% biomass) at least 90% of the time. As the percentage of simulations which estimated the biomass to fall under the LRP was 9.9% (assuming a constant catch of 95 tonnes per season over 12 years), this RBC figure satisfied the 90% risk criterion.
- 53. The WG noted that the 'F50' value of 95 tonnes also satisfies the interim target reference point for the fishery; to rebuild the stock to 48% of virgin biomass.
- 54. Having considered advice from FFRAG 12 on a Recommended Biological Catch (95 Tonnes) and best estimates of non-commercial catches (20 tonnes), the WG discussed and provided advice on a Total Allowable Catch for the 2023-24 fishing season for Spanish mackerel.
- 55. The WG noted advice from TIB members that the TSRA Quota Management Committee and Fisheries Advisory Committee consider an estimate of TIB sector catch when allocating an amount of the TAC to the Sunset sector. This practice reduces the risk of the TAC being exceeded. The WG noted that TSRA will progress the leasing arrangements on behalf of Traditional Inhabitants once a decision has been made by the PZJA in February 2023.
- 56. The WG formally accepted the advice of the RAG on a recommended biological catch of 95 tonnes, and recommended at Total Allowable Commercial Catch (TACC) of 75 tonnes for the 2023-24 fishing season for Spanish mackerel.
- 57. This total allowable commercial catch accounted for an allocation of 20 tonnes to the non-commercial sector (15 tonnes for kai kai (subsistence), 5 tonnes for recreational fishing), accepting the estimate of

non-commercial catch provided by the RAG.

### 3.2 Coral Trout Total Allowable Catch Advice for the 2023-24 Season

#### Reviewing the updated standardised CPUE time series and recommendations from FFRAG 12

- 58. The WG noted a presentation by scientific member Dr Michael O'Neill on an updated catch-per-uniteffort (CPUE) time series for coral trout. (**Attachment C**). This time series standardised the catch rates of sunset fishers, accounting for the various geographic zones of the fishery area, and the efficiency of individual fishing vessels. The WG noted that the current iteration of the timeseries contains all available data, including catch data from QDAF (pre-2004). This was incorporated into the CPUE analysis as an action from FFRAG 12 meeting.
- 59. The WG noted that with the inclusion of the QDAF data that catch rates remain above 130 kg per boat day. Therefore, the 'trigger level' of 90kg per boat-day, considered under the harvest strategy work completed to date for the fishery, has not been reached. The WG recalled that should catch rates decline to 90kg per boat day, then this was trigger an immediate priority to conduct a formal stock assessment.
- 60. The WG agreed that the finalised CPUE time series did not suggest a decline in the coral trout population, noting that the addition of historical QLD data suggest that catch rates remain consistent with the long-term average.
- 61. The WG noted that the FFRAG provided the following advice at their meeting on 3-4 November 2022:
  - Having considered recent catch data, previous assessments, and the updated CPUE time series, the RAG concluded that there is no evidence to suggest amending the substantive RBC of 135 tonnes; the available data does not suggest a decline in the coral trout population, and there were no justifications identified to increase the RBC.
  - The FFRAG agreed that, based on all lines of evidence, it is highly unlikely that the stock is at risk from fishing:
    - 1. Fishing levels remain low in the Fishery. The total reported catch for 2021-22 fishing season is 42 t;
    - 2. Outcomes of the 2006 Management Strategy Evaluation (MSE) analysis and the 2019 preliminary stock assessment both predict the current biomass to be high relative to virgin biomass:
    - 3. MSE: Four constant catch scenarios of 80, 110, 140 and 170 tonnes were tested which all achieved a biomass for the fishery of at least 60 per cent of virgin total biomass by 2025 (B60). The biomass in 2004 was estimated to be more than 60 per cent of unfished levels (Williams et al. 2011, 2007). Commercial catch in recent years has been below historical catch levels and well below the lowest catch level simulated in the MSE (80 t per year).
    - 4. Preliminary stock assessment: This assessment found the coral trout stock to be around 80 per cent of virgin biomass (B80). All of the model estimates of current spawning biomass were above 65 per cent estimated virgin biomass (B65).
    - 5. Although there is some uncertainty with the 1995/96 CSIRO dive survey (reviewed at FFRAG 10), the density estimates provide a level of validation of the density estimates derived from the preliminary stock assessment.

6. The RAG recommended an RBC for coral trout of 135 tonnes for the 2023/24 season.

## 62. The FFWG supported the FFRAG's advice and recommended that the coral trout TAC remain at 135t for the 2023-24 fishing season.

- 63. In providing its advice, the WG considered that TAC for coral trout has not been calculated with an explicit deduction to account for likely catches taken outside the fishery (e.g. Traditional, recreational or charter fishing). This is because it has not been a high priority to undertake work to determine catch estimates whilst catches remain very low compared with the TAC.
- 64. The WG noted advice from TIB members that it is desirable to reassess the priority of providing an estimate of non-commercial catch when recommending a TAC for the 2024/25 season.

#### Additional considerations for the coral trout fishery

- 65. The WG discussed the factors which are limiting the capacity of the TIB sector to fully utilise the TAC for coral trout. TIB members cited to loss of infrastructure such as freezers/cold stores as the primary limiting factor for TIB fishers to participate in the coral trout fishery. It was noted that despite recent increases to coral trout catches from the TIB sector, it is likely that fishers are focussing on Spanish mackerel due to the current higher market value.
- 66. The WG noted that the Zenadth Kes Fisheries Limited (ZK) seeks to increase the capacity of the TIB sector by working with TSRA to establish the necessary infrastructure and market access. The WG noted that it is the aspiration of ZK to investigate and participate in the value-adding live trout market.
- 67. The WG noted that the recent increase in coral trout catch reported in 2021/22 could be partly explained by increased reporting, but also due to greater participation from communities such as Mer.
- 68. The WG considered advice from the RAG that stockpiling of fish due to economic/logistical reasons has resulted in the recent decline in daily fishing effort data coming from the TIB sector. TIB members recommended to conduct education on the importance of landing/reporting catch daily during the next round of community consultations.
- 69. Further to the consideration of TIB catch data, the WG recommended that education be conducted with fishers/receivers on the importance of reporting coral trout by species. The WG agreed with advice from the RAG that catch data comprising information on the four key coral trout species will provide the necessary data for a future stock assessment. It was suggested that one possible option to address this providing on option on the CDR from to reporting a 'species spilt' percentage, similar to the method established in the TSF01 Logbook. The AFMA member agreed to investigate this option, however reiterated that the TSF01 Logbook is due to be updated to require that individual coral trout species are accurately reported.
- 70. The WG discussed the newly available biological data for coral trout and considered how to best utilise this information. It was recommended that age-frequency data be incorporated into the CPUE analysis in the same way which is applied to the Spanish mackerel assessment.
- 71. In its final consideration of coral trout, the WG discussed potential options to address the borderline uncertain status of the stock. The WG recalled the preliminary stock assessment released in 2019, which considered data up to 2017/18. This assessment extrapolated habitat data from the GBR to establish a proxy for abundance. At the time, this methodology was not accepted by the RAG as a precautionary measure to ensure abundance was not overestimated.
- 72. However, the WG recommended that the RAG revisit this past assessment, to ensure that the current

appraisal of its results is appropriate. This reassessment could include an independent reef ecologist, to verify whether the extrapolated data could be accurately applied. Should the 2019 assessment be concluded to be an accurate index of abundance, this will mediate the immediate risk of the status of the stock being listed as uncertain.

**Action 2:** AFMA to contact the RAG out-of-session to seek RAG advice on how to proceed with a review of the 2019 stock assessment.

## 4 Management

### 4.1 Harvest Strategy Development

- 73. Having regard for advice received from FFRAG 12, the WG was asked to discuss and provide advice on options for progressing the development of harvest strategies (HS) for the Torres Strait Finfish Fishery (TSFF).
- 74. The WG reviewed the work to date on progressing harvest strategies for the TSFF, noting that for the Spanish mackerel fishery the RAG/WG has been following the well-developed guiding principles of a HS in recent seasons. This process was due to be assessed through a management strategy evaluation (MSE) 2022/23 but was unable to be progressed due to the availability of researchers.
- 75. The WG noted that a call for research was conducted in September 2022 to action an MSE in 2023/24. The AFMA advised the call for research had been widely shared with prospective researchers in Australia and New Zealand. However, no research proposals had been received. Therefore, an MSE of the draft Spanish mackerel harvest strategy is not able to be conducted in 2023/24.
- 76. The WG were asked to provide advice on whether to progress with the proposed HS workshop in early 2023, noting that an objective of this workshop was to confirm the aspirations of stakeholders, as well as to identify appropriate uncertainties to assess via a future MSE project.
- 77. The WG were also asked to provide advice on whether interim harvest strategies could be produced which would adhere to the CFHSP guidelines and meet 'condition 8' of WTO approval for the fishery.
- 78. The WG recommended that the proposed HS workshop be progressed despite an MSE for Spanish mackerel not being able to be actioned in 2023/24. The WG suggested that this workshop could be an opportunity to inform stakeholders of the HS work to date.
- 79. The WG advised that an 'interim' HS document could be completed based on the work to date and further advice from the proposed workshop. Regarding a HS for coral trout, the WG agreed that it may also be feasible to complete an interim HS for coral trout.
- 80. The AFMA member agreed to progress with the preparation of a HS workshop. The WG then conducted a planning session to ensure that the objectives for the workshop are well defined. The following agenda was developed:

Day 1: Spanish mackerel

Day 2: Coral trout.

#### **Objectives:**

- 1. Present and review the HS work and advice to date.
- 2. Identify outstanding considerations for 'interim' HS documents.

- 3. Produce draft HS document/documents co-designed by participants.
- 4. Include a one-page summary to summarise the outcomes of the workshop.
- 5. Receive community feedback and identify further work for the future beyond the 'interim' harvest strategies.
- 81. TIB members requested the support of the TSRA to ensure that relevant stakeholders are able to participate in the workshop. The TSRA member agreed to provide logistical and financial support to ensure adequate representation is achieved.

Action 3: TIB members to liaise with AFMA to identify and invite essential participants.

## 4.2 Management of the Take of Shark

- 82. The AFMA member provided the WG with an update on the progress against Condition 6 of the current Finfish Fishery Wildlife Trade Operation, which stipulates that the Torres Strait Protected Zone Joint Authority must review the current measures applied to the management of the take of sharks in the Torres Strait Finfish Fishery to ensure that they are in line with Commonwealth best practice.
- 83. The WG noted that AFMA have reviewed the current arrangements and concluded that they are already in line with Commonwealth best practice where practicable. The one exception to the guidelines is the use of wire traces in the Spanish mackerel fishery. The WG agreed with AFMA's assessment that due to the operational nature of this fishery, wire traces are a necessity for the effective capture of this sharp-toothed species.
- 84. It was noted that bans on wire traces are primarily associated with long line fisheries, in which sharks are at risk of remaining hooked for several hours before hauling; the mortality of this shark bycatch is subsequently high. In the Spanish mackerel fishery, lines are hauled immediately, with sharks being able to be released alive. The WG also noted that fishers in the reef line fishery do not utilise wire traces as part of their operations.
- 85. The WG were asked to provide advice on ways in which to improve upon data collection and bycatch mitigation, to ensure that interactions with sharks can by monitored, and negative impacts can be minimised. The WG agreed that it is desirable to collect data on shark interactions, noting that AFMA intends to include a provision in the updated TSF01 logbook to record shark interaction/depredation. It was also suggested that shark interactions could be considered in the future non-commercial catch project.
- 86. Regarding the objective to mitigate shark interactions, the WG noted advice from the QDAF member that relevant research is currently underway in QLD (east coast). The WG agreed to follow the progress of this research as reports are published.

## 4.3 Review of Barramundi Cod Management

- 87. The WG considered RAG advice provided at FFRAG 12 regarding the management of Barramundi Cod in the Torres Strait Finfish Fishery:
  - The RAG advised that current catch trends for barramundi cod are not a risk to sustainability. However, the RAG noted advice from TIB members that barramundi cod is an important resource for kai kai (subsistence).
  - TIB members flagged their aspiration to have this species listed as a no-take species for commercial fishing. These members raised Traditional Knowledge of the breeding behaviour of Barramundi cod and stated that making this species a Traditional-only fishery will ensure

ongoing sustainability.

- The RAG noted this advice, giving consideration to the aspirations of the TIB sector to increase the quantum of effort in the reef-line fishery in the future.
- The RAG recommended to refer this matter to the Finfish Working Group, as the appropriate management advisory group for further consideration.
- 88. The WG TIB members reiterated that barramundi cod are an important kai kai species, and that the preference is to make this a no-take species for commercial fishing. The WG acknowledged the advice of TIB members and discussed the options to address these aspirations.
- 89. The WG noted that barramundi cod are a no-take species for recreational fishers under Queensland Government regulations, including in Torres Strait waters. Barramundi cod are also protected in the QLD East Coast Reef Line Fishery which borders the Protected Zone to the south.
- 90. The AFMA member advised that best practice would be to seek PZJA approval to conduct community consultation on the proposal to list barramundi cod as a no-take commercial species. Should the PZJA endorse community consultation on this matter, AFMA would complete this consultation and present the outcomes back to the WG. Based on the outcomes of community consultations, the WG would be asked to provide a recommendation to the PZJA regarding the management of barramundi cod.
- 91. The WG recommended that AFMA to seek PZJA approval to conduct community consultation on the proposal to list barramundi cod as a no-take species for commercial fishing.

## 4.4 Torres Strait Finfish Fishery Management Priorities

- 92. The WG reviewed the management priorities discussed at the WG meeting on 25 November 2021 as outlined in the agenda paper. Having regard for the management issues discussed at the current meeting, the WG recommended the following priorities for 2023:
  - HIGH: Progress the development of a harvest strategy.

This remains a high priority, to be progressed further at the proposed harvest strategy workshop scheduled for March 2023.

• HIGH: Potential application of Vessel Monitoring Systems (VMS) on tenders.

The WG recommended to increase this from low priority to high priority.

The WG agreed that the application of VMS on tenders in the sunset sector would introduce several benefits to the fishery, including the collection of fishing-effort data to reduce uncertainty in standardised catch rates. It would also serve as a compliance tool to monitor specific spatial and temporal closures which apply to this sector. The WG agreed that these closures were implemented for significant cultural and environmental reasons.

The WG noted that VMS data is being used in adjacent jurisdictions to refine the stock assessments of several fisheries. The member for QDAF agreed to distribute to members a copy of the *Vessel Tracking Post Implementation Review* which is currently out for public consultation. This review contains a cost/benefit summary of the application of VMS.

The WG noted advice from TIB members that the Traditional Inhabitant sector may wish to pursue the use of VMS on TIB vessels <6 metres in the future, noting the perceived benefits of high-quality data collection. It was discussed whether there are mechanisms for dual-licenced

fishers to operate in separate fisheries with the same VMS device. This would be relevant for those wishing to fish for TRL within the finfish closure area. The AFMA member confirmed that there are established mechanisms in Commonwealth fisheries to account for such scenarios.

#### • MEDIUM: Formalising total allowable catches for the Finfish fishery.

The WG recalled that an enforceable TAC is a management arrangement that would formally limit the catch of the TIB sector, noting that current arrangements require catch data to be monitored against the 'Olympic' TAC. A formalised TAC would mitigate the current requirement to reactively close the fishery to ensure that the TAC isn't exceeded. A formalised TAC would also support the aspired utilisation of the entire TAC by the TIB sector.

The WG acknowledged the views of TIB members, who maintain strong opposition to individual quota unit allocation options. TIB members expressed a preference to maintain an Olympic TAC style system, pending further review by the TSRA. The WG noted that the TSRA continue to lead a review into the allocation of TRL resources, and that the outcomes from this process will guide future advice on the allocation of finfish catch allowances.

The WG agreed that it is not appropriate for the WG to provide formal advice on the process of allocation while the review is being undertaken, noting that the PZJA will consider the outcomes of the review before recording a decision.

The WG suggested that AFMA conduct a review of the Torres Strait Finfish Fishery Management Plan 2013 to assess whether an amendment to this plan could provide for an enforceable TAC. The WG also suggested that future harvest strategy documents could capture the inclusion of catch triggers against the current Olympic TAC to formalise the current process to reactively close the fishery. The WG agreed that these points should be discussed further at the HS workshop scheduled for early 2023.

The WG agreed to maintain this item as an ongoing medium priority, noting that further action is pending the review process lead by the TSRA.

• LOW: Supporting consultation on future proposed changes to the Western Line Closure.

The WG acknowledged the aspirations of several community members in Maluligal and Kaiwalagal Kaurareg clusters to extend the recently amended 'western line' area to provide an additional fishing opportunity to these communities. The WG supports future consultation on this subject, agreeing that this remains an important matter.

The WG agreed to list this as a low priority, noting that immediate consultation is not required. The priority to progress with formal community consultation will be guided by further advice from TIB members.

93. The WG agreed to remove the following priority from the list:

• Review current measures applied to the management of the take of sharks in the Fishery to ensure that they are in line with Commonwealth best practice (condition 6 of the Wildlife Trade Approval for the fishery). This priority has been actioned.

## 5 <u>Research</u>

## 5.1 Non-Commercial Catch Project

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94. The WG noted a presentation from Mr David Brewer on the upcoming 'phase 2' of the noncommercial catch project *Measuring non-commercial fishing catches (traditional subsistence fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods* which has been approved for co-funding between AFMA and the FRDC in the 2022/23 - 2023/24 financial years.

**Action 4:** The AFMA member agreed to distribute the final report for phase 1 of the project to the WG out of session.

- 95. The WG agreed that this remains a vitally important project, serving to support Traditional Owners in monitoring traditional fisheries to ensure their ongoing sustainability. This is particularity relevant in changes in environmental drivers due to climate change.
- 96. The WG noted that there are several possible reporting methods to be investigated through the project, such as the development of a mobile phone application (App). The WG noted that commercial fishing Apps have been successfully implemented in Queensland State fisheries, and have built-in features which account for offline use. This feature would be beneficial in the Torres Strait, where phone reception is often lacking.
- 97. The QLD-based Apps have been credited with mitigating the lag-time in processing hardcopy commercial logbooks and are also seen as a viable option to collect high-quality recreational fishing data. The WG agreed that this is an effective tool for collecting catch data for both commercial and non-commercial sectors. This raised a suggestion that an App could be developed in future to account for all components of fisheries catch in the Torres Strait.
- 98. The WG noted that during the project's appraisal of a potential self-reporting App, the cost effectiveness of this option will be assessed. This assessment would include a consideration of the ongoing funding costs to maintain such an App.
- 99. The WG noted advice from the TIB sector that data on Traditional catch used to be collected at various community cold stores. However, since the loss of much of this infrastructure, this data collection has also been lost.
- 100. The member for TSRA asked for details on the project's community consultation plan. Mr Brewer clarified that the project team will seek to visit each community, using the standard protocols to gain permission and community support for the visits. The objective is to complete the initial consultation round by June 2023 pending the availability of stakeholders. The WG noted that the project team is due to meet in the week following the current meeting to discuss the project's timeline further. Mr Brewer agreed to provide further information as it becomes available.
- 101. The WG noted advice from TIB members that Traditional Owner representatives should be present during the project's community consultations. The WG agreed that the presence of these representatives will assist in gaining community support for the project. The member for TSRA agreed to liaise with TIB members and the project team to support this travel arrangements once dates for the consultations have been scheduled.

## 5.2 Research Priorities

- 102. The WG noted the Finfish Fishery 5-Year Rolling Research Plan (the research plan) which was provided in the meeting papers. The plan was updated by the RAG at FFRAG 12 (3-4 November 2022).
- 103. The WG endorsed the recommendations of the RAG contained in the research plan, noting that the RAG will be asked to meet OOS to confirm the status of the current order of priorities before the

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commencement of the 2024/25 funding allocation process (July 2023).

- 104. The WG noted that up to \$110,000 was available for funding in 2023/24 for the proposed project *Management Strategy Evaluation of Spanish mackerel for the Torres Strait Finfish Fishery.* However, no researchers are available to conduct this research.
- 105. The WG considered a proposal from the RAG to allocate funding in 2023/24 to support the ongoing collection and processing of genetic tissue samples to ensure the continuity of the genetic dataset for use in a future close-kin mark-recapture (CKMR) project.
- 106. The WG noted the RAG's recommendation that the most efficient way to collect these genetic samples is to incorporate this work into the current biological sampling project (AFMA project number 2020/0814). The RAG considered this project a 'value-adding' option, considering that the biological sampling is already funded to collect 400 mackerel in 2023/24, with this proposed additional funding allowing for the collection of an additional 600 mackerel to reach the 1000 samples required for CKMR.
- 107. The biological sampling project team provided an indicative cost of \$17,000. This budget was considered appropriate by RAG scientific members out-of-session in November 2022. The WG recommended to proceed with this proposal and to request funding allocation though TSSAC for 2023/24.
- 108. The WG noted advice from the AFMA member that in the time between FFRAG 12 and the current WG meeting, RAG scientific members further discussed the MSE research priority and when this should be pursued. This discussion occurred after final advice was received regarding the availability of researchers to action this work in 2023/24.
- 109. Noting that an MSE would need to be conducted following a potential (CKMR) project (as this will provide an alternate index of abundance), the immediate need to conduct an MSE on the current harvest strategy framework will need to be reassessed in 2023. The RAG scientific members have agreed to meet in early 2023 to conduct a technical review of the current stock assessment before the RAG will be asked to provide final advice to TSSAC in the lead-up to the 2024/25 funding round. **The WG endorsed this approach and agreed to revisit research priorities in 2023**.

#### Biological sampling project update

- 110. The WG noted the strong support offered by Mr Rocky Stephen regarding future community engagement with the current biological sampling project. Mr Stephen informed the WG of a recent meeting held with the project team, providing a summary of the meeting outcomes to be attached to this WG meeting record **(Attachment C).** Mr Stephen discussed the proposal to establish a TIB representative in each community to act as a 'champion' for the project to drum up community support.
- 111. The WG also noted a proposal to present the project data using visual posters, including a breakdown of data by individual communities to illustrate the contributions of community members. The WG noted that the project team is collaborating with the TSRA media team to further this proposal.
- 112. The WG supported the proposal to pursue further community engagement, noting that the project team has been invited to attend Ugar and Masig Islands during the next available consultation round.

## 6 Overview of AFMA Compliance Risk Assessment Process

- 113. The WG noted a virtual presentation from the AFMA Senior Manager of National Compliance on an overview of the AFMA domestic compliance risk assessment process that AFMA undertakes biannually to inform their compliance activities in both Torres Strait and Commonwealth fisheries.
- 114. The WG noted that the priorities listed in the presentation were the risk identified in the previous plan. The planning for 2023-25 program recently commenced, and as such the process of identifying future compliance risks is currently being conducted.
- 115. While outside the scope of the domestic risk assessment, the WG acknowledged concerns from TIB members about IUU fishing by foreign vessels with Australian waters.

**Action 5:** The AMFA member agreed to provide information on the international compliance risk assessment process, with priorities compiled and presented to the WG out-of-session

116. Regarding domestic compliance, the WG noted advice from TIB members that compliance risks could be discussed and identified by the Fisheries Advisory Committee (FAC) of the TSRA.

**Action 6:** AFMA Senior Manager of National Compliance to attend FAC meeting in February 2023 to progress the process of identifying, prioritising and addressing risks as part of the 2023-25 compliance plan. TSRA agreed to support the review of this risk assessment process.

## 7 Other Business

117. FFRAG members were invited to discuss other business for consideration.

#### FRDC Indigenous Engagement Strategy Project

- 118. Nicholas McClean provided an update on the FRDC funded project *Developing an Indigenous Engagement Strategy for fishing interests with a focus on Commonwealth fisheries* which seeks to develop indigenous engagement initiatives at the national level. The WG were informed of initial discussions with AFMA and TSRA management staff on developing materials documenting the importance of the TSI fisheries to other regions, which are viewed as an example of what can be possible with respect to Indigenous engagement in fisheries. The project is also liaising with Mr Kenny Bedford as a key contact person in the early stages.
- 119. The WG was asked to provide advice in particular on whether any case study work undertaken on the finfish fishery would be objectionable to the WG, should that arise. Strong support was offered by member Mr Rocky Stephen, and the WG expressed overall support for this project. TIB members agreed that continuing to liaise with Mr Bedford on specifics with respect to TSI fisheries was appropriate, and requested the project advise on any further developments as necessary.

#### Droplining – Spanish Mackerel Fishery

120. During their consideration of Agenda Item 4.2, the WG discussed the commercial take of shark in the finfish fishery, noting that certain shark species under 2m in length are permitted to be retained. The WG noted that while there are no historical records of shark catches in the fishery, TIB members

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expressed concern about the potential for the use of long lines by fishers wishing to target sharks (or other species) in the future. The WG noted advice from TIB members that methods such as longlining which allow for a large number of hooks and extended soak times are not culturally appropriate for Torres Strait waters.

- 121. The AFMA member confirmed that a maximum of six hooks per line are permitted under the reef line fishery, and that while longlining is not permitted in either fishery, droplining is a permitted method under the Spanish mackerel fishery. The WG noted advice from the AFMA member that the definition of droplining would allow for a larger number of hooks, depending on the applicable depth of water.
- 122. The WG were asked to provide advice on whether droplining should remain a permitted method under the Spanish mackerel fishery, noting concerns from TIB fishers of the potential negative impacts of this method.
- 123. The WG recommended that droplining should be removed as a permitted method, pending further investigation by AFMA into the original intent and fishing-effort history. This in-principle support considers that the requirement for consultation on this matter will be guided by the identified impacts to stakeholders and further advice from the WG.

**Action 7**: The AFMA member agreed to investigate the removal of droplining as a permitted method, noting that such a change would require an amendment to the Torres Strait Fisheries Management Instrument No. 14. The WG noted that further advice would be sought before such an amendment could be progressed to the PZJA for decision.

#### **Proposed Bait Fisheries**

124. WG noted two proposals presented by the TSRA member on behalf of Traditional Inhabitants:

 The first proposal was to revisit the development of a bait-net fishery (commercial sale of bait fish species caught with the use of a handheld bait net). The WG noted that such an activity was researched and published in a TSRA-funded report in 2017. This report concluded that while a bait net fishery would offer an economic opportunity, concerns were identified in each community about the potential impacts on subsistence fishing.

The 2017 bait net report can be found at the following link: (<u>http://icic.net.au/wp-</u> <u>content/uploads/2018/03/Fisheries-FI-Bait-Industry-Development-Project-CA-2017-00046-</u> <u>Final-Report.pdf</u>

The WG noted that if fishers wish to pursue this activity, then the developmental fishery application process should be followed to assess the sustainability of the fishery.

• The second proposal was to investigate the retention of bycatch from prawn trawling vessels to be sold for the use of bait.

The WG noted that further research is required to identify the correct avenues to pursue such an activity.

**Action 8:** AFMA to investigate the legal barriers to such an activity, noting that the TS Prawn Fishery regulates the take of bait species. To report back to the WG at it's next meeting.

The WG noted advice from the QDAF member the QDAF have commissions research on this activity and has published a 'decision-tree' detailing a list of bycatch species which may be viable for use as bait.

Action 9: QDAF to distribute information of bycatch bait species research to the WG OOS.

The WG noted further advice from a scientific member regarding a separate study which assessed the viability of a bycatch bait fishery.

Action 10: *Mr* Brewer to share bycatch bait fishery viability study with the WG OOS.

## 8 Date and venue for next meeting

125. The WG agreed that its next meeting would be held at the end of November 2023 with the 29th-30th identified as a potential option.

#### The meeting closed at 1700 hrs on Thursday 8 December 2022.

#### Attachments

Attachment A: Torres Strait Finfish Fishery Working Group Meeting Agenda – 7-8 December 2022.

Attachment B: 2022 Spanish Mackerel Stock Assessment Presentation.

Attachment C: Coral Trout CPUE Presentation.

Attachment D: Biological Sampling Project – Consultation Meeting Outcomes.

#### MEETING OF THE PZJA TORRES STRAIT FINFISH FISHERY WORKING GROUP

Wednesday 7<sup>th</sup> December – Thursday 8<sup>th</sup> December 2022

8:30am – 5:00pm

Thursday Island – Pearls Building

## **DRAFT AGENDA**

#### 1 PRELIMINARIES

#### 1.1 Acknowledgement of Traditional Owners, Welcome and Apologies

The Chair will welcome members and observers to the meeting.

#### 1.2 Adoption of Agenda

The FFWG will be invited to adopt the draft agenda.

#### **1.3 Declaration of Interests**

Members and observers will be invited to declare any real or potential conflicts of interest 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 FFWG will be invited to note the status of action items arising from previous meetings.

#### **1.5 Out-of-Session Correspondence**

The FFWG will be invited to note out of session correspondence on FFWG matters since the previous meeting.

#### 2 UPDATES FROM MEMBERS

#### 2.1 Industry & Scientific Members

Industry and scientific members will be invited to provide a verbal update on matters concerning the Torres Strait Finfish Fishery, in particular, providing comment on fishing patterns, behaviours, prices, and market trends this season.

#### **2.2 Government Agencies**

The FFWG will be invited to note updates from AFMA, TSRA and QDAF on matters concerning the Torres Strait Finfish Fishery.

#### 2.3 PNG National Fisheries Authority

The FFWG will be invited to note a verbal update from the PNG National Fisheries Authority if a representative is in attendance.

#### 2.4 Native Title

The FFWG will be invited to note a verbal update from Malu Lamar (Torres Strait Islander) Corporation RNTBC if a representative is in attendance.

#### **3 TOTAL ALLOWABLE CATCH ADVICE**

#### 3.1 Spanish Mackerel Total Allowable Catch Advice for the 2022-23 Season

Having considered advice from FFRAG 12 (3-4 Nov 2022) on a Recommended Biological Catch and best estimates of non-commercial catches, the FFWG will discuss and provide advice on a Total Allowable Catch for the 2023-24 fishing season for Spanish mackerel.

#### 3.2 Coral Trout Total Allowable Catch Advice for the 2022-23 Season

Having considered advice from FFRAG 12 on a Recommended Biological Catch, FFWG will discuss and provide advice on a Total Allowable Catch for the 2023-24 fishing season for coral trout.

#### 4 MANAGEMENT

#### 4.1 Harvest Strategy Development

Having regard for advice from FFRAG 12, the FFWG is asked to discuss and provide advice on options for progressing the development of a harvest strategy (HS) for the Spanish mackerel fishery. This advice will be referred to a joint RAG/WG HS workshop in 2023. The HS workshop will seek to resolve all outstanding refinements to progress the development of a Management Strategy Evaluation for the fishery.

#### 4.2 Management of the Take of Shark

The FFWG will be asked to review the current measures applied to the management of the take of sharks in the Torres Strait Finfish Fishery and provide advice on whether they are in line with Commonwealth best practice.

#### 4.3 Review of Barramundi Cod Management

Having regard for advice from the FFRAG (FFRAG 12), the FFWG is asked to discuss and provide advice on the management of Barramundi Cod in the Torres Strait Finfish Fishery.

#### 4.4 Torres Strait Finfish Fishery Management Priorities

The FFWG are asked to discuss and provide updated advice to AFMA and the PZJA on management priorities for the Finfish Fishery.

#### 5 RESEARCH

#### 5.1 Non-Commercial Catch Project

The FFWG will be invited to note a presentation from David Brewer on the upcoming '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* which has been approved for co-funding between AFMA and the FRDC in the 2022/23 - 2023/24 financial years.

#### **5.2 Research Priorities**

FFWG members will be invited to discuss research priorities for the Finfish Fishery. Noting advice from FFRAG, the FFWG will review the *Finfish Fishery Rolling Five Year Research Plan.* 

#### 6 OVERVIEW OF AFMA COMPLIANCE RISK ASSESSMENT PROCESS

The WG is invited to note a virtual presentation from the AFMA Senior Manager of National Compliance on an overview of the AFMA domestic compliance risk assessment process that AFMA undertakes each year to inform their compliance activities in both Torres Strait and Commonwealth fisheries.

#### 7 OTHER BUSINESS

FFRAG members will be invited to discuss other business for consideration.

#### 8 DATE AND VENUE FOR NEXT MEETING

The FFWG will note arrangements for FFRAG 13 (6-7 Sept 2023) and FFRAG 14 (1-2 November 2023), and confirm arrangements for FFWG in 2023. The FFWG will also be advised of and PZJA meeting to decide next season's TACs.

The Chair must approve the attendance of all observers at the meeting. Individuals wishing to join the meeting as an observer must contact the Executive Officer – Chris Boon (chris.boon@afma.gov.au)





## **Torres Strait**

Scomberomorus commerson

# Spanish mackerel

The 2022 stock assessment.

FFWG meeting, 7-8 December 2022

Michael O'Neill, Jo Langstreth, Rik Buckworth, Andrew Trappett



Australian Government Australian Fisheries Management Authority





## Acknowledgement of First Nations peoples

I would like to respectfully acknowledge the Traditional Owners and Custodians of the land on which we meet today, and I pay my respects to their Elders past, present and emerging.

I extend that respect to all Aboriginal and Torres Strait Islander peoples here today.

# **Presentation sections**

- 1. Summary
- 2. Data inputs
- 3. Spawning biomass
- 4. Recommended Biological Catch (RBC)

Labelling change: Fishing is by financial years, and 2021-2022 data is now labelled as 2022, not 2021.

## **Section 1 – Summary of median biomass**

- Median spawning biomass estimates were from 6 core analyses.
- FFRAG #11 agreed on 6 analyses, varying data inputs for natural mortality (M) and total harvests.

## **Summary indicators**

Indicator	Median results
dian 2021-2022 spawning biomass/unfished biomass	31% Custom model
Median 2021-2022 Spawning biomass/unitshed biomass	31% Stock Synthesis
Limit point: spawning biomass / unfished biomass	20 per cent
Harvest taken in 2021-2022 (all fishing sectors)	73 tonnes
Recommended Biological Catch (RBC) set for 2021-2022	94 tonnes
Recommended Biological Catch (RBC) set for 2022-2023	95 tonnes

## **Summary diagnostics**

- Parameter estimates were consistent
- Analyses fitted standardised catch rates and age data well
- Recruitment deviations in recent years were at average levels

## Section 2 – Annual data inputs

- Harvest
- Catch rates
- Age frequencies

## **Estimated harvests (all fishing sectors)**



## **Catch rates**



180

## **Fish ages**



Frequency (proportion)

0.6 0.5 0.4 0.3 0.2 0.1

0.0

2 3

4 5 6 7 8

1

2021-22, 2022 ALK n = 423 fish aged n = 1787 lengths

9 10 11 12 13



Age group (years)
## **Section 3 – Spawning biomass**

- Median biomass from 6 core analyses using both the custom annual age-structured model and the Stock Synthesis (SS) model were very similar.
- Comparison of biomass scenarios in 2022 showed consistency between models and analyses.

## Median spawning biomass ratios



## Section 4 – Recommended biological catch (RBC)

- Median RBC and risks from the 6 core analyses using the custom model are presented.
- RBCs were like those estimated last year.

# Summary of potential RBC for 2023-2024 (no change to age data weighting [1])

No.	Name of RBC approach 1941 custom model	% of <u>all</u> simulations below S <sub>20</sub> over 12 years and 6 analyses Assuming average recruitment and constant RBC	Median RBC tonnes Over 6 analyses
1	Constant F <sub>MSY</sub>	12.7%	137
2	Constant F <sub>40</sub>	12.2%	132
3	Constant F <sub>48</sub>	10.3%	102
4	Constant F <sub>50</sub>	9.9%	95
5	Constant F <sub>60</sub>	8.9%	67



## List of available data

180



#### Data compiled for input into the stock model by year.



The six key data inputs

## Number of treatments

1.	<ul> <li>Total harvests from all fishing sectors:</li> <li>Two methods for historical estimates 1941-1989.</li> <li>One Taiwanese IUU harvests.</li> </ul>	(2)
2.	<ul> <li>Standardised Sunset catch rates 1990-2022:</li> <li>Tender/dory and hours data (out)</li> <li>Qld north east coast fishing power offset (in)</li> </ul>	(1)
3.	<ul> <li>Nominal historical Sunset (old) catch rates. Pre 1990.</li> <li>From one boat operation (in)</li> </ul>	(1)
4.	<ul> <li>Fish age frequencies:</li> <li>All years with fish age or length data (in)</li> </ul>	(1)
5.	<ul> <li>Natural mortality rate (M; maximum age = 13.5 years)</li> <li>0.3, 0.35, 0.4 per year (in)</li> </ul>	(3)
6.	<ul> <li>Steepness estimated</li> <li>Estimated (in)</li> </ul>	(1)



## **Attachment C**





## **Coral trout standardised catch rates**

## FFWG meeting, 7-8 December 2022



## Acknowledgement of First Nations peoples

I would like to respectfully acknowledge the Traditional Owners and Custodians of the land on which we meet today, and I pay my respects to their Elders past, present and emerging.

I extend that respect to all Aboriginal and Torres Strait Islander peoples here today.

# From the Hutton et. al. report



**Figure 9**: Estimated vulnerable biomass in Torres Strait Regions five and three respectively. Biomass in region 5, the most heavily fished region, always remains above 75% of vulnerable virgin biomass, and region 3 is always above 90% of virgin biomass.



# From the Hutton et. al. 2019 report

Total Catch Torres Strait by Data Set



Figure 2: Total harvest size for different data sources summed over all regions in Torres Strait

## Harvest update

## CDR Sunset report

Fishing year	Number fish	Harvest kg	Av fish wt kg
2019	9441	13048	1.38
2020	19740	30775	1.56
2021	8663	15662	1.81
2022	21062	30890	1.47

## **CDR Summary**

Fishing year	Sector	Harvest kg
2018	SUN	7636
2018	TIB	4712
2019	SUN	13048
2019	TIB	6087
2020	SUN	30775
2020	TIB	4013
2021	SUN	15662
2021	TIB	4940
2022	SUN	30890
2022	TIB	11090

### Sunset result for AFMA and Qld data



## TIB result for AFMA CDR data





# From the Hutton et. al. report

**Table 4:** Possible options for biological catch limits and their corresponding rationale, and subjective levels of risk. Note that these are purely based on the preliminary model outputs. The table uses the reference point estimates allowing for non-zero recruitment deviations as this methodology yields the smaller estimates for biomass and therefore would generate more conservative biological catch recommendations given. This is important due to the high degree of uncertainty in this system.

<b>Biological Catch</b>	Risk	Rationale
106 tonnes	Very conservative	YB60 solely in TS5
126 tonnes	Conservative	MSY solely in TS5
134.9 tonnes	Conservative	No change
147 tonnes	Conservative / Moderate	If 72% of future catch occurs in TS5, this catch, for the whole fishery, would yield B60 in TS5
174 tonnes	Moderate	If 72% of future catch occurs in TS5, this catch would yield MSY in TS5
218 tonnes	High	Yield that achieves B60 if everyone fishes the regions in optimal proportion
258 tonnes	Very high	MSY if everyone fishes the regions at an optimal proportion



### Notes for Cr. Rocky Stephen – discussion at Northern Fisheries Centre, 5 December 2022

#### **Project funding rounds**

2019-20	First round, 12 months funding, one season, Spanish mackerel only
2020-21	Second round, 12 months funding, coral trout added
2021-22	Third, fourth and fifth round, 36 months funding, Spanish mackerel and coral trout.
2022-23	
2023-24	

Notes from whiteboard:

#### Part 1 - Community consultation dates

#### 2019-20 round activities

Date	Visit / Activity	Agencies
13-14 March 2019	FQ presentation to PZJA FFRAG 4, pre-	FQ presents to PZJA FFRAG
	proposal content and feedback from	
	RAG.	
17 September 2019	Workshop Erub - PZJA Industry Members	TSRA (lead & travel), AFMA, FQ
	Awareness Trip	
19 September 2019	Workshop Masig - PZJA Industry	TSRA (lead & travel), AFMA, FQ
	Members Awareness Trip	
<mark>9 October 2019</mark>	Ugar PZJA Industry Members Trip	TSRA (lead & travel), AFMA, FQ
31 Oct-1 Nov 2019	FQ presentation to PZJA FFRAG 5 update	FQ presents to PZJA FFRAG
	on sampling achieved in 2019-20 round	
	and community visit outcomes.	

### 2020-21 round activities

Date	Visit / Activity	Agencies
<mark>27 Oct – 3 Nov 2020</mark>	Community meetings held on Erub, Ugar <mark>&amp; Mer</mark> communities. Presentation of 2019-20 results, engage with community and fishers/fish receivers.	AFMA lead, FQ (AFMA organised travel, accommodation).
4-5 Nov 2020	FQ presentation to FFRAG 8	FQ presents to PZJA FFRAG
Dec 2020	TIB trip 1: FQ, AFMA visit to Erub and Mer for targeted follow-up with fishers and fish receivers actively fishing and providing samples.	FQ lead, AFMA. (AFMA organised travel, accommodation)
Feb 2021	TIB trip 2: FQ, AFMA & TSRA visit to Erub and Mer for targeted follow-up with fishers and fish receivers actively fishing and providing samples.	FQ lead, AFMA, TSRA. (AFMA organised travel, accommodation).

#### 2021-22 round activities

Date	Visit /Activity	Agencies
18-22 Oct 2021	TIB trip 1: Mer and Erub community consultation	FQ and AFMA
29 Dec – Fri 3 Dec 2021	TIB trip 2: Mer, Erub and Waiben sampling and community meetings.	FQ and AFMA
13 April 2022	AFMA Fisheries Monitoring Workshop, Cairns	AFMA workshop

#### 2022-23 round

Date	Visit /Activity	Agencies
14-16 June 2022	Bonus visit: FQ invited to join AFMA led	AFMA led, organised charter
	visit to Mer & Erub (black teatfish	and accommodation.
	consultation)	
12-15 Sep 2022	TIB trip 1: FQ visit to Erub and Mer –	FQ only.
	sampling and community meeting on Mer	
26-27 Oct 2022	TIB trip 2: Planned trip to Mer + Erub	FQ only.
	flights suspended. Instead changed to	
	spend 2 days on Waiben, Horn Island.	
3-4 Nov 2022	FQ presentation to PZJA FFRAG 12	FQ presents to RAG meeting.
	meeting, Cairns.	

#### 2023-24 round planned visits

Date	Visit	Agencies
Early Sep 2023	TIB trip 1: Planned trip to Mer and Erub –	FQ only.
	community meetings and sampling	
Late Oct 2022	TIB trip 2: Planned trip to Mer and Erub –	FQ only.
	One on one follow-up with fishers and	
	fish receiver's engaged in sampling.	

- It was suggested that because the project didn't get to go to Erub/Mer in Oct 2022 as planned and hadn't been to Ugar/Masig since 2019/2020 it would be good to add additional community consultation and engagement between Jan-Jun 2023 ahead of final funded round 2023-24.
- For example the project could be invited to attend Ugar in mid-January, might be good to add Masig, Erub, Mer at the same time if permissions granted and funding is available for inter-island travel. Noted this would be pending availability of Skytrans fixed service flights between Erub, Mer, Masig (helicopter charter Horn to Ugar to Erub).
- Noted that PZJA Industry Member Harry Nona could be engaged at Horn Island on the way out/return from outer islands if any samples from Horn Island. AFMA could bring across any samples from Waiben that have been collected at the AFMA freezer.
- Rocky to discuss this plan at Finfish Working Group with AFMA, TSRA, Industry Members.

#### Part 2 – Feedback of project info to communities

- Sampling results we have flyers completed for 2019-20 and 2020-21, these have been used during community visits to give data and findings so far back to communities.
- Results flyers good format ☑
- Can provide an updated flyer including 2021-22 information and initial info on samples collected so far in the 2022-23 season noting lots of Spanish mackerel samples have been collected.
- Noted to make sure to give data back to communities that participated before posting on the PZJA website etc. make public.
- Have different versions of the results flyers / information collected prepared:
  - Whole fleet (Sunset and TIB combined)
  - Breakdown just Sunset fleet data
  - Breakdown just TIB fleet data
  - Breakdown data just from community that is being visited

#### Part 3 – Community engagement

Methods for engagement:

- 1. Community meetings provide feedback info, seek engagement, what's going on (normally first TIB trip per fishing season)
- 2. Fish receivers one on one coaching (normally the focus of the second TIB trip per fishing season).
- 3. TIB PZJA industry representatives / Project 'Champions' who can help with information and collection of data at fish receivers and help at collection points for samples in communities.

Need clear information about the exact required data to be provided:

- #1 priority Measuring daily catches (length frequency sheets),
- #2 priority donating samples fish frames with guts and gonads for length, sex and age study at Cairns lab.