

**PROTECTED ZONE JOINT AUTHORITY  
TORRES STRAIT FINFISH FISHERY WORKING GROUP MEETING 2021**

**25 November 2021 (8:30 am - 5:00 pm)**

**Joint face-to-face meeting / Video Conference**

**Venue: Thursday Island - JCU Conference Room**

## **DRAFT AGENDA**

### **1 PRELIMINARIES**

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

The Chair will welcome members and observers to the 9<sup>th</sup> meeting of the FFRAG.

#### **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 the FFRAG 10 (18 Nov 2021) on Recommended Biological Catches and best estimates of catches taken outside the fishery, FFWG will discuss and provide advice on Total Allowable Catches for the 2022-23 fishing season for Spanish mackerel.

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

Having considered advice from the FFRAG 10 (18 Nov 2021) on Recommended Biological Catches and best estimates of catches taken outside the fishery, FFWG will discuss and provide advice on Total Allowable Catches for the 2022-23 fishing season for coral trout.

### **MANAGEMENT**

#### **4 4.1 Spanish Mackerel & Grey Mackerel Size Limits**

Having regard for any advice from the FFRAG (to be considered by the FFRAG on 14-15 October 2021), the FFWG will be invited to discuss the size limits of Spanish mackerel & grey mackerel in the context of the WTO condition, neighbouring jurisdictions, and size-at-maturity data.

#### **4.2 Harvest Strategy**

Having regard for any advice from the FFRAG (to be considered by the FFRAG on 18 November 2021), the FFWG is asked to discuss and provide advice on options for progressing the development of a harvest strategy for the fishery.

### **5 TORRES STRAIT FINFISH FISHERY MANAGEMENT PRIORITIES**

FFWG are asked to discuss and provide advice to AFMA and the PZJA on management priorities for 2022-23.

### **6 TORRES STRAIT FINFISH FISHERY RESEARCH PRIORITIES**

FFWG are asked to discuss and provide advice to AFMA and the PZJA on research priorities for 2022-23.

### **7 OTHER BUSINESS**

FFWG members are invited to discuss other business for consideration.

### **8 DATE AND VENUE FOR NEXT MEETING**

The FFWG will confirm arrangements for FFRAG 11 and 12, and FFWG 2022 proposed for September and October 2022, and be advised of and PZJA meeting to decide next season's TACs (January 2022).

**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](mailto:chris.boon@afma.gov.au))**

<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>PRELIMINARIES</b> <b>Acknowledgement of Traditional Owners, Welcome and Apologies</b>	<b>Agenda Item No. 1.1 FOR NOTING</b>

## **RECOMMENDATIONS**

1. That the Working Group **NOTE**:
  - a) an acknowledgement of Traditional Owners;
  - b) the Chair's welcome address;
  - c) apologies received from members unable to attend.

## **BACKGROUND**

1. As of 11 November 2021, no formal apologies have been received.

<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>PRELIMINARIES Adoption of Agenda</b>	<b>Agenda Item No. 1.2 FOR NOTING</b>

## RECOMMENDATIONS

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

## BACKGROUND

2. A first draft annotated agenda was circulated to members and observers on 14 September 2021.
3. No comments from members were received.
4. Agenda items 4.1 and 4.2 (Spanish mackerel and grey mackerel size limits) were consolidated into a single agenda item (4.1) to streamline the discussion.
5. Agenda item 4.4 *Wildlife Trade Operation (WTO) Conditions: Shark Management* was removed as an agenda item and added to the AFMA update (Agenda Item 2.2).
6. Agenda item 4.5 *Policy Guidance for Carrier Licences* was removed to allow appropriate meeting time allocation to other agenda items. This item is to be deferred to 2022.
7. Agenda item 6 *Research Priorities* was added for the WG to note and discuss research priorities as recommended by the FFRAG at their meeting on 14-15<sup>th</sup> October 2021.

<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>PRELIMINARIES</b> <b>Declarations of interests</b>	<b>Agenda Item No. 1.3</b> <b>FOR ACTION</b>

## RECOMMENDATIONS

That the Working Group:

1. **DECLARE** all real or potential conflicts of interest in Torres Strait Finfish Fisheries at the commencement of the meeting;
2. **DETERMINE** whether the member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict;
3. **ABIDE** by decisions of the Finfish Fishery Working Group (FFWG) regarding the management of conflicts of interest; and
4. **NOTE** that the record of the meeting must record the fact of any disclosure, and the determination of the Working Group as to whether the member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict.

## BACKGROUND

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

the discussions, the member should retire from the meeting for the remainder of discussions on that issue. Declarations of interest, and subsequent decisions by the forum, must be recorded accurately in the meeting minutes.

**Table 1.** Register of Declared Interests from FFWG meeting on 29 November 2020 and FFRAG meeting on 14-15 October 2021.

Name	Position	Declaration of interest
Andy Bodsworth	Independent Chair	<ul style="list-style-type: none"> <li>Independent Consultant – Cobalt Marine Resource Management.</li> <li>Has previously been commissioned to undertake Torres Strait related fisheries research projects (For example the Torres Strait Finfish Fishery Action Plan).</li> <li>Previously worked from AFMA and as Chair other PZJA Advisory Committees (e.g. HCWG)</li> </ul>
Rocky Stephen	Traditional Inhabitant Industry Member, Kemer Kemer Meriam (Ugar, Mer, Erub)	<ul style="list-style-type: none"> <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 Scientific Advisory Committee.</li> <li>TSRA Board member for Ugar TSRA Finfish Quota Management Committee.</li> <li>TSRA Board Fisheries Advisory Committee member.</li> <li>Member of Zenadth Kes Fisheries company.</li> </ul>
Hilda Mosby	Traditional Inhabitant Industry member, Kulkalgai Cluster (Masig, Warraber, Iama, Poruma)	<ul style="list-style-type: none"> <li>No direct interest in fisheries but has long history with Torres Strait fisheries through family involvement.</li> <li>TSRA Board Member for Masig.</li> </ul>
Harry Nona	Traditional inhabitant Industry member (Kaiwalagal)	<ul style="list-style-type: none"> <li>Fulltime fishermen.</li> <li>TIB licence holder</li> </ul>
Terrence Whap	Traditional inhabitant Industry member (Maluiagal)	<ul style="list-style-type: none"> <li>Interests to be declared in session</li> </ul>
Tenny Elisala	Traditional Inhabitant Industry	<ul style="list-style-type: none"> <li>TSRA Ranger Dauan.</li> <li>TIB licence holder.</li> </ul>

Name	Position	Declaration of interest
	Member, Gudmalulgal (Saibai, Dauan, Boigu).	<ul style="list-style-type: none"> <li>PBC director.</li> </ul>
Michael O'Neill	Scientific Member	<ul style="list-style-type: none"> <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>Member of PZJA Finfish RAG and Working Group.</li> </ul>
David Brewer	Scientific Member	<ul style="list-style-type: none"> <li>Director – Upwelling P/L (David Brewer Consulting).</li> <li>Honorary Fellow - CSIRO</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.</li> <li>Co-investigator on the completed Torres Strait 'Non-commercial catch' project funded by TSSAC with RAG member Kenny Bedford.</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>
Ash Lawson	QDAF member	<ul style="list-style-type: none"> <li>Manager of the east coast Spanish mackerel, charter, and deep water line fisheries.</li> <li>Currently transitioning into managing the east coast inshore finfish fishery.</li> </ul>
Chris Boon	Executive Officer (AFMA)	<ul style="list-style-type: none"> <li>Employed by AFMA, no pecuniary interests or otherwise</li> </ul>
Selina Stoute	AFMA Member	<ul style="list-style-type: none"> <li>Employed by AFMA, no pecuniary interests or otherwise</li> </ul>
Mark Anderson	TSRA Member	<ul style="list-style-type: none"> <li>Employed by TSRA.</li> <li>Program manager for economic development fisheries and infrastructure.</li> <li>No pecuniary interests as an individual - TSRA holds fishing licences on behalf of traditional inhabitants.</li> </ul>
Permanent Observers		
Tony Vass	Industry permanent observer	<ul style="list-style-type: none"> <li>No financial interests in the Torres Strait.</li> <li>Former mackerel fisher in Torres Strait 1990 to 2008, does not own or operate a licence in Torres Strait.</li> </ul>

Name	Position	Declaration of interest
Trevor Hutton	Scientific permanent observer	<ul style="list-style-type: none"> <li>• Member of the PZJA Finfish Working Group.</li> <li>• Project team member for past FF harvest strategy project.</li> </ul>
Casual Observers		
Quinten Hirakawa	TSRA Senior Project Officer	<ul style="list-style-type: none"> <li>• TSRA project officer.</li> <li>• TIB licence holder with mackerel, line, cray, and BDM endorsements.</li> <li>• Commercial TRL fisher background.</li> <li>• 25 years working with Queensland Boating and Fisheries Patrol (QDAF).</li> <li>• Recent employment with TSRA Ranger Program and now with the TSRA Fisheries Team.</li> <li>• Co-investigator on behalf of TSRA for the current Spanish mackerel and coral trout biological sampling project.</li> </ul>
Yen Loban	TSRA Fisheries Portfolio member	<ul style="list-style-type: none"> <li>• TIB licence holder.</li> <li>• Board director of the Zenadth Kes Fisheries Company.</li> <li>• Chair of the TSRA Board Fisheries Advisory Committee.</li> </ul>
Keith Brightman	TSRA fisheries Project Officer	<ul style="list-style-type: none"> <li>• Interests to be declared in session</li> </ul>



<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>PRELIMINARIES Action items and record from previous meetings</b>	<b>Agenda Item No. 1.4 FOR NOTING</b>

## RECOMMENDATIONS

1. That the Finfish Fishery Working Group **NOTE:**
  - a) Progress against actions arising from past FFWG meetings; and
  - b) The final meeting record of the FFWG meeting on 25 November 2020.

## KEY ISSUES

### Action arising

2. There is a single outstanding action item from FFWG Meeting 20 March 2018. **Table 1** below outlines progress against this item.

### Meeting record

3. The draft meeting record from FFWG 25 November 2020 was circulated for member comments on 01 December 2020. Minor editing comments were received from David Brewer and Trevor Hutton.
4. No other comments were received.
5. The meeting record (**Attachment 1.4a**) was closed and ratified as a true and accurate record and posted on the PZJA website for public viewing:  
<https://www.pzja.gov.au/torres-strait-finfish-groups>

**Table 1** Status of actions arising from FFWG meetings that are still in progress, yet to progressed or completed but yet to be reported on (updated November 2021).

Meeting	Action	Status as at FFWG Nov 2021
Nov 2018	AFMA to organise a presentation from Biosecurity Australia to present to the FFWG on monitoring in place to prevent invasive fish species such as climbing perch and snakehead from entering the Torres Strait from PNG (and vice versa for cane toads).	<b>In progress</b>  AFMA proposes that this presentation be scheduled for a future meeting.

<https://www.pzja.gov.au/torres-strait-finish-groups>

## Agenda Item 1 – Preliminaries

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

1. The meeting was opened at 0840 hrs at the Novotel Oasis, Cairns. The Chair welcomed attendees and acknowledged the Traditional Owners of the land on which the meeting was held and paid respect to Elders past, present and emerging. The Chairperson reminded members of the need to observe good hygiene practices and social distancing throughout the meeting.
2. The Working Group noted:
  - a) QDAF was an apology;
  - b) AFMA's intention to record the meeting to assist in the preparation of an accurate record and that once the meeting record is finalised the recording would be deleted. The Chair sought advice from members on any concerns with this approach and none were tabled;
  - c) advice from members that Mr Terence Whap had been nominated by participants at the recent fisheries summit convened by TSRA to be the new Traditional Inhabitant member for Maluialgal on the FFWG (filling the current vacancy). The TSRA nomination report is to be considered by AFMA, as delegate for appointing persons to the PZJA advisory committees; and
  - d) Malu Lamar RNTBC (Malu Lamar) have a standing invite to attend all PZJA advisory committee meetings as an observer. The AFMA member confirmed that Malu Lamar has requested consideration be given to Malu Lamar holding membership on all committees. In considering the creation of new positions on PZJA advisory committees, the AFMA member advised that it is necessary to clearly define the role of position. Relevantly, Malu Lamar representations who attended a Hand Collectable Working Group meeting in February 2020, advised that Malu Lamar would seek advice on whether a Malu Lamar representative could participate in recommendation making. Members supported the ongoing attendance of Malu Lamar representatives at FFWG meetings noting Malu Lamar's role in supporting initiatives such as fisheries research activities in the region.

### 1.2. Adoption of Agenda

3. The Working Group adopted the agenda with the addition of having a RAG Chair report under Agenda Item 2 (to be added as item 2.3). Traditional Inhabitant members also nominated two items for discussion under Other Business:
  - a) Consideration of potential impacts that might arise from increased fishing effort in adjacent areas to the Protected Zone associated with the potential development of a 'comprehensive multi-functional fishery industrial park' in Daru and catch sharing arrangements for Spanish mackerel under the Treaty; and
  - b) communicating business of the Working Group with stakeholders, including support for Traditional Inhabitant members to fulfil their responsibilities to engage with fishers and communities.

### 1.3. Declaration of Interests

4. The Chairperson advised that consistent now with Working Group procedure for some time (as provided in PZJA Fisheries Management Paper No. 1), all members of the Working Group must declare all real or potential conflicts of interest in the Torres Strait Finfish Fishery at the commencement of the meeting. Where it is determined that a direct conflict of interest exists, the Working Group may allow the member to continue to participate in the discussions relating to the matter but not in any decision-making process. The Working Group may also determine that, having made their contribution to the discussions, the member should retire from the meeting for the remainder of discussions on that issue.
5. Declarations of interests were provided by each meeting participant. These are detailed in **Table 1**.

6. The FFWG followed a process where each group of members with similar interests were asked to leave the meeting room to enable the remaining members to:
  - a) freely comment on the declared interests;
  - b) agree if the interests precluded the members from participating in any discussions; and
  - c) agree on any actions to manage declared conflicts of interest (e.g. the member may be allowed to participate in the discussions relating to the matter but not in the formulation of final advice).
7. The FFWG also noted that interest can be revisited throughout the meeting and that if any member becomes aware of a potential conflict throughout the meeting, they must immediately disclose the interest.

### **Research interests**

8. Members with research interests (Andy Bodsworth, Michael O'Neill, Dave Brewer and Quinten Hirakawa) were asked to leave the meeting room. The Working Group, temporarily Chaired by the AFMA member, noted that researchers and/or consultants can have a perceived or real interest in both advice on future research priorities and outcomes of currently funded research projects. At the same time the scientific members were appointed to the Working Group in recognition of their scientific expertise relevant to the fishery and hence research that might be undertaken. Like all members, scientific members must ensure they act in the interest of the fishery. Members noted that future research priorities were not part of the meeting agenda and noted the benefit of having scientific expertise available at the meeting. On this basis, it was agreed that the excused members be permitted to participate in discussions under all agenda items and the formulation of recommendations.

### **TSRA and AFMA**

9. TSRA and AFMA officers were asked to leave the meeting room (Mark Anderson, Quinten Hirakawa, Selina Stoute). It was noted that both TSRA and AFMA are a fundamental part of the Torres Strait Fisheries decision making and management processes and as such bring considerable experience and expertise into the FFWG processes. In addition, TSRA administer the finfish sunset leasing process and hold revenue generated from leasing in trust on behalf of Traditional Inhabitants. Several of the Traditional Inhabitant Members' have also been appointed as TSRA Board members (currently in caretaker mode). Members noted the importance of managers supporting elected members and particularly enabling information to get back to fishers and communities.

### **TIB fishing interests**

10. Members with declared commercial fishing interests were asked to leave the meeting room (Cr. Rocky Stephen, Mr Tenny Elisala, Harry Nona, Hilda Mosby and Quinten Hirakawa). The Working Group noted that while fishers may have an interest, real or perceived, in management decisions, either personally or at a community level, their industry expertise and knowledge is critical provided they act in the interest of the fishery as a whole (rather than in a manner that may benefit an individual business and/or specific community). It was also noted that interests can be revisited throughout the meeting. On this basis, it was agreed that the excused members be permitted to participate in discussions under all agenda items, and the formulation of recommendations.

### **Sunset fishing interests**

11. Mr Tony Vass was asked to leave the room. Members noted that while Mr Vass no longer holds a Torres Strait Finfish Fishery licence, he has declared that he represents the interest of the sunset sector. Members recognised the value of Mr Vass's expertise and knowledge of the sunset sector through time. For this reason members agreed for Mr Vass to participate in discussions under all agenda items. To remove any ambiguity, the Chairperson clarified that Mr Vass is appointed on the basis of his expertise and not as a representative of the sunset sector interests.

**Table 1: Torres Strait Finfish Working Group members and observers' declarations of interests**

Name	Position	Declaration of interest
Andy Bodsworth	Independent Chair	Independent Consultant – Cobalt Marine Resource Management. Has previously been commissioned to undertake Torres Strait related fisheries research projects (e.g. the Torres Strait Finfish Fishery Action Plan). Previously worked from AFMA and as Chair other PZJA Advisory Committees (e.g. HCWG)
Rocky Stephen	Traditional Inhabitant Industry Member, Kemer Kemer Meriam (Ugar, Mer, Erub)	Councillor for Ugar, Chairperson of Kos and Abob Fisheries Ugar, Works with brother in a commercial fishing business on Ugar, Eastern cluster member for the PZJA Finfish RAG. Torres Strait Scientific Advisory committee member. Does not hold a TIB licence. TSRA Board Member for Ugar. TSRA Finfish Quota Management Committee. Member of Zenadth Kes Fisheries company to be established on 1 December 2020.
Hilda Mosby	Traditional Inhabitant Industry member, Kulkgal Cluster (Masig, Warraber, lama, Poruma)	No direct interest in fisheries but has long history with Torres Strait fisheries through family involvement. TSRA Board Member for Masig.
Tenny Elisala	Traditional Inhabitant Industry Member, Gudmalulgal (Saibai, Dauan, Boigu).	TSRA Ranger Dauan, TIB licence holder, Traditional inhabitant member, Gudmalulgal for the PZJA Finfish RAG.
Harry Nona	Traditional Inhabitant member, Kaiwalagal	Fulltime fishermen, TIB licence holder and member for Kaiwalagal
Selina Stoute	AFMA Member and E/O	Nil
Mark Anderson	TSRA Member	No personal pecuniary interests. Programme Manager for Fisheries and Economic Development TSRA. TSRA holds finfish quota in trust on behalf of Traditional inhabitants and administers the annual leasing process to Sunset licence holders to generate revenue
Michael O'Neill	Scientific Member	Principal Fisheries Scientist, Queensland Department of Agriculture and Fisheries. Member of PZJA Finfish RAG and Working Group. Project team member for the Torres Strait (Spanish mackerel, coral trout) biological sampling program. Principal scientist for the Spanish mackerel stock assessment project. Was a co-investigator for the research project to develop a harvest strategy for the Torres Strait Finfish Fishery, which closed in 2019. Maintains an interest in undertaking research in the Torres Strait and is likely to submit a funding application to the address the Spanish mackerel stock

Name	Position	Declaration of interest
		assessment research scope in the current funding round.
David Brewer	Scientific Member	Independent consultant - Director of Upwelling P/L (David Brewer Consulting). Honorary Fellow of CSIRO. Chair of the Torres Strait Finfish RAG. Scientific member of the Northern Prawn Fishery RAG. Current consultancies with Quandamooka Yoolooburrabee Aboriginal Corporation, Redlands City Council. Co-investigator on the currently funded Torres Strait Non-commercial fishery monitoring project.
Invited participants and observers,		Declarations of interests
Tony Vass	Invited participant	No financial interest in Torres Strait Fisheries. Previous Torres Strait finfish operator from 1990-2007/08. Represents sunset sector interests.
Trevor Hutton	Scientific permanent observer	Research scientist with CSIRO. CSIRO maintains an interest in undertaking research in the Torres Strait and is likely to submit a funding application to the address the harvest strategy research scope in the current funding round. Was the Principal investigator for the research project to develop a harvest strategy for the Torres Strait Finfish Fishery, which closed in 2019.
Quinten Hirakawa	Observer	TSRA employee and TIB licence holder with Spanish mackerel and coral trout entries. Co-investigator on the Spanish mackerel and coral trout biological sampling project.

#### 1.4. Actions items from previous meetings

12. The Working Group noted progress against actions arising and the final meeting record from the FFWG meeting on 29 November 2019. The Working Group noted that AFMA emailed the TSRA commissioned baitfish scoping study to members on 24 November 2020 after receiving the report from TSRA. The Working Group acknowledged AFMA's previous attempt to have a biosecurity officer attend a Working Group meeting to advise on any monitoring programs in place for invasive pest fish species and associated risks within the region. The Working Group reiterated the importance of obtaining such information and therefore maintaining the action item.

## Agenda Item 2 – Working group updates

### 2.1 Industry and scientific member updates

13. The FFWG noted the following general updates from industry members and invited participants.

#### Sunset sector

14. There has only been one sunset licence holder operating so far for the season. The fisher started a month later than normal and has reported very good Spanish mackerel catch rates. The fisher is reporting 'fished hours' more accurately now rather than the reporting 3 hours irrespective of time fished which was a long-standing practice by the sunset fishing sector.
15. The TSRA member asked why fishers seek access to the Torres Strait Spanish mackerel fishery when the quota value on the QLD east coast is 80-85 cents per kilogram compared to

\$1.25 per kilogram in the Torres Strait. The TSRA member advised that TSRA don't set the price rather operators submit tenders for access each year and nominate a price.

16. Mr Vass advised that when leasing commenced it was intended for the lease price to be 10 percent of the beach price (a common rule of thumb in fisheries) but in recent years the price has increased. Sunset fishers also view the lease pricing differently, in that the price is effectively set and therefore has been increased. The Torres Strait Fishery is attractive in the sense that fishers know they can catch their quota. On the east coast fishing is little by little. The east coast fishery does not catch the TAC. The TAC is around 570t and last season only around 300t was caught. The east coast fishery also supplies the whole fish Sydney market selling at around \$25 per kilogram. Torres Strait product is snap frozen processed.
17. The Scientific member also noted that Torres Strait fishery is based on fishing a spawning aggregation with limited competition from other fishers. Mr Vass advised that on the east coast about half the fleet fish spawning aggregations (e.g. off Lucinda) and half don't. Mr Vass further advised that the loss of the spawning aggregation off Cairns may be more to do with run-off pollution rather than fishing pressure.
18. Members supported the participation of active sunset fishers at future working group meetings.

### **TIB sector**

19. Little fishing has occurred this year from Eastern communities due to poor weather. It has only been the last month that fishers have started to go fishing for Spanish mackerel. Some fishers are focusing on coral trout.
20. The Spanish mackerel biological sampling project has been progressing well and visits to engage communities in the research have been well received. Ugar has just sent samples to QDAF for the project.
21. The Erub freezer is back running following funding from TSRA. The freezer business, 'Darnley Deep' is supporting an increase in fishing effort. Darnley Deep has now sent several (4) shipments of mixed seafood to mainland buyers (TRL tails, coral trout, Spanish mackerel).
22. At Masig there are usually a few older fishers going out for Spanish mackerel. A big TIB vessel is now operating in the central islands and the fisher has sought approval to work around Masig.
23. Traditional take catches have been reportedly very good. Spanish mackerel is an important resource for Traditional fishers.
24. Mer fishers have been selling whole Spanish mackerel for \$18 per kilogram. Mer fishers reportedly caught 1 tonne of Spanish mackerel in a week.
25. Ugar community members expressed concern that Spanish mackerel being taken for subsistence and recreational fishing are significant (maybe more than the TIB catches) but are not being recorded. The fish receiver system records commercial catch only. Members recognised the importance of collecting more accurate catch data for TIB Traditional Fishers (kai kai) and are eagerly awaiting the outcomes of the scoping study investigating options for monitoring Traditional take catches being led by Kenny Bedford.
26. The scientific member confirmed that the 2019 QLD recreational fishing survey did not adequately cover the Torres Strait. The survey is focused on the east coast with limited sample occurring in the Torres Strait.

## **2.2 Government member updates**

### **TSRA**

27. The TSRA member advised that the TSRA funded export and branding project is almost complete with the final report due soon. The report will be publicly available. The aim of the project is to develop export opportunities for Torres Strait product to alleviate reliance on the Chinese market.
28. Following support from participants at a recent summit convened by TSRA, an entity, called Zenadth Kes (meaning four winds of the Torres Strait) is set to be established on 1 December



2020. The entity will slowly take over ownership of Torres Strait Fisheries assets. The TSRA member advised that once the entity starts, information about the entity will be publically available, for example on websites.

## AFMA

29. The Working Group noted the AFMA update as tabled in the agenda item paper. The AFMA member highlighted the management and data history document that AFMA has compiled for the Torres Strait Spanish Mackerel Fishery (Attachment B to the agenda item paper). Members were invited to consider the current draft and if possible out of session, provide advice on any gaps in the information so far compiled.

## 2.3 RAG Chairperson report

30. The Scientific member, Mr Brewer provided an overview of the outcomes of Finfish Resource Assessment Group (FFRAG) meetings held since the last Working Group meeting. Mr Brewer is the Chairperson of the RAG. Mr Brewer reported that the RAG met on 8 October 2020 (meeting 7) to consider data inputs, model scenarios and methods for calculating the Spanish mackerel stock Recommended Biological Catch (RBC). The RAG met again on 4-5 November 2020. Mr Brewer provided a brief outline of the RAG meeting outcomes noting more detailed consideration of key RAG advice will occur under subsequent agenda items. A copy of the meeting record is at **Attachment A** of Agenda Item 3.1.
31. The Chair noted the importance of the RAG's work, particularly with respect to clear advice and recommendations supporting TAC setting for the Spanish mackerel fishery. Also recognising that the good work done by the RAG also made the work of the FFWG more efficient.

## Agenda Item 3 –Total Allowable Catch advice

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### Agenda item 3.1 Spanish mackerel TAC advice for 2021-22 fishing season

32. The Working Group considered and discussed:
- a) an overview from the AFMA member on the advice being sought from the Working Group (as detailed in the agenda paper);
  - b) a presentation from the Scientific member, Dr O'Neill on the Spanish mackerel 2020 stock assessment (Attachment B to the agenda paper);
  - c) a verbal report from the Scientific member and Chairperson of FFRAG, David Brewer outlining relevant advice from FFRAG (as detailed in the agenda paper);
  - d) verbal reports from Traditional Inhabitant members who also serve on the FFRAG outlining the rationale for the FFRAG recommendations on increasing the estimates of catches for Traditional (kai-kai) and recreational fishing (as detailed in the agenda paper). The Working Group noted that, for an abundance of clarity, further discussions would be held in the FFRAG to confirm if the increased estimates apply to any previous years. If so, the catch history for the fishery would be adjusted accordingly;
  - e) verbal reports from Traditional Inhabitant members who also serve on the FFRAG outlining the rationale for why Traditional Inhabitant members of the FFRAG recommended a 94 tonnes RBC over a possible RBC of 105 tonnes (as detailed in the agenda paper);
  - f) the draft meeting record for FFRAG meeting 8 held on 4-5 November 2020 (Attachment A to the agenda paper); and
  - g) FFRAG/WG and industry advice to date on components, guiding principles and key fishery attributes to help shape the development of a harvest strategy for Spanish mackerel (Attachment C to the agenda paper).
33. The Working Group noted that, overall, the current biomass has increased. With increased catch rates and inclusion of new age-frequency data into the model, the RBC recommended by the FFRAG is based on forecasted biomass for the 2021-2020 fishing season. The RBC is

likely to build the stock to a target reference point of B48 within a reasonable timeframe and acceptable level of risk.

34. Having considered advice from the FFRAG and advice on the harvest strategy to date, the Working Group agreed to recommend a TAC for Spanish mackerel for the 2020-21 fishing season of 74 tonnes. The TAC:
  - a) is based on an agreed RBC of 94 tonnes minus 20 tonnes of estimated catches that could be expected to be taken outside of the Fishery (15 tonnes Traditional fishing (kai kai), 5 tonnes recreational fishing, 0 tonnes charter fishing and 0 tonnes PNG catch sharing);
  - b) reflects the preference of Traditional Inhabitant members of both the RAG and Working Group to have a harvest strategy that is balanced and careful by 'hastening slowly' and 'banking' fish if the biomass is increasing. This harvest strategy approach reflects the advice to date on developing a harvest strategy for Spanish mackerel.
35. The Working Group thanked Dr O'Neill, the stock assessment project team and FFRAG for all the work undertaken to assess the status of the stock and recommend a TAC. In particular, the detailed work undertaken to include new age-frequency data, refine data inputs and model scenarios and to support RBC forecasting for the relevant fishing season.

### **Agenda item 3.2. Coral trout TAC for the 2020-21 fishing season**

36. Having considered advice from the FFRAG (as detailed in the agenda item paper) the Working Group agreed to recommend maintaining the coral trout TAC at 135 tonnes. In making this recommendation the Working Group noted that:
  - a) catches remain low in the fishery (catches for the 2019-20 fishing season were 32.34 tonnes);
  - b) FFRAG advice that the preliminary stock assessment undertaken in 2019 indicated that the stock biomass is likely to be high (the preliminary stock assessment estimated biomass to be around 80 percent (B80) of estimated virgin biomass (B0) with all of the model estimates of spawning biomass being above B65);
  - c) consistent with FFRAG advice, it is priority at this time to develop estimates of catches taken outside the fishery and for the TAC to be reduced accordingly. However, this work should commence, further highlighting the importance of the Torres Strait Non-commercial fishery monitoring project currently funded and due to report soon.
37. The Working Group noted FFRAG advice on the data priorities for the fishery and information needed to support the development of a more accurate stock assessment that could be relied upon to adjust the TAC and therefore have greater confidence around the future harvest levels. The Working Group noted the importance of such information to guide investment decisions and provide insights into potential future expansion of the Fishery. The priorities include a fishery-independent dive survey of abundance, together with improvements to the accuracy of logbook reporting (effort, species 'split'), biological sampling and habitat mapping.

## **Agenda Item 4 – Management**

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### **Agenda item 4.1 Western Line Closure**

38. The Working Group noted previous Working Group advice and advice from FFRAG, Tropical Rock Lobster (TRL) RAG discussion, and previous outcomes of public consultation on the proposal to remove the Western Line Closure. The Working Group noted further advice from the FFRAG (meeting 8) on removing the closure in the northern 'top hat' area of the Torres Strait Protected Zone only, for example north of Turnagain Island or Numar Reef. Members noted that the 'top hat' area does not overlap with significant TRL fishing grounds. Interactions with the TRL Fishery was a key concern raised during public consultations.
39. Noting advice from the FFRAG (as detailed in the agenda item paper), the Working Group supported AFMA's intention to undertake further targeted consultation with Gudamalulgal

communities, in partnership with nominated industry members of the RAG (Tenny Elisala, Cr Rock Stephen and John Tabo) to broadly develop the conditions for removing the closure in the 'top hat' area.

40. The Working Group recommended that potential biosecurity concerns associated with invasive fish species be considered; supporting the Traditional inhabitant members recommendation to delay community visits until early next year to enable more preparation time (AFMA had been working towards including the Western Line Closure matter in meetings scheduled with Gudamalulgal communities for the first week of December 2020). Traditional Inhabitant members noted that communities want to open the area but they haven't yet had the information to think through the risks and options for managing those risks. In their view therefore, it was important to not rush and be well prepared, and to share and gather the right information.

#### **Agenda item 4.2      Torres Strait Finfish Fishery management priorities**

41. Working Group members were asked to provide advice on recommended management priorities for 2021-22. Members noted AFMA had outlined several priorities for the Working Group's consideration (detailed in the agenda paper). Members did not recommend any other priorities but provided the following advice on those outlined by AFMA:
  - a) *Progress the development of a harvest strategy.* Supported as a priority. However, it was noted that clear guidance from AFMA to prospective funding applicants on expected deliverables is needed. It was noted that the RAG and Working Group have been developing a harvest strategy approach for Spanish mackerel over the last four years and arguably there are no immediate risks for coral trout given the low fishing effort. However, the Working Group recognised that it is best practice to develop agreed harvest strategies to provide certainty to stakeholders on the information requirements and decision rules for setting TACs in the fishery. This certainty enables more informed business decisions and importantly supports industry and community leaders in building broader stakeholder support for improving data for the Fishery. To ensure a clear return on investment, members agreed that it was essential that a future project build on work already completed to develop a harvest strategy for the fishery. In this regard all potential applicants were encouraged to contact AFMA to discuss proposals prior to submission.
  - b) *Supporting possible changes to the Western Line Closure.* Supported as a priority. It was noted as a long-standing issue, but that good progress has been made more recently to understand the views of Torres Strait Islanders throughout the region and to develop risk-based management options. It was noted that advice needed to be made clear on allowable fishing methods.
  - c) *Supporting the PZJA's consideration of quota unit allocation options.* The Working Group noted the PZJA decision and rationale. That being to consider quota unit allocation options for the Finfish Fishery alongside the review it must undertake for the Traditional Inhabitant quota unit allocation in Tropical Rock Lobster Fishery. The AFMA member advised that having clearly defined catch entitlements (i.e. quota units) will be important to support the transfer of the sunset leasing arrangements from TSRA to non-government entity/ies. Members noted that the PZJA has not yet allocated quota in the Finfish Fishery despite there being a plan of management in place to do so. The AFMA member advised that, following Australian Government buyout of licences held by non-traditional inhabitants in 2008 and therefore potential effort, the PZJA agreed that it was no longer a priority to introduce quota management. Some Traditional Inhabitant members raised strong concerns that a quota allocation process could start to divide their people and cause in-fighting. In their view it should be a matter for the new Zenadth Kes Fishing Company (the entity) to consider whether to pursue such an option. The Working Group noted the sensitivities around allocation and whilst there was support to involve the new entity as a means of involving stakeholders, members

noted AFMA member advice that the nature and extent of any involvement would be subject to the role of the entity. Details on this are to be released by TSRA once the entity is established (refer to TSRA update under agenda item 2.2).

- d) *Formalising total allowable catches for the Finfish fishery.* Supported as a priority noting the Working Group's previous consideration and support for ensuring the TAC is binding on all sectors. The Working Group noted that, in the absence of having quota management under the management plan, current arrangements do not limit catches by the Traditional Inhabitant sector. Having an enforceable TAC was noted as a necessary part of carefully managing catches in the fishery.
- e) *Potential application of VMS on tenders.* The Working Group did not consider this a high priority at this time, however, supported further information being tabled on the pros and cons on having VMS on tenders (boats that work in conjunction with a primary boat). Some Traditional Inhabitant members did not support having VMS on TIB boats but supported the measure applying to the sunset sector noting concerns with sunset boats breaching the 10nm closures around eastern communities. The AFMA member noted that the FFRAG had previously considered the use of VMS as an option for addressing the spatial data needs. The AFMA member further advised that whilst VMS is generally considered to be a cost-effective compliance tool, there was still much analysis to be done by AFMA on matters such as implementation costs across all licence holders to support further consideration of this initiative. AFMA maintains this as a lower priority, subject to resourcing.

## Agenda Item 5 – Research

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### Agenda item 5.1 Research updates

- 42. The Working Group noted that the four research priorities recommended by the FFRAG were supported by the Torres Strait Scientific Advisory Committee (TSSAC) and have recently been released by AFMA in the call for research funding proposals in 2021-22. The AFMA member advised that advice would be sought from the FFRAG and Working Group on any proposals received with pre-proposals due to AFMA early February 2021.
- 43. The Working Group further noted advice from the AFMA member that TSSAC plans to convene a face-to-face meeting in May 2021 to consider strategic research priorities and funding opportunities. Other potential funding partners such as FRDC will be invited. The AFMA member noted that with the conclusion of both the climate change and traditional take scoping studies it will be timely to consider future research directions and possible funding partnerships.

## Agenda Item 6 – Other business

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### Agenda item 6.1 Other business

***Consideration of potential impacts that might arise from increased fishing effort in adjacent areas to the Protected Zone associated with the potential development of a 'comprehensive multi-functional fishery industrial park' in Daru and catch sharing arrangements for Spanish mackerel under the Treaty.***

- 44. Traditional Inhabitant Working Group members sought information on the potential risks to fisheries in the region if fishing effort increased in areas adjacent to Protected Zone as a result of proposed fisheries infrastructure expansion in Daru Island, PNG as recently reported by the media (a 'Comprehensive Multi-functional Fishery Industrial Park'). Members also sought clarification on the catch sharing arrangements for Spanish mackerel.
- 45. The AFMA member advised that the Treaty recognises the rights of both countries to Protected Zone commercial fisheries. This recognition is implemented through catch-sharing arrangements. For Spanish mackerel, PNG is entitled to 40 percent of the agreed TAC for the Protected Zone and outside-but-near areas. The AFMA member advised that AFMA and its PNG counterpart, the PNG National Fisheries Authority (NFA) consult and co-operate with

each other to manage Protected Zone commercial fisheries arrangements. Any expansion in fishing effort in the region needs to be carefully managed within appropriate arrangements and monitoring. AFMA and NFA work closely with each other on fisheries compliance monitoring and enforcement for the region.

***Communicating business of the Working Group with stakeholders, including support for Traditional Inhabitant members to fulfil their responsibilities to engage with fishers and communities.***

46. Traditional Inhabitant members advised of the challenges with communicating with fishers and community stakeholders on Working Group business. Members advised that information is not getting back to all communities. The Working Group agreed that this was central to ensuring the Working Group can provide informed advice and recognised the ongoing efforts to support members and communication more generally. Most recently the initiatives include:
  - a) TSRA committing to an annual round of ‘cluster’ meetings led by Traditional Inhabitant members. The first round of cluster meetings occurred in October and November 2019;
  - b) TSRA preparing meeting outcome summaries (based on the agreed meeting record) to support members liaison with fishers and communities;
  - c) TSRA undertake pre-meeting briefings with Traditional Inhabitant members to go through meeting agenda’s and material;
  - d) TSRA provide new Traditional Inhabitant members with an induction training which is designed, in part, to build their capacity to understand and communicate outcomes;
  - e) AFMA undertakes at a minimum, an annual round of meetings with all communities in partnership with relevant Traditional Inhabitant members.
47. Working Group members offered a number of suggestions for potentially improving and supporting communication:
  - a) Greater use of technology. For example, there are applications that allow material to be posted to multiple social media platforms simultaneously;
  - b) Appointing a communications specialist within TSRA to communicate and gather information;
  - c) One Traditional Inhabitant member recommended having common membership across RAG and Working Groups;
  - d) One Traditional Inhabitant member emphasised the need for all members within a cluster to use one another to share information with fishers and communications from all of the PZJA advisory committees; and
  - e) The AFMA member advised that AFMA continues to explore opportunities to use the TSIRC video conference network to liaise with outer island communities. Being able to video link with communities would allow more frequent direct communication with fishers and fisher associations. AFMA also uses SMS messaging. SMS messaging could be use in future to alert fishers to meeting agendas and outcomes (with links to the PZJA website).
48. Working Group members encouraged both the ongoing development of communication options to support members and for members to continue their efforts to liaise with stakeholders.

**Agenda item 6.2      Date and venue for next meeting**

49. The Working Group noted the proposed meeting schedule together with key items for discussion as detailed in the agenda paper and **Table 2** below.
50. In closing, the Chairperson thanked all members for their contribution and acknowledged the ongoing work undertaken by the Spanish mackerel project team and the FFRAG to improve the stock assessment and develop harvest strategy options. Noting that improved confidence in the stock assessment process would help to ensure a more robust TAC setting process, and improved investment confidence for the fishery. The Chair further recognised the stewardship



shown by Traditional Inhabitants in making recommendations to benefit the long-term sustainability of the fishery. He noted the development of the newly formed Torres Strait fishing entity, Zenadth Kes, and the importance of maintaining good engagement and communications between the FFWG and this group, as well as Malu Lamar. The meeting closed around 1600hrs.

**Table 2: Proposed Torres Strait Finfish Fishery FFWG and FFRAG meetings and key items for 2021.**

Date	Group	Key agenda items
January 2021 (TBC)	PZJA	Decision on 2020-21 season TACs.
1 July 2021 - Torres Strait Finfish Fishery 2021-22 Season Opens		
Date TBC	FFRAG 9 Data Meeting	Review new data available from 2020-21 season to support 2021 stock assessments. Review and advise on research priorities
2-3 September 2021	FFRAG 10	Preliminary assessment update for Spanish mackerel.
14-15 October 2021	FFRAG 11	RBC advice for 2022-23
25-26 Nov 2021	FFWG 2021	TAC advice for 2023-23 season.

<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>PRELIMINARIES</b> <b>Out of session correspondence</b>	<b>Agenda Item 1.5</b> <b>For Noting</b>

## RECOMMENDATIONS

1. That the WG **NOTE** the correspondence sent out-of-session since the 25 November 2020.

## BACKGROUND

2. The following correspondence was circulated out-of-session since 14/09/21. Copies of this correspondence can be requested at any time from the FFWG Executive Officer.

<b>Date</b>	<b>Item</b>
1/12/2020	AFMA circulated the draft meeting record of the FWG meeting held on 25 Nov 2020. Comments were requested by 14 Dec 2020.
14/12/2020	AFMA circulated the ratified meeting record of the FWG meeting held on 25 Nov 2020.
14/12/2020	AFMA provided a NFA catch sharing update
17/08/2021	AFMA emailed members to confirm availability for Finfish Working Group meeting on 25-26 November 2021
14/09/2021	AFMA circulated the draft Agenda for Finfish Fishery Working Group Meeting 2021 for comment.

<b>PZJA Torres Strait Finfish Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>WORKING GROUP UPDATES</b> <b>Industry and scientific member updates</b>	<b>Agenda Item No. 2.1</b> <b>FOR DISCUSSION</b>

## RECOMMENDATIONS

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

## BACKGROUND

2. Verbal reports will be provided by industry members under this item. The FFWG Chairperson may also welcome a short report from any invited participants from industry at this agenda item.
3. It is important that the Working Group develop a common understanding of any relevant matters within the fishery and in adjacent jurisdictions and what issues if any, are having the greatest impact on industry and the management of fisheries. Such understanding will ensure proceedings of the FFRAG and FFWG are focused and may more effectively address each issue.
4. FFWG members are asked to provide any updates on trends and opportunities in global markets, processing and value adding. Industry is also asked to contribute advice on economic and market trends where possible. Scientific members are asked to contribute advice on any broader strategic research projects or issues that may be of interest to the Torres Strait industry in future.



<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2020</b>
<b>WORKING GROUP UPDATES</b> <b>Government member updates</b>	<b>Agenda Item No. 2.2</b> <b>FOR NOTING</b>

## RECOMMENDATIONS

### 1. That the Working Group:

- a. **NOTE** the update provided by the Australian Fisheries Management Authority (AFMA) below;
- b. **DISCUSS** the progress to date against the Wildlife Trade Operation (WTO) conditions for the TSFF fishery as summarised in **Table 3**;
- c. **NOTE** the Communiques from 2021 East Coast Spanish Mackerel Working Group and Queensland Reef Line Working Group meetings provided under **Attachments 2.2i and 2.2j**, and any additional verbal updates provided by Queensland Department of Agriculture and Fisheries (QDAF); and
- d. **NOTE** verbal updates provided by the Torres Strait Regional Authority (TSRA).

## KEY ISSUES

### *AFMA update*

#### *Finfish Fishery licensing and catch information*

2. The end of season 'catch watch' report for the 2020-21 season<sup>1</sup> is provided at **Attachment 2.2a**.
3. At its 28 January 2021 meeting the Protected Zone Joint Authority (PZJA) decided that the Total Allowable Catches (TAC) for the Torres Strait Finfish Fishery (TSFF) 2021-22 season will be 74 tonnes for Spanish mackerel and 135 tonnes for coral trout (see **Table 1**). The PZJA decision was in line with advice from the Torres Strait Finfish Resource Assessment Group and Torres Strait Finfish Working Group.

**Table 1:** TAC allocation in tonnes for the 2021/22 Torres Strait Finfish Fishery season.

2021-22 fishing season TACs and catch allowance by sector			
Species	Agreed TAC	Sunset sector catch share	TIB sector catch share
Spanish mackerel	74	50	24
Coral trout	135	25	110
Other reef-line species*	n/a	6	No limit

<sup>1</sup> This report was initially issued on 19<sup>th</sup> July 2021. The report was re-issued on the 09<sup>th</sup> November 2021 to account for the late-submission of Catch Deposal Records (CDRs). The report was updated on the PZJA website accordingly.

4. As at 12 November 2021, the following number of licences were registered (**Table 2**). By this same period, four TIB licences and two Sunset licences had reported catch.

**Table 2:** Number of licenses issued for the Torres Strait Finfish Fishery at 12/11/2021.

Fishing season	Number of TIB licences			Number of Sunset licences
	SM	Reef line	Dual endorsed	SM/Reef line combined
2021/22	56	20	168	3

5. A total of 84 fish-receiver licenses had been issued as at 12 November 2021.

#### ***Update to the Spanish mackerel management history document***

6. AFMA commenced compiling a management and data history document for the Torres Strait Spanish Mackerel Fishery as an output from the FFRAG 7 meeting held on 8 October 2020. This 'living document' was tabled for comment at the Working Group meeting on 25 November 2020.
7. This document has been updated by AFMA to reflect recent research projects, biological sampling rounds, and Spanish mackerel stock assessments. Refer to **Attachment 2.2b**

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

8. The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires the Australian Government to assess the environmental performance of all commercial fisheries, including those in the Torres Strait, and promote ecologically sustainable fisheries management. Approval under the EPBC Act is necessary for fisheries to be able to legally export commercially wild caught seafood from Australia. Such approvals may be subject to conditions applicable to the responsible management authority and fishers.
9. In October 2020 the Australian Fisheries Management Authority applied for export approval for the Torres Strait Finfish Fishery (TSFF) under the EPBC Act. The application was assessed and the fishery was declared Delegate for the Minister of the Environment, as an approved wildlife trade operation under Part 13A of the EPBC Act until 1 November 2023.
10. This approval was based on the 'Assessment of the Torres Strait Finfish Fishery December 2020', which was undertaken by The Department of Agriculture, Water and the Environment. This assessment contained 9 approval conditions and one recommendation to ensure ecological risks continue to be managed. The advice from the Delegate to AFMA on the WTO approval and the conditions imposed on the Torres Strait Finfish Fishery is provided as **Attachment 2.2c**.
11. AFMA invites both the Finfish RAG and Finfish Working Group (WG) to monitor progress against each condition and provide advice on addressing conditions. To assist the RAG and WG, **Table 3** provides a summary of relevant actions taken or proposed to address each condition.

12. The 2021 Wildlife Trade Operation annual report was submitted to the Department of Agriculture, Water and the Environment on 27/10/2021 in accordance with *Condition 4* of the fishery's WTO export approval. This report details the status against the nine conditions and one recommendation of the export approval. A copy of the report can be reviewed in **Attachment 2.2d**.
13. *Condition 7* of the WTO approval was reviewed by the RAG at FFRAG 9 meeting (14-15 October 2021), *Condition 8* reviewed at FFRAG10 meeting. Further conditions, including Condition 6 are scheduled for review in 2022. Condition 6 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*. This process will need to be formally reviewed within the current WTO approval (by 1 November 2023).
14. The current commonwealth best-practice management measures applied to the take of shark in AFMA fisheries and that with the Torres Strait Fishery include:
  - A ban on finning at sea – (Currently, the processing of a shark by removing the fins from the shark and discarding the remainder of the shark into the sea by a person in the Torres Strait Finfish Fishery (TSFF) is prohibited).
  - A ban on wire traces – (currently not addressed in management instruments or licence conditions for the TSFF. AFMA understands that wire traces are used in the Spanish mackerel fishery. However, it is noted that the wire trace ban was implemented in Australia's pelagic longline fisheries to allow sharks the opportunity to be freed from the line before hauling. The Spanish mackerel fishery is an operationally different fishery, in that catch are immediately hauled upon capture, allowing the live release of sharks.
  - A ban on the take of certain species of shark - (The TSFF currently has no-take prohibitions on hammerhead shark (*Sphyrna lewini*), grey nurse shark, (*Carcharias taurus*) and tiger shark (*Galeocerdo cuvier*)).
  - VMS/Electronic Monitoring – (TSFF sunset sector vessels currently required to have VMS devices installed on primary vessels).
  - Education supported by shark handling/identification/best practice guides. These can be found here: <https://www.afma.gov.au/sustainability-environment/bycatch-discarding/bycatch-reports-publications-id-guides>

See **Attachment 2.2e** for an extract from AFMA's *Handling Practices Guide for Commonly Caught Bycatch Species*

  - Bycatch work plan with identified risks and responses to risk to sharks, developed through an ecological risk assessment (ERA). - (The development of an ERA is also a WTO condition for the TSFF).
15. Further information on the current commonwealth shark management measures relating to shark finning can be reviewed in **Attachment 2.2f**.
16. Noting arrangements in the Torres Strait Finfish Fishery are mostly consistent with Commonwealth best practice, and AFMA is aiming for an Ecological Risk Assessment of the Fishery to commence soon, AFMA proposes for the RAG and Working Group (WG) to review and provide advice on necessary shark bycatch management measures in 2022.

**Table 3.** Progress to date (November 2021) against the Wildlife Trade Operation (WTO) conditions for the Torres Strait Finfish Fishery.

WTO Conditions for the Finfish Fishery	Progress as of October 2021
<p><b>Condition 1:</b></p> <p>The Torres Strait Protected Zone Joint Authority must ensure that operation of the Torres Strait Finfish Fishery is carried out in accordance with management arrangements defined in the Torres Strait Fisheries Act 1984, Torres Strait Fisheries Regulations 1985, Torres Strait Finfish Fishery Management Plan 2013, Torres Strait Fisheries Management Instrument No. 14, Torres Strait Fisheries (Finfish) Management Instrument 2020, Torres Strait Fisheries (Furnishing of Logbooks) Instrument 2020 and in fishery permit conditions.</p>	<p><b>On track:</b></p> <p>The Torres Strait Finfish Fishery continues to be managed in accordance with management arrangements in force under the <i>Torres Strait Fisheries Act 1984</i>.</p>
<p><b>Condition 2:</b></p> <p>The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended material changes to the Torres Strait Finfish Fishery management arrangements that may affect the assessment against which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are made.</p>	<p><b>On track:</b></p> <p>There have been no material changes to management arrangements for the Fishery. As a result AFMA, on behalf of the PZJA, has not been required to inform the Department.</p>
<p><b>Condition 3:</b></p> <p>The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended changes to fisheries legislation that may affect the legislative instruments relevant to this approval.</p>	<p><b>On track:</b></p> <p>AFMA, on behalf of the PZJA, will inform the department of any intended changes to the fisheries legislation and subordinate instruments.</p>
<p><b>Condition 4:</b></p> <p>The Torres Strait Protected Zone Joint Authority must provide reports to the Department of Agriculture, Water and the Environment annually as per Appendix B of the Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition.</p>	<p><b>On track:</b></p> <p>AFMA, on behalf of the PZJA, provided the first annual report on 27 October 2021.</p>
<p><b>Condition 5:</b></p> <p>By 30 June 2023 the Torres Strait Protected Zone Joint Authority must complete an ecological risk assessment of the Torres Strait Finfish Fishery and develop an associated risk management strategy to address any risks identified in this assessment.</p>	<p><b>To be progressed:</b></p> <p>AFMA have yet to approach the CSIRO to undertake an ecological risk assessment for the fishery.</p>
<p><b>Condition 6:</b></p> <p>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.</p>	<p><b>In progress:</b></p> <p>Update scheduled for FFRAG 10 meeting on 18 November 2021, and 2021 FFWG meeting on 25 November 2021.</p> <p>To be formally reviewed by the FFRAG and WG in 2022.</p>

WTO Conditions for the Finfish Fishery	Progress as of October 2021
<p><b>Condition 7:</b></p> <p>The Torres Strait Protected Zone Joint Authority must review the appropriateness of the current minimum size limits for Spanish Mackerel in the Torres Strait Finfish Fishery.</p>	<p><b>In progress:</b></p> <p>To be reviewed at FFRAG 9 meeting on 14-15 October 2021</p>
<p><b>Condition 8:</b></p> <p>By 30 June 2023 the Torres Strait Protected Zone Joint Authority must develop a harvest strategy for the Torres Strait Finfish Fishery.</p>	<p><b>In progress:</b></p> <p>To be discussed/progressed at FFRAG 10 meeting on 18 November 2021, and 2021 FFWG meeting on 25 November 2021.</p>
<p><b>Condition 9:</b></p> <p>The Torres Strait Protected Zone Joint Authority must ensure that there is a sufficient level of compliance measures in place to ensure the sustainable management of the Torres Strait Finfish Fishery, in accordance with the management arrangements in place for the fishery, including the reporting of interaction with protected species.</p>	<p><b>On track:</b></p> <p>To ensure AFMA's compliance efforts are targeted in the right areas an intelligence driven risk based approach, using Compliance Risk Management Teams (CRMTs) will be applied under the <a href="#">2020-21 National Compliance and Enforcement Program</a>. The 2020-21 Program will focus on four key areas, one of which is compliance within Torres Strait Fisheries, focusing on quota evasion and reporting of threatened, endangered and protected (TEP) species. This document explains AFMA's compliance program priorities and objectives for the 2020-21 financial year (FY) and performance in the 2019-20 FY.</p>
<p><b>Recommendation 1:</b></p> <p>The Australian Fisheries Management Authority to continue to work with the Department of Agriculture, Water and the Environment and the Protected Zone Joint Authority to implement changes to the Torres Strait Fisheries Act 1984 to allow data reporting requirements to apply to all fishing sectors in the fishery.</p> <p>Data collection requirements for target species are to include:</p> <ul style="list-style-type: none"> <li>• The total quantity of each species removed from the fishery, including any catch discarded prior to landing to an authorised fish receiver; and</li> <li>• catch and effort data, including location of all commercial fishing activity.</li> </ul> <p>Progress and outcomes of this recommendation to be included in annual reports required under condition 4.</p>	<p>Consistent with the information provided to DAWE via email on 26 October 2021, AFMA is continuing the work with DAWE to progress amendments to the <i>Torres Strait Fisheries Act 1984</i> to create provisions that would require all fishing sectors in the Finfish fishery to undertake logbook reporting.</p> <p>DAWE in consultation with AFMA is finalising drafting instructions for the amendments and sourcing legislative drafting resources from the Office of Parliamentary Counsel. It is expected that an exposure draft of the amendments will be prepared by the end of December 2021, which will then require PZJA approval and subsequent approval from the Prime Minister to be released for consultation.</p> <p>Following this, opportunities to comment on the proposed amendments will be provided to fishers, their communities, Native Title bodies and the general public. This will include a round of community visits in during March - April 2022 where AFMA expects to be consulting with stakeholders on the legislative amendments and other fishery matters.</p> <p>Following the public consultation period, it is expected that Parliament will be able to consider the amendments in the Winter 2022 Parliamentary sittings.</p>

### ABARES Fishery Status Report

17. Each year, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) compiles fishery status reports which provide an independent assessment of the biological status of fish stocks and the economic status of fisheries managed, or jointly managed, by the Australian Government (Commonwealth fisheries). The most recent ABARES Fishery Status Report was released in 2020 and summarises the performance of the finfish fishery in 2018 and 2019, against the requirements of fisheries legislation and policy.
18. In the 2020 report, both Spanish mackerel and coral trout are classified as not being overfished, and not subject to overfishing. The status of the Torres Strait Finfish and Fishery is summarised in the table below.

**TABLE 16.1** Status of the Torres Strait Finfish Fishery

Biological status					
Stock	2018		2019		Comments
	Fishing mortality	Biomass	Fishing mortality	Biomass	
Coral trout ( <i>Plectropomus</i> spp., <i>Variola</i> spp.)					Management strategy evaluation testing suggests that current catches are below the level likely to lead to biomass declines. Most recent biomass estimate indicated a biomass above $0.6B_0$ .
Spanish mackerel ( <i>Scomberomorus commerson</i> )					Current fishing mortality rate is below that required to produce MSY. Most recent average estimate of biomass is above $0.2B_0$ .
Economic status					
Estimated net economic returns are not available for the fishery. The gross value of production declined in the 2018–19 fishing season, likely due to lower catch. However, participation from the Traditional Inhabitant Boat Sector increased in 2018–19, indicating a potential increase in the socio-economic benefits for Torres Strait Islander communities.					
Notes: $B_0$ Unfished biomass. MSY Maximum sustainable yield.					
Fishing mortality					
Biomass					

■ Not subject to overfishing      ■ Subject to overfishing      ■ Uncertain  
■ Not overfished      ■ Overfished      ■ Uncertain

19. ABARES fishery status reports can be accessed on the ABARES website at: <https://www.agriculture.gov.au/abares/research-topics/fisheries/fishery-status#sections>

### Legislative amendment update

20. AFMA is continuing the work with the Department of Agriculture, Water and the Environment (DAWE) to progress amendments to the *Torres Strait Fisheries Act 1984* (the Act) and the *Torres Strait Fisheries Regulations 1985* (the Regulations). The purpose of the amendments is to provide improvements to the efficiency and effectiveness of fisheries administration in the Torres Strait. The PZJA first decided to pursue legislative amendments at its meeting on 5 August 2015, which was then approved by the then Deputy Prime Minister and Minister for Agriculture and Water Resources in March 2017. AFMA advised the HCWG of this decision at its 11<sup>th</sup> meeting on 27 June 2017, and has provided periodic updates on the status of the legislative amendments at subsequent HCWG meetings.



21. At their most recent meeting on 17 August 2021, the PZJA provided policy approval to a final suite of proposed amendments to both the Act and the Regulations. A complete list of the approved proposed amendments is provided at **Attachment 2.2g**. Of particular relevance to the Working Group, the amendment to provide for catch reporting across all licence holders will allow for the implementation of mandatory daily logbook reporting by TIB licence holders. This will provide for improved data on which to base management advice and decisions.
22. DAWE in consultation with AFMA is finalising drafting instructions for the amendments and sourcing legislative drafting resources from the Office of Parliamentary Counsel. It is expected that an exposure draft of the amendments will be prepared by the end of December 2021, which will then require PZJA approval and subsequent approval from the Prime Minister to be released for consultation.
23. Following this, opportunities to comment on the proposed amendments will be provided to fishers, their communities, Native Title bodies and the general public. This will include a round of community visits in March - April 2022 where AFMA expects to be consulting with stakeholders on the legislative amendments and other fishery matters.
24. Following the public consultation period, it is expected that Parliament will be able to consider the amendments in the Winter 2022 Parliamentary sittings.
25. The expected timeline of events is summarised below:

Event	Timeline
Exposure draft prepared	By end of December 2021
PZJA and Prime Ministerial approval to release for public consultation	January 2022
Public consultation, including face to face community meetings (subject to COVID-19 requirements)	March - April 2022
PZJA advisory committees' consideration of outcomes as necessary.	To be determined
PZJA consideration of consultation outcomes.	To be determined
Introduction of the Bill to Parliament	Winter 2022 Parliamentary sittings

### ***Electronic Catch Disposal Records***

26. AFMA has launched electronic Catch Disposal Records (eCDRs) as part of the mandatory Fish Receiver System. This will provide Torres Strait fish receivers with an optional fast and easy way to electronically report landed catch information to AFMA.
27. Using eCDRs can mean less paperwork and no need to post or email paper CDR records to AFMA. Fish receivers will benefit from electronically submitting their CDRs directly to AFMA in real time. Fishers also benefit by receiving a notification via SMS or email from AFMA when fish receiver submits an eCDR of the catch landed. The system is simple and can be accessed via computer, mobile phones or tablets.
28. While the Fish Receiver System remains a mandatory licence condition, using electronic CDRs is voluntary. Fishers are still able to use the original paper system.

### Standardised licence conditions

29. Licences granted by AFMA, on behalf of the PZJA are subject to conditions under section 22 of the *Torres Strait Fisheries Act 1984*. Current licence conditions have been developed over many years and as such may not always be clear or consistent. AFMA therefore intends to vary the conditions on all Master Fisherman's, fishing licences (TIB, TVH and sunset), carrier licences and fish receiver licences to ensure they are standardised across all licences of the same type, and to ensure the requirements imposed on licence holders are enforceable.
30. The new or amended conditions do not impose any new requirements on licence holders. The changes are to clarify requirements that are already known and understood by licence holders, including TIB licence holders.
31. Specifically, the varied conditions will address the following:
  - a. **Adding definitions** of terms from existing conditions that were previously not defined on the licence.
  - b. **Adding a condition** that explicitly links the fishery symbols (otherwise known as endorsements) listed on the licence with the area of waters the licence holder can operate within, and with what species they can take (for a fishing licence), carry and/or process (for a Carrier A, B or C licence) or which boats they can be in charge of (for a Master Fisherman's licence).
  - c. **Adding a condition** to require compliance with any applicable management plans.
  - d. **Adding a condition** to clarify that boats nominated on a Torres Strait licence must be Australian boats.
  - e. **Adding a new condition** to clarify existing and known requirements for tender boats to fish in conjunction with a primary boat.<sup>2</sup>
  - f. **Adding a new condition** on Carrier A licences to clarify known requirements that a boat with a Carrier A licence can only carry product caught by said boat or its tender boats.
  - g. **Amending an existing condition** on Carrier B licences to clarifying existing requirements including:
    - that Carrier B licences cannot carrying product from unlicensed fishing boats;
    - providing an exemption to allow boats with both a carrier B licence and a fishing licence to be able to process product where that product has been caught by the fishing boat nominated to the licence (or its tenders);
    - providing an exemption to allow boats with both a Carrier B licence and a fishing licence to tow its own tender boats and provide accommodation for its own crew.
  - h. **Amending existing conditions** on Carrier C licences relating to accommodating crew, towing boats and carrying product from licenced boats only with slight wording changes to ensure the wording is the same across all Carrier C licences.
  - i. **Amending an existing condition** to standardise, the requirements for carrying a Vessel Monitoring System (VMS) across all licences where applicable. VMS is required on all carrier and primary fishing boats greater than 6m in length unless an exemption is granted.

<sup>2</sup> The Working Group should note that this is to clarify existing licensing arrangements and does not impede on TIB industry aspirations to pursue greater flexibility for TIB primary boats to tow tenders un-associated with the primary boat, buy and receive product from other fishing boats and accommodate fishers.



- j. **Amending an existing condition** (with slight wording changes) to clarify existing requirements to land catch to licensed fish receivers and to **add** a provision for the approved use of electronic catch disposal records (eCDRS) on fish receiver licences.
  - k. **Amending an existing condition** relating to ownership and operation of boats on Traditional Inhabitant Boat (TIB) licences to mirror the requirements in current licence policy to ensure that:
    - the licence holder is a verified traditional inhabitant (aka who have completed a Traditional Inhabitant Identification form), who is also an Australian citizen and continues to reside in either the Protected Zone or adjacent area of Australia;
    - all crew on boat the nominated boat are Traditional Inhabitants who are also Australian citizens, who continue to reside in either the Protected Zone or adjacent area of Australia; and
    - the boat nominated on the licence is owned by the licence holder.
32. In line with section 24HA(7) of the *Commonwealth Native Title Act 1993*, a future act notice (FAN) was issued to relevant Native Title bodies and claimants by AFMA in relation to varying Torres Strait licence conditions. Having regard to any comments provided in response to the FAN (the comment period closes on 29 October 2021), AFMA expects to implement the new conditions before the end of the calendar year. All affected licence holders will be notified accordingly.

### ***Compliance outcomes for the 2020-21 season***

33. AFMA has been delivering domestic compliance functions in the Torres Strait in accordance with the National Compliance and Enforcement Program. There are three (soon to be four) compliance officers based in the Thursday Island office delivering both domestic and foreign compliance outcomes.
34. In March 2020 all AFMA field duties were suspended due to COVID-19, however AFMA continued to monitor fishing operations via electronic means including vessel monitoring systems (VMS), remote monitoring, surveillance, intelligence and other sources of data.
35. AFMA recommenced limited operational field activities in August 2020 and continues to conduct these activities in accordance with best practise, mandatory social distancing and hygiene and in accordance with guidelines developed for field activities.
36. Despite some operational challenges in 2020, AFMA fisheries officers have delivered the following outcomes between July 2020 – June 2021:
- a. 45 ports/freight hubs visits;
  - b. 68 fish receiver inspections;
  - c. 62 vessel inspections;
  - d. Joined our management team in 22 stakeholder / community meetings.
  - e. Regular monitoring of seafood movements throughout the Torres Strait and conducting further investigations in some cases;
  - f. 12 individuals were prosecuted for Torres Strait fisheries offences in 2020/21. None of these offences occurred within the Finfish fishery.
37. To better target priority risks in Torres Strait fisheries, AFMA have established a specialised multi-disciplinary Compliance Risk Management Team (CRMT). Priority risks specific to the Torres Strait include unlicensed fishing, unlicensed fish receiving and non-compliance with catch/landing reporting to AFMA. Failing to report catch or landings is considered quota

evasion and results in the undermining of the ongoing sustainable management of the Torres Strait Fisheries.

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

### ***Western Line Closure***

40. The RAG (at FFRAG 9 meeting 14-15 October 2021) noted an update from AFMA and industry members Rocky Stephen, John Tabo Jr, and Tenny Elisala on recent planning sessions to progress targeted consultations in Gudamalugal communities on the proposed re-opening of the Western Line Closure. A copy of the tabled draft plan of action to remove the closure, as well as a complete timeline of PZJA consultations and advice can be reviewed at **Attachment 2.2h**.
41. The RAG reviewed the plan of action for consultations and approval process for removing the closure. As discussed at previous meetings the RAG noted the following points that will need to be addressed in the lead up to the proposed opening:
  - a) The area of the opening will need to be defined;
  - b) What are the aspirations of the Gudamalugal communities for a commercial reef line fishery? What species does the community want to target? Are minimum size limits required for currently unregulated fish species?
  - c) What are the merits of the various research options available to support the opening of the fishery?
  - d) What are the likely implications for Traditional fishing? These will need to be mitigated.
42. The representative from Malu Lamur advised that a resolution has been reached within the Gudamalugal Nation islands that the boundary of the 'top hat' area should be drawn north of Buru (Turnagain) Island. Malu Lamar are to be invited to join in the next round of targeted consultations.

### ***QDAF UPDATE***

43. The RAG are invited to note a verbal update delivered by Ash Lawson of QDAF.
44. A copy of the communique from the inaugural East Coast Spanish Mackerel Working Group held on 17 and 18 May 2021 in Brisbane is provided at **Attachment 2.2i**
45. A copy of the communique from the Queensland Reef Line Working Group meeting held on 22-23 April 2021 in Cairns is provided at **Attachment 2.2j**

# AFMA CATCHWATCH

A REPORT FROM THE AUSTRALIAN FISHERIES MANAGEMENT AUTHORITY

Notice Issued on 09 November 2021

## Torres Strait Finfish Fishery - Data Period 1 July 2020 to 30 June 2021 (End of season report)

Species Name		Agreed Total Allowable Catch (TAC) (kg)	Reported catch^ (kg)	Available TAC (kg)	% TAC Caught
Traditional Inhabitant Boat Licence (TIB) sector					
Spanish mackerel		20,000	3,527.5	16,870.80	15.65%
Coral Trout		105,000	4,155.9	101,726.20	3.12%
Basket species	Barramundi cod	No catch limit	248.4	n/a	n/a
	Cobia		20.00		
	Emperor		8.10		
	Mixed fish		291.10		
	Red emperor		35.7		
	Rockcod		119.20		
	School mackerel		818.30		
	Shark mackerel		-		
	Trevallies and scads		3.90		
	Tripletail maori wrasse		32.50		
	Tropical snappers (mixed)		11.50		
	Basket species TOTAL		1,588.70		
Sunset licence (Sunset) sector					
Spanish mackerel		39,000	28,813.20	10,186.80	73.88%
Coral Trout		30,000	15,661.80	14,338.20	52.21%
Basket species	Barramundi cod	4,000	532.00	2,076.20	48.10%
	Cobia		13.5		
	Emperor		59.50		
	Mixed fish		-		
	Red emperor		148.50		
	Rockcod		177.00		
	School mackerel		-		
	Shark mackerel		65.50		
	Trevallies and scads		562.50		
	Tripletail maori wrasse		-		
	Tropical snappers (mixed)		365.30		
	Basket species TOTAL		1,923.80		

Notes:

<sup>^</sup> Catch reported through mandatory TDB02 Catch Disposal Records (CDRs) and does not include any unreported catches or outstanding catches (there is an expected processing delay of 2-3 weeks from when a Fish Receiver completes a CDR and AFMA receives and processes it). TIB sector operates under a competitive total allowable catch. Sunset sector boats have individual vessel catch allowances detailed here: [www.afma.gov.au/fisheries-services/concession-holders-conditions](http://www.afma.gov.au/fisheries-services/concession-holders-conditions)

Conversion ratios used to convert back to whole weight are:

	Spanish mackerel	Coral trout	Other reef-line species
Filleted	1.601 : 1	2 : 1	2.5 : 1
Gilled & Gutted	1.050 : 1	1.1 : 1	1.1 : 1

Season date is financial year 1 July to 30 June.

### Summary of Torres Strait Spanish mackerel fishery commercial fishing history

Updated 01/10/2021

**Table 1.** Table of FFRAG reports and studies to understand major changes in the TSSMF over time. Events are colour coded according to the key below.

Management	Research projects	Stock assessments	Foreign fishing	Key history e.g. boats active	Biological sampling
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Date	Event	Source
1942	Start of commercial fishing for Spanish mackerel, reportedly to supply Torres Strait Army Hospitals augment food supply during WW2. Army Fishing Unit (although mackerel catches were likely occurring for local consumption prior to WW2)	McPherson 1986 in Haines et. al summary of 1985 Port Moresby seminar
1945-1957	Skipper Snowy Whitaker was known to have a vessel prior to the <i>Trader Horn</i> after WW2. This might have been <i>AFV Saint Hillaire</i> or <i>AFV Sawfish</i> .	McPherson pers. comm. AFMA interview Oct 2020.
1957 to 1962	<i>AFV Winston</i> reportedly the major mackerel catching boat from 57-62 and the only Torres Strait fleet boat of a size and seaworthiness to fish at Bramble Cay. <i>AFV Winston</i> reportedly fished two dories for all years active. ( <i>Geoff McPherson holds logbook data for AFV Winston and is reviewing</i> )	McPherson pers. comm. AFMA interview Oct 2020.
1957 to ~1969	<i>AFV Trader Horn</i> active in TSFF from 1957 working Spanish mackerel until it refitted as a prawn trawler in the late 60's. Once this vessel moved to prawn other mackerel boats entered the Torres Strait (skipper Snowy Whitaker was protective of his fishing marks and market).	Kenny Bedford report at FFRAG 7, McPherson pers. comm. AFMA interview Oct 2020.
1970s to 1980's	Four boats reported to be commonly working from Ugar at two sites with occasional fishing at Bramble Cay. One primary boat reportedly had 7-8 dories linked.	Rocky Stephen interview with father Daniel Stephen report given to FFRAG 7.
1974	Torres Strait Fisheries Survey including mackerel, Aboriginal and Torres Strait Island Commission engaged in the survey. (Need further details was this aboard <i>AFV Winston</i> as reported by McPherson?)	Begg et al. 2006
1975-1979	Catch data available from this time period from the Queensland Fish Board (or North Queensland Fish Board).	McPherson 1986
1974-1986	Taiwanese gillnet fishery operated in Australian EEZ from NW Shelf to north of Gulf of Carpentaria, 8-16km driftnets targeting shark, tuna and mackerel.	FRDC Report 1990 Analysis of Taiwanese Gill-net Data
1976-1993	Taiwanese gillnet fishery in operation in the adjacent Gulf of Papua under PNG licences. Mainly targeting sharks but known	Chapau & Opnai, 1986 "The Taiwanese Gillnet"

	that up to 10% of catch was bony fishes from earlier years where catch reports are available. (Need to confirm date PNG licences stopped).	<i>Fishery in the Gulf of Papua</i> in Haines et. al summary of 1985 Port Moresby seminar.
1977-1982	TSSMF Research conducted aboard <i>AFV Winston</i> , scientist John Carlton (QLD Fisheries) and skipper Jack Jarret. Same vessel and procedures each year meaning this study is likely a good insight into the fishing at this time in history.	McPherson pers. comm. AFMA interview Oct 2020.
1979, November	Australian Fishing Zone (AFZ) <sup>3</sup> declared as the NT gillnet fishery develops in late 70s. This declaration limited the impact of Taiwanese gillnet fishery. Taiwanese catch dropped from 25,000t of all species p.a. to 10,000 t for all species p.a. post 1979.	FRDC Report 1990 Analysis of Taiwanese Gill-net Data
Late 70s, early 80s	Thursday Island local Tony Tardent worked as a deckhand on <i>AFV TRADER HORN</i> .	Kenny Bedford report to FFRAG 7.
1984/1985	<i>AFV Winston</i> was sold by the Jarret family after fishing Torres Strait for X time period.	McPherson pers. comm. AFMA interview Oct 2020.
1985	Torres Strait Treaty established and Torres Strait Fisheries Act. Establishment of Torres Strait Protected Zone Joint Authority (PZJA) to regulate all fisheries in Torres Strait. Transferable licences issued to non-traditional inhabitants who could demonstrate history and commitment to fishing in Torres Strait. Licences subject to strict vessel replacement regulations related to vessel size. Vessels restricted to less than 20 m in length. Traditional inhabitants could obtain the commercial fishing license from PZJA. Ban on netting of Spanish mackerel. Minimum legal size of 45 cm TL for Spanish mackerel.	Begg et al. 2006
1985	Genetic variation and population structure of Torres Strait Spanish Mackerel.	Shaklee et al. 1985
1986	Aust. Govt. limits length of gillnets to 2.5km to lower risk to dolphins ( <i>Signed Wellington Treaty?</i> ) this makes the legal Taiwanese gillnet fishery uneconomical and it generally ceases soon after.	FRDC Report 1990 Analysis of Taiwanese Gill-net Data
1988	AFMA SM01 daily fishing logbook introduced – compulsory for non-islander and PNG fishers, replaces Queensland LF03 logbook	Begg et al. 2006
1990	AFMA SM02 daily fishing logbook introduced	Begg et al. 2006

<sup>3</sup> <https://www.agriculture.gov.au/fisheries/domestic/zone>

1990	Skipper Tony Vass (FFRAG member) begins fishing Torres Strait mackerel until 2007 buyout.	
1992	IUU incident with two Taiwanese vessels <i>FFV Sheng Fu</i> and <i>FFV Hwa Si</i> , apprehended. One running aground at Turu Cay, ghost nets retrieved up to 10 miles in length.	AFMA 2020 advice to Spanish mackerel project team.
1998	Minimum size limit of 45cm TL introduced for Torres Strait for all mackerel species. Fishing methods restricted to trolling, hand-lining and drop-lining.	Begg et al. 2006
1999	Management transferred from QDAF to PZJA with AFMA engaged. . Traditional inhabitants required to hold a current Torres Strait Traditional Inhabitant Fishing Boat Licence (TIB) or Torres Strait Fishing Boat Licence for commercial fishing in TSPZ. Fishery expanded to include spotted, school, shark and grey mackerel in addition to Spanish mackerel.	Begg et al. 2006
2001 and 2002	Investment warnings issued by Aust. Govt. ahead of TSFF structural adjustment (6 Nov 2001 and 15 Feb 2002).	AFMA
2003	Voluntary islander docket book (TDB01) introduced 2003, in use until mandatory Torres Strait Fish Receiver System (AFMA CDRs) started in December 2017.	AFMA
2004	AFMA led (John Marrington) voluntary industry length frequency and sexing program provides 1789 samples (length and sexing only, no ageing data performed). Sampling methodology is available.	AFMA 2004 Torres Strait Mackerel Fishery Mackerel/Linefish Logbook Supplementary Information
2004	Minimum legal size increased to 75 cm TL for Spanish mackerel. Minimum legal size increased to 60 cm TL for spotted mackerel. Minimum legal size increased to 50 cm TL for school, shark and grey mackerel.	AFMA
2005	PZJA decision on total ban of gillnetting in the Torres Strait for commercial purposes.	AFMA
2006	Begg et al. First Stock assessment of Torres Strait Spanish mackerel.	Begg et al. 2006
2007	Structural adjustment and buyout - fishery access becomes 100 per owned by Traditional Inhabitants	
2013	<i>Torres Strait Finfish Management Plan 2013</i> implemented.	
2016	Assessment update for Torres Strait Spanish mackerel fishery.	O'Neill 2016

2017 (1 July 2017)	Vessel monitoring systems introduced in Torres Strait primary tender operation vessels. (TIB and TVH - no VMS on tenders or sole operating dinghies)	
2017 (1 Dec 2017)	TDB02 Catch Disposal Records become mandatory for all Torres Strait commercial catch (TIB and TVH-sunset sectors)	
2017 (Nov 2017)	PZJA Torres Strait Finfish Resource Assessment Group formed and inaugural meeting to progress Harvest Strategy	
2019	2019-20 Torres Strait Biological Sampling Program run <b>(Project number 190832)</b>	QDAF - Joanne Langstreth
2019	Non-commercial fishing in the Torres Strait <b>(Project number 190827)</b> (completed in 2020-21 as extended by 1 year due to covid)	DML consulting - Kenny Bedford
2019	"Torres Strait Spanish mackerel stock assessment with appraisal of environmental drivers" <b>(project number 190831) Year 1</b>	M. O'Neill (QDAF) R. Buckworth (Seasense)
2020	2019-20 Torres Strait Biological Sampling Program run <b>(Project number 190851)</b>	QDAF - Joanne Langstreth
2020	"Torres Strait Spanish mackerel stock assessment with appraisal of environmental drivers" <b>(project number 190831) Year 2</b>	M. O'Neill (QDAF) R. Buckworth (Seasense)
2020	WTO 'approval condition 7' requires the PZJA to: <i>review the appropriateness of the current minimum size limits for Spanish Mackerel in the Torres Strait Finfish Fishery. (To be reviewed at FFRAG 9 Oct 2021)</i>	Delegate of the Minister for the Environment
2021	2019-20 Torres Strait Biological Sampling Program run <b>(Project number 200814 – Year 1 of 3)</b>	QDAF - Joanne Langstreth
2021	Torres Strait Finfish Fishery Spanish mackerel stock assessment <b>(project number 200815 – Year 1 of 3)</b>	M. O'Neill (QDAF) R. Buckworth (Seasense)
2021	Designing a close-kin mark-recapture study for Torres Strait Spanish mackerel. <b>(project number 200817)</b>	Ashley Williams (CSIRO)





## Australian Government

Department of Agriculture,  
Water and the Environment

Ref: 002068366

Mr Wez Norris  
Chief Executive Officer  
Australian Fisheries Management Authority  
GPO Box 7051  
CANBERRA ACT 2610

Dear Mr Norris

I am writing to you as Delegate of the Minister for the Environment in relation to the assessment of the Torres Strait Finfish Fishery under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In October 2020 the Australian Fisheries Management Authority applied for export approval for the fishery under the EPBC Act.

The application has been assessed and I have declared the fishery an approved wildlife trade operation under Part 13A of the EPBC Act until 1 November 2023. The list of exempt native specimens has also been amended to allow export of product from the fishery while the specimens are covered by the declaration as an approved wildlife trade operation.

The Part 13A declaration includes conditions and recommendation that were agreed by officials from AFMA and the Department of Agriculture, Water and the Environment as areas requiring ongoing attention. These are set out at **Attachment 1**.

I have also reaccredited the management plan for the fishery under Part 13 of the EPBC Act.

Please note that any person whose interests are affected by this decision may make an application to the Department for the reasons for the decision, and may apply to the Administrative Appeals Tribunal to have this decision reviewed. I have enclosed further information on these processes at **Attachment 2**.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Laura Timmins'.

Laura Timmins  
Delegate of the Minister for the Environment

23 December 2020



**Part 13A conditions to the Torres Strait Protected Zone Joint Authority on the approved wildlife trade operation declaration for the Torres Strait Finfish Fishery – December 2020**

**Condition 1:**

The Torres Strait Protected Zone Joint Authority must ensure that operation of the Torres Strait Finfish Fishery is carried out in accordance with management arrangements defined in the *Torres Strait Fisheries Act 1984*, *Torres Strait Fisheries Regulations 1985*, *Torres Strait Finfish Fishery Management Plan 2013*, *Torres Strait Fisheries Management Instrument No. 14*, *Torres Strait Fisheries (Finfish) Management Instrument 2020*, *Torres Strait Fisheries (Furnishing of Logbooks) Instrument 2020* and in fishery permit conditions.

**Condition 2:**

The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended material changes to the Torres Strait Finfish Fishery management arrangements that may affect the assessment against which *Environment Protection and Biodiversity Conservation Act 1999* decisions are made.

**Condition 3:**

The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended changes to fisheries legislation that may affect the legislative instruments relevant to this approval.

**Condition 4:**

The Torres Strait Protected Zone Joint Authority must provide reports to the Department of Agriculture, Water and the Environment annually as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition*.

**Condition 5:**

By 30 June 2023 the Torres Strait Protected Zone Joint Authority must complete an ecological risk assessment of the Torres Strait Finfish Fishery and develop a associated risk management strategy to address any risks identified in this assessment.

**Condition 6:**

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.

**Condition 7:**

The Torres Strait Protected Zone Joint Authority must review the appropriateness of the current minimum size limits for Spanish Mackerel in the Torres Strait Finfish Fishery.

**Condition 8:**

By 30 June 2023 the Torres Strait Protected Zone Joint Authority must develop a harvest strategy for the Torres Strait Finfish Fishery.

**Condition 9:**

The Torres Strait Protected Zone Joint Authority must ensure that there is a sufficient level of compliance measures in place to ensure the sustainable management of the Torres Strait Finfish Fishery, in accordance with the management arrangements in place for the fishery, including the reporting of interaction with protected species.

**Recommendation 1:**

The Australian Fisheries Management Authority to continue to work with the Department of Agriculture, Water and the Environment and the Protected Zone Joint Authority to implement changes to the *Torres Strait Fisheries Act 1984* to allow data reporting requirements to apply to all fishing sectors in the fishery.

Data collection requirements are to include:

- The total quantity of each target and non-target species removed from the fishery, including any catch discarded prior to landing to an authorised fish receiver;
- Catch and effort data, including location of all commercial fishing activity; and
- Interactions with protected species.

Progress and outcome of this recommendation to be included in annual reports required under condition 4.



### **Notification of Reviewable Decisions and Rights of Review<sup>1</sup>**

There is a right of review to the Administrative Appeals Tribunal (AAT) in relation to certain decisions/declarations made by the Minister, the Minister's delegate or the Secretary under Part 13A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Section 303GJ(1) of the EPBC Act provides that applications may be made to the AAT for the review of the following decisions:

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

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

- by notice, provided in writing, request that the Minister or the Minister's delegate give you a statement in writing setting out the reasons for the decision as per section 28 of the *Administrative Appeals Tribunal Act 1975*. The Minister, or Minister's delegate may refuse to give you a statement of reasons if your application is made more than 28 days after the day on which you received this notice.
- apply to the AAT for independent merits review of the decision. The AAT undertakes *de novo* merits review. This means they take a fresh look at the facts, law and policy relating to the decision and arrive at their own decision. They decide if the decision should stay the same or be changed. They are independent of the Department.

Application for review of a decision must be made to the AAT within **28 days** after the day on which you have received the reviewable decision. However an extension of time for lodging an application may be granted by the AAT under certain circumstances. Please visit the AAT's website at <http://www.aat.gov.au/> or telephone 1800 228 333 for further information. The role of the AAT is to provide a review mechanism that is fair, just, economical, informal and quick.

### **Applications & Costs**

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

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

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

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

The cost of lodging an application for review is \$952 (as of 1 July 2020) (GST inclusive). You may be eligible to pay a reduced fee of \$100.00 if

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

You may also be eligible for a reduced fee if you can demonstrate to the AAT that paying the full fee would cause you financial hardship. Further information can be found on the AAT's website. Additionally, you can access information about legal assistance at <https://www.ag.gov.au/LegalSystem/Legalaidprogrammes/Commonwealthlegalfinancialassistance/Documents/LegalFinancialAssistanceInformationSheet.pdf>.

If you pay a standard application fee, most of it will be refunded if the case is resolved in your favour. The refund amount is the difference between the fee you paid and \$100. So, if you paid \$920, you get back \$820 and if you pay \$952, you get back \$852. There is no refund if you paid the lower application fee for certain taxation decisions or the reduced fee of \$100.

### Contact Details

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

The Director  
Wildlife Trade Assessments Section  
Department of Agriculture, Water and the Environment  
GPO Box 858  
Canberra ACT 2601  
**Telephone:** +61 (0) 2 6274 1917  
**Email:** [sustainablefisheries@environment.gov.au](mailto:sustainablefisheries@environment.gov.au)

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

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

### Freedom of Information Request

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

## **Torres Strait Finfish Fishery**

**Wildlife Trade Operation  
Annual Report 2021**

# 1 Introduction

All fisheries granted export approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) are required to produce annual reports containing the information outlined in Appendix B of the Australian Government's *Guidelines for the Ecologically Sustainable Management of Fisheries – 2<sup>nd</sup> Edition* (the Guidelines).

This report to the Department of the Agriculture, Water and the Environment (the Department) meets the annual reporting requirements (Condition 4) for AFMA managed fishery approvals under the EPBC Act. The information provided in this report covers the 12 months since the Torres Strait Finfish Fishery (FF Fishery) was declared as an approved as a Wildlife Trade Operation on 23 December 2020.

Table 1 below summarises the level of information contained in this annual report. Detailed responses are provided under relevant section headings.

**Table 1. Summary of key changes to the Finfish Fishery since last approved as a Wildlife Trade Operation on 23 December 2020.**

Section	Since the last accreditation	Yes / No	Refer to section below
Description of the Fishery	Has there been any significant change to the description of the Fishery?	No	n/a
Management arrangements	Has there been any significant change to management arrangements and/or fishing practices that may affect EPBC Act approval criteria? If yes, please provide relevant information.	No	n/a
Research and monitoring	Has any research and/or monitoring of fishing activities including stock assessments or risk analysis been conducted? If yes, please provide relevant information.	Yes	2
Catch data for target, byproduct and bycatch species	Has there been any change in average annual catch data for target, byproduct and bycatch species including upward or downward trend in catches and its relevance to limit reference points or performance indicators? If yes, please provide details.	Assessments are in progress.  Total catches for the fishery remain relatively similar to past years. End of season catch watch for the fishery is available from the PZJA website.	3
Stock status for target, byproduct	Has there been any change in the stock status for target and byproduct species including any	No	n/a

Section	Since the last accreditation	Yes / No	Refer to section below
and bycatch species	increase or decrease in the number of overfished or uncertain stocks, or where limit reference points or performance indicators have been triggered? If yes, please provide details.		
Interaction with EPBC-listed protected species	Has there been any change in the nature, scale, intensity of impact, and/or management response in relation to interactions? If yes, please provide details.	No	n/a
Ecosystem impact (e.g. habitat, food chains etc).	Has there been any fishery and/or non-fishery change in the nature, scale, intensity of impact, and/or management response including identification and mitigation measures? If yes, please provide details.	No	n/a
Conditions and/or recommendations	Has any progress been made towards implementing the conditions and/or recommendations from the last fishery assessment or annual report under the EPBC Act. If yes, please provide details.	Yes	4

## 2 Research and monitoring

### 2.1 Research projects

Three research projects have been funded for the TS Finfish Fishery:

- Torres Strait Finfish Fishery Spanish mackerel stock assessment (project number 200815)
- Enhancing biological data inputs to Torres Strait Spanish Mackerel stock assessment (project number 2019/0832)
- Designing a close-kin mark-recapture study for Torres Strait Spanish Mackerel (project number 200817)

For further information on these projects refer to the meeting papers and record of Finfish Resource Assessment Group 9 (FFRAG 9) on the PZJA website.

### 2.2 Climate change impacts on Torres Strait Fisheries

In the 2019-20 financial year, the Torres Strait Scientific Advisory Committee (TSSAC) funded a project applicable across all Torres Strait fisheries entitled 'Climate variability and change relevant



tot key fisheries resources in the Torres Strait – a scoping study’. The need to better understand the species-specific effects of climate change and variability on Torres Strait fisheries was identified as a research priority by the TSSAC in 2018. The project builds on a literature review of the main climate change drivers in Torres Strait affecting tropical rock lobster, beche-de-mer, finfish, prawns, turtles and dugongs to provide detailed specification and costings for a future project that will produce the over-arching data framework at the appropriate spatial scales, as required to address future climate variability and change scenarios for Torres Strait fisheries.

## 2.3 Developing an approach for measuring non-commercial fishing in Torres Strait

This scoping study was funded to quantify the subsistence and recreational (i.e. non-commercial) take of key commercial species and to gauge interest from Torres Strait communities in collecting information on the subsistence take of other non-commercial species, to identify the most culturally significant and important species to communities (including contribution to health and livelihoods).

The research need was identified the Torres Strait Regional Authority (TSRA) Finfish Fishery leasing quota committee. A committee at the time, comprising TSRA Board members and traditional inhabitant representatives from eastern island communities. Members identified the need to improve estimates of non-commercial catch of commercial species to inform stock assessment, the setting of sustainable catch levels and to determine the how much of the available catch needs to be reserved for traditional fishing.

The project found self-reporting using an app (or web-based approach indistinguishable from an app) was likely to be the best approach to monitoring non-commercial fishing, paired with a data validation method of conducting household surveys. The project undertook consultation with stakeholders on this monitoring approach which would need to continue should the project recommendation proceed. This would ensure communities are on board with this approach and identify risks and concerns that would need to be managed around it.

## 2.4 Electronic catch disposal records

AFMA has launched electronic Catch Disposal Records (eCDRs) as part of the mandatory Fish Receiver System. This will provide Torres Strait fish receivers with a fast and easy way to electronically report landed catch information to AFMA

Using eCDRs means less paperwork and no need to post or email paper CDR records to AFMA. Fish receivers will benefit from electronically submitting their CDRs directly to AFMA in real time. Fishers also benefit by receiving a notification via SMS or email from AFMA when fish receiver submits an eCDR of the catch landed. The system is simple and can be accessed via computer, mobile phones or tablets.

While the Fish Receiver System remains mandatory, the use of eCDRs is voluntary and licence holders are still able to use the paper system.

### 3 Catch data for target species

Protected Zone Joint Authority (PZJA) advisory Resource Assessment Group and Working Group processes are currently underway for the Finfish Fishery. Meeting outcomes from both advisory committees will be made available on the PZJA website. Total catches for the fishery remain relatively similar to past years. End of season catch watch for the fishery is available from the PZJA website here: [https://www.pzja.gov.au/sites/default/files/ff\\_catch\\_watch\\_2020-21\\_end\\_of\\_season.pdf](https://www.pzja.gov.au/sites/default/files/ff_catch_watch_2020-21_end_of_season.pdf)

### 4 Progress against conditions and recommendations

As per details in Table 2 below.

**Table 2. Summary of progress against WTO conditions and recommendations for the Torres Strait Finfish Fishery.**

WTO Conditions for the Finfish Fishery	Progress as of October 2021
<b>Condition 1:</b> The Torres Strait Protected Zone Joint Authority must ensure that operation of the Torres Strait Finfish Fishery is carried out in accordance with management arrangements defined in the <i>Torres Strait Fisheries Act 1984</i> , <i>Torres Strait Fisheries Regulations 1985</i> , <i>Torres Strait Finfish Fishery Management Plan 2013</i> , <i>Torres Strait Fisheries Management Instrument No. 14</i> , <i>Torres Strait Fisheries (Finfish) Management Instrument 2020</i> , <i>Torres Strait Fisheries (Furnishing of Logbooks) Instrument 2020</i> and in fishery licence conditions.	<b>On track:</b> The Torres Strait Finfish Fishery continues to be managed in accordance with management arrangements in force under the <i>Torres Strait Fisheries Act 1984</i> .
<b>Condition 2:</b> The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended material changes to the Torres Strait Finfish Fishery management arrangements that may affect the assessment against which <i>Environment Protection and Biodiversity Conservation Act 1999</i> decisions are made.	<b>On track:</b> There have been no material changes to management arrangements for the Fishery. As a result AFMA, on behalf of the PZJA, has not been required to inform the Department.
<b>Condition 3:</b> The Torres Strait Protected Zone Joint Authority must inform the Department of Agriculture, Water and the Environment of any intended changes to fisheries legislation	<b>On track:</b> AFMA, on behalf of the PZJA, provided the Department an update on proposed legislative amendments on 26 October 2021.

WTO Conditions for the Finfish Fishery	Progress as of October 2021
that may affect the legislative instruments relevant to this approval.	
<b>Condition 4:</b> The Torres Strait Protected Zone Joint Authority must provide reports to the Department of Agriculture, Water and the Environment annually as per Appendix B of <i>the Guidelines for the Ecologically Sustainable Management of Fisheries - 2nd Edition</i> .	<b>On track:</b> This report meets this requirement.
<b>Condition 5:</b> By 30 June 2023 the Torres Strait Protected Zone Joint Authority must complete an ecological risk assessment of the Torres Strait Finfish Fishery and develop an associated risk management strategy to address any risks identified in this assessment.	<b>In progress:</b> AFMA is working with CSIRO on priorities for ecological risk assessments across all commonwealth and Torres Strait Fisheries.
<b>Condition 6:</b> 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.	<b>To be progressed:</b> Advice will be sought from the PZJA advisory Resource Assessment Group and Working Group in 2022.
<b>Condition 7:</b> The Torres Strait Protected Zone Joint Authority must review the appropriateness of the current minimum size limits for Spanish Mackerel in the Torres Strait Finfish Fishery.	<b>In progress:</b> Currently under consideration by the PZJA advisory Resource Assessment Group and Working Group.
<b>Condition 8:</b> By 30 June 2023 the Torres Strait Protected Zone Joint Authority must develop a harvest strategy for the Torres Strait Finfish Fishery.	<b>In progress:</b> Currently under consideration by the PZJA advisory Resource Assessment Group and Working Group.
<b>Condition 9:</b> The Torres Strait Protected Zone Joint Authority must ensure that there is a sufficient level of compliance measures in place to ensure the sustainable management of the Torres Strait Finfish Fishery, in accordance with the management arrangements in place for the fishery, including the reporting of interaction with protected species.	<b>On track:</b> To ensure AFMA's compliance efforts are targeted in the right areas an intelligence driven risk based approach, using Compliance Risk Management Teams (CRMTs) will be applied under the <a href="#">2020-21 National Compliance and Enforcement Program</a> . The 2020-21 Program will focus on four key areas, one of which is compliance within Torres Strait Fisheries, focusing on quota evasion and reporting of threatened, endangered and protected (TEP) species. This document explains AFMA's compliance program priorities and objectives for the 2020-21 financial year (FY) and performance in the 2019-20 FY.

WTO Conditions for the Finfish Fishery	Progress as of October 2021
<p><b>Recommendation 1:</b></p> <p>The Australian Fisheries Management Authority to continue to work with the Department of Agriculture, Water and the Environment and the Protected Zone Joint Authority to implement changes to the <i>Torres Strait Fisheries Act 1984</i> to allow data reporting requirements to apply to all fishing sectors in the fishery.</p> <p>Data collection requirements for target species are to include:</p> <ul style="list-style-type: none"> <li>• The total quantity of each species removed from the fishery, including any catch discarded prior to landing to an authorised fish receiver; an</li> <li>• catch and effort data, including location of all commercial fishing activity.</li> </ul> <p>Progress and outcomes of this recommendation to be included in annual reports required under condition 4.</p>	<p>Consistent with the information provided to DAWE via email on 26 October 2021, AFMA is continuing the work with DAWE to progress amendments to the <i>Torres Strait Fisheries Act 1984</i> to create provisions that would require all fishing sectors in the Finfish fishery to undertake logbook reporting.</p> <p>DAWE in consultation with AFMA is finalising drafting instructions for the amendments and sourcing legislative drafting resources from the Office of Parliamentary Counsel. It is expected that an exposure draft of the amendments will be prepared by the end of December 2021, which will then require PZJA approval and subsequent approval from the Prime Minister to be released for consultation.</p> <p>Following this, opportunities to comment on the proposed amendments will be provided to fishers, their communities, Native Title bodies and the general public. This will include a round of community visits in during March - April 2022 where AFMA expects to be consulting with stakeholders on the legislative amendments and other fishery matters.</p> <p>Following the public consultation period, it is expected that Parliament will be able to consider the amendments in the Winter 2022 Parliamentary sittings.</p>

# Sharks

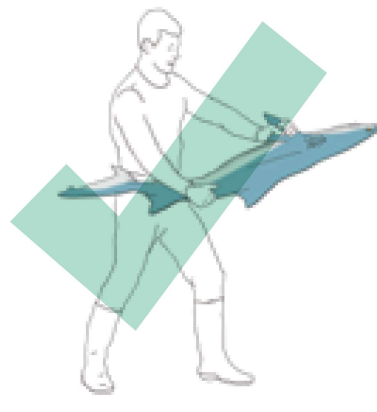
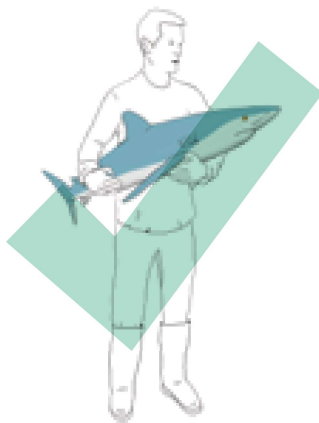
## CORRECT HANDLING

**If possible, release the shark without bringing it onto the deck.**

## If the shark has to be brought on board:

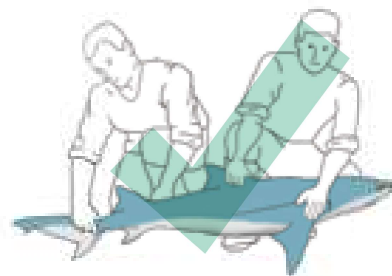
### Holding and lifting of sharks

- Generally, small sharks are fragile and need to be handled very carefully. It is best to handle and release them with both hands. Methods of holding include:
  - ~ both hands supporting the body
  - ~ one hand grabbing the pectoral fin and the other the tail
  - ~ holding the dorsal fin and supporting the body and tail.



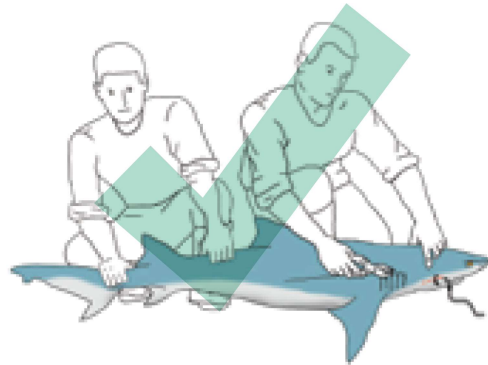
### Holding large sharks

- Two people may be required with one person holding the dorsal fin and pectoral fin, while the other person holds the tail.



## Treating sharks on deck

- Always attempt to keep the shark in a horizontal position to reduce the risk of internal organ damage
- Hold the shark firmly behind the head and around the tail using gloves and/or a wet towel, and then try to remove the hook
- If the hook cannot be removed easily the line should be cut as close to the mouth as possible
- To calm a shark down turn it over onto its back or place a wet towel over its eyes
- To prevent bites place a dead fish or stick in its jaws
- If release needs to be delayed place a deck hose in the shark's mouth so that water flows through the shark's gills.



## Returning sharks to the water

1. Lower the shark gently into the water head first and release it.

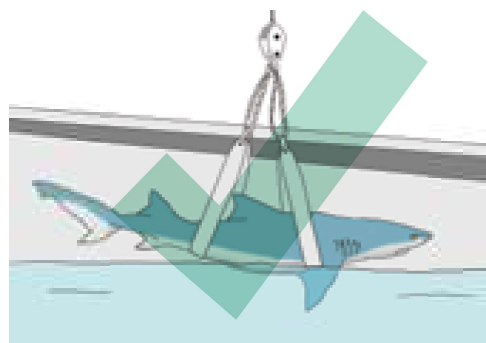
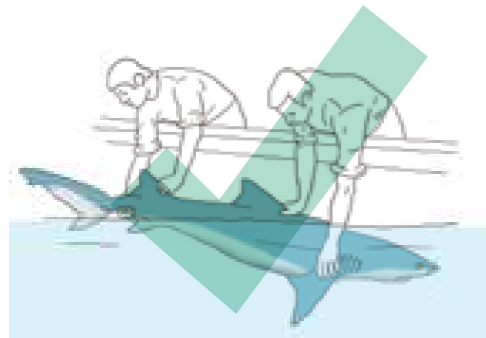
**Do not throw it**

2. It may be necessary to face the shark into the current and swim it for a few minutes to aid in recovery before it swims away

3. Small sharks can be released by one person

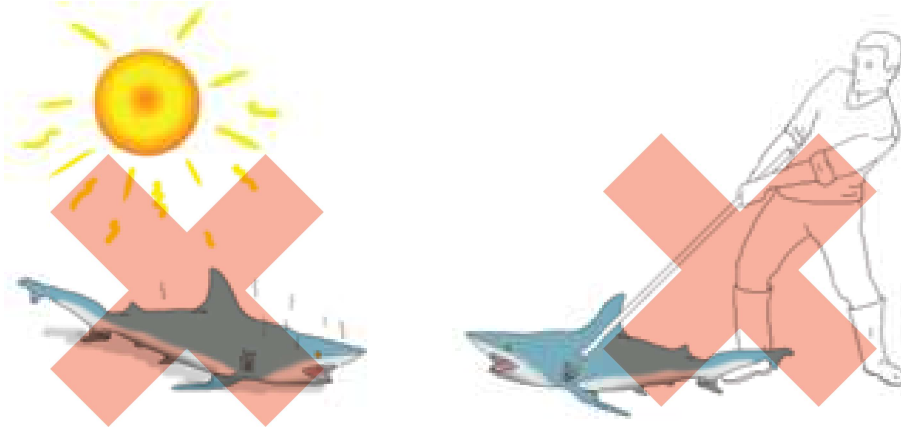
4. Large sharks may require two people to lift and hold the shark

5. Very large sharks may need to be lifted with the use of wide slings. **Do not use thin wires or cables.**

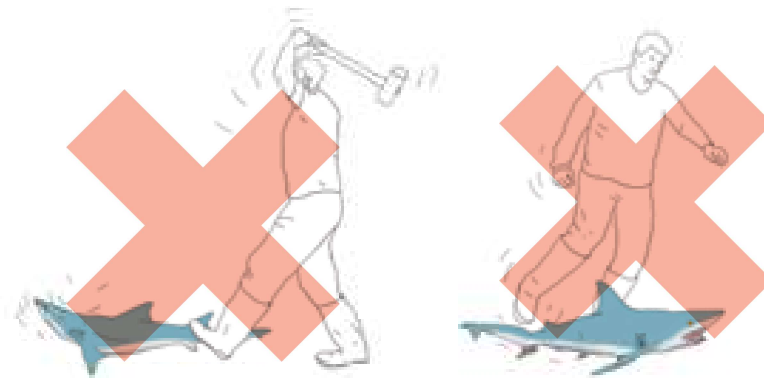


## INCORRECT HANDLING

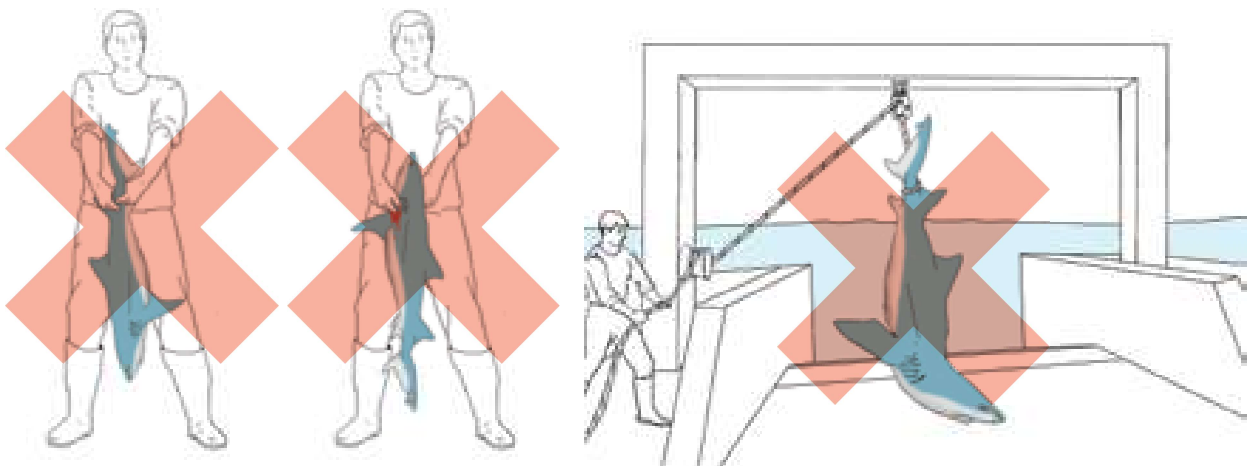
- **Do not** use gaffs or sharp objects in direct contact with the shark. A gaff should be used only to control the line



- **Do not** leave the shark exposed to sunlight for extended periods of time
- **Do not** kick, hit, throw or push the shark harshly, or expose it to other physical trauma



- **Do not** pick up the shark by the tail, head or the gill slits.







## Shark finning – frequently asked questions

You are here: [Home](#) / [Resources](#) / [Educational](#)

### What is shark finning?

Shark finning is simply the practice of removing a shark's fins from the body for separate sale. The term is sometimes used to describe the practice when a shark's fins are removed to sell and the rest of the body is discarded at sea.

### Why do people take the fins? What are the fins used for?

Shark fin is used in predominantly Chinese cooking, e.g. shark fin soup. It is considered a delicacy and some people believe it has medicinal value. It is a high priced commodity, especially as shark finning at-sea has now been banned by a lot of countries.

### What happens to the shark when its fins are taken?

The body of the shark is either returned to the water without its fins or the fins and the body are sold separately. On rare occasions the shark is sometimes alive when returned to the water but will soon die.

In Australian fisheries it is illegal to possess shark fins on board a commercial fishing vessel without having the whole shark on the vessel. This helps ensure that shark finning is not occurring at sea. Not allowing finning at-sea allows for more effective monitoring of the catch and promotes optimum utilisation as the fins can then be used along with the rest of the shark. Once landed the whole shark must be offloaded to a licensed fish receiver. From that point on the shark can be processed with various body parts going to different markets, including the fins.

### Does AFMA allow shark finning in Commonwealth fisheries?

Shark finning at-sea is illegal in Commonwealth fisheries. This means that the removal of shark fins at sea and the dumping of the carcass are prohibited. To prevent this occurring, all fisheries are subject to Fisheries Management Regulation 9ZO that makes it an offence for the caudal lobe, caudal fin, pectoral fin and dorsal fin to be removed from the shark at sea before it is in the possession of a fish receiver.

### Is illegal shark finning at-sea a problem in Commonwealth fisheries?

Between 2008-09 and 2011-12 reports of and evidence for illegal shark finning became less common in Commonwealth fisheries.

AFMA takes this issue very seriously and has done extensive analysis of catch landings and export data, investigated allegations of shark finning and has conducted strategic intelligence assessments on market demand and potential black market implications. Evidence available to AFMA suggests that illegal shark finning at-sea is a low risk however, compliance officers remain on the lookout for evidence of illegal shark finning when they are out in the field.

### How does AFMA stop shark finning at-sea in Commonwealth fisheries?

#### Rules and regulations

In parts of Australia where the Commonwealth has jurisdiction over fishing, AFMA has imposed a range of measures to prevent shark finning at-sea. These include limits on the number of sharks which can be carried on board vessels and restrictions on processing sharks at sea and the form in which fish receivers are permitted to receive shark.

#### No wire traces



In addition, AFMA has banned the use of wire traces in Australia's pelagic longline fisheries. Elsewhere in the world, wire is used to connect the hook to the main fishing line. The increased strength of wire prevents sharks from biting through the line and escaping. Scientific research has shown banning wire traces allow many sharks to escape longlines by biting through the monofilament that connects the hook to the mainline.

## Inspections

AFMA also undertakes regular targeted inspections of Commonwealth fishing vessels and fish receiver premises. These inspections check compliance levels against all Commonwealth fisheries management arrangements, including the landing and receipt of sharks.

## Vessel Monitoring Systems

AFMA also ensures strong compliance measures are in place on fishing vessels, including the use of electronic vessel monitoring systems for all boats so their movements can be tracked. This allows fisheries officers to better target their inspections because they know when fishing vessels are coming into port.

## E-monitoring

AFMA has also installed electronic monitoring systems on some vessels operating in fisheries that target or otherwise catch significant numbers of shark. These systems monitor vessel location through GPS and video record 100% of fishing activities. AFMA then analyses the footage for data verification and compliance purposes.

## What is AFMA doing about shark finning risks in our region?

Australia has taken a leading role at Regional Fisheries Management Organisations (agreements between countries to manage shared fish stocks) to implement stronger shark management measures. Australia has regularly called for the international banning of the use of wire traces and the shark finning at sea.

## Which fisheries catch shark?

AFMA manages one fishery that actively targets shark. This fishery predominantly targets gummy shark. Gummy shark is not caught for its fins but to sell as 'flake' which is often used in fish and chips. The fishery is subject to high levels of monitoring and assessment to ensure catches are sustainable and within scientifically-based limits. Catch limits are actively enforced by AFMA Compliance Officers and through catch documentation requirements. School shark, which can be caught with gummy shark, was historically subject to high levels of fishing pressure and the stocks are now being closely managed to ensure recovery.

Some sharks are taken as incidental catch in the Eastern and Western Tuna and Billfish Fisheries. The main species caught are shortfin mako sharks and blue sharks.

## Is there legal shark fin?

Yes. Where sharks have been harvested and landed in accordance with the regulations, fins removed from these sharks can be sold legally.

## What can I do to help?

If you suspect illegal fishing, including shark finning at-sea or shark catches beyond sustainable limits, please report it via our hotline CRIMFISH on 1800 274 634 or via our [CRIMFISH online form](#).

### [EDUCATIONAL](#)

[Shark finning – frequently asked questions](#)

▼ EXPLORE THE SITE ▼



<b>Torres Strait Fisheries Act 1984 proposed amendments</b>		
<b>No</b>	<b>Proposals</b>	<b>PZJA policy approval date</b>
1	Capacity to require catch reporting across all licence holders.	PZJA Out of Session January 2017 (approved in March 2017)
2	Capacity to provide electronic licensing and monitoring to licence holders.	
3	Capacity to delegate the powers to grant and vary scientific and developmental permits.	
4	Capacity to simplify the renewal of fishing licences.	
5	Capacity to delegate the powers to contracted service providers.	
6	The implementation of Fisheries Infringement Notices.	
7	Provide for the grant of a licence without specifying a boat in the licence.	PZJA meeting 32 8 October 2019
8	Provide for a class of licence that authorises the taking of fish as well as the processing and carrying of fish taken with the use of another boat.	
9	Impose logbook requirements via the determination of a legislative instrument, exercisable by a delegate of the PZJA.	
10	Make minor technical amendments to support the introduction of other measures.	
11	Make further amendment to the Act to make it explicit that the Chief Executive Officer (CEO) of the Australian Fisheries Management Authority (AFMA) is a person to whom the Minister and the PZJA can delegate their respective functions and powers in sections 9 and 38 of the Act.	PZJA meeting 35 27 August 2020
12	Make further amendments to the Act and Regulations to be prepared for the PZJA's consideration that are consistent with providing immediate improvements to the efficiency and effectiveness of fisheries administration in the Torres Strait.	
13	Make a technical amendment to section 42(1) (q) of the Act where currently an officer may 'sell any fish seized by him or her under this Act' to make this requirement consistent with section 84(1)(t) of the Fisheries Management Act 1991 where an officer may 'sell or otherwise dispose of any fish seized by him or her under this Act'.	PZJA meeting 38 17 August 2021
14	Extending the statutory limit of prosecution for offences under the Act from 12 months to two years, in order to make this requirement consistent with section 95(7) of the <i>Fisheries Management Act 1991</i> , which enables a prosecution for an offence to be commenced within two years after the commission of the offence.	
15	Provide for the Minister to be able to declare that a person must hold a master fisherman's licence for specific fisheries.	

Torres Strait Fisheries Regulations 1985 proposed amendments		
1	Simplified disclosure of fisheries information.	PZJA OOS January 2017 (approved in March 2017)
2	Provide a legislative authority for the collection of information, to be exercised by a person exercising powers or performing functions under the Act.	PZJA meeting 32 8 October 2019
3	Allow licences to be granted for up to five years duration.	PZJA meeting 32 8 October 2019
4	Update provisions concerning the detention of illegal foreign fishers to be brought in line with analogous provisions of the <i>Migration Regulations 1994</i> .	
5	Prescribe a condition that all licence holders must comply with any relevant plan of management.	
6	Make any additional amendments required consequential to the amendments to the Act identified above.	
7	Make further amendments to the Act and Regulations to be prepared for the PZJA's consideration that are consistent with providing immediate improvements to the efficiency and effectiveness of fisheries administration in the Torres Strait.	PZJA meeting 35 27 August 2020
8	Update the Regulations relating to distinguishing number requirements for licenced boats to align with current licencing practice	PZJA meeting 38 17 August 2021
9	Enable a licence fee to be paid for a Fish Receiver Licence and a licence to fish without a boat.	

### **Progression to date on the consultation process to review the ‘western line closure’ in the Torres Strait Finfish Fishery.**

Updated at FFRAG 9 meeting on 14-15 October 2021, this document outlines a draft plan of action to remove the closure, as well as a complete timeline of PZJA consultations and advice.

### **KEY ISSUES**

1. At the Torres Strait Finfish Fishery Working Group meeting on 25 November 2020, the Working Group supported AFMA’s intention to undertake further targeted consultation with Gudamalulgal communities, in partnership with nominated industry members of the RAG (Tenny Elisala, Cr Rock Stephen and John Tabo) to broadly develop the conditions for removing the closure in the ‘top hat’ area.
2. These consultations were planned as a result of RAG advice tabled at FFRAG meeting 8 (4-5 November 2020), agreed to by the Finfish Working Group 25 November 2020.
3. Having regard for the RAG advice, the purpose of undertaking further targeted consultation with Gudamalulgal communities is to:
  - a) further understand the nature and extent of likely fishing effort in the short-term and longer-term industry aspirations and potential impacts on traditional fishing;
  - b) outline the risks with targeting jewfish – a species vulnerable to depletion; and
  - c) discuss with fishers the different options for management approaches for developing the fishery including:
    - opening with data collection and monitoring obligations and a review schedule for assessing whether the opening should continue
    - undertaking a resource survey before opening (noting funding would need to be sourced for this research); and
    - taking an adaptive management approach whereby fishing is allowed in part of the fishery as a means to examine likely impacts and the nature of fishing (noting this option is likely least viable given the small area under consideration)
4. The Working Group on 25 November 2020 recommended that potential biosecurity concerns associated with invasive fish species be considered; supporting the Traditional inhabitant members recommendation to delay community visits until early 2021 to enable more preparation time (AFMA had been working towards including the Western Line Closure matter in meetings scheduled with Gudamalulgal communities for the first week of December 2020).  
 In early 2021 AFMA could not progress this item due to the limited availability of stakeholders and due to the timing of 2021 black teatfish opening in the Torres Strait Beche-de-mer Fishery, commencing on 30 April 2021, and the level of AFMA resources required to support a successful opening.
5. As of 30th September 2021, there was a draft plan to engage in community consultations in April/May 2022. A planning meeting between AFMA and industry members is scheduled to take place in October 2021.
6. The removal of the ‘top hat’ area of the western line closure requires an amendment to the existing *Torres Strait Fisheries (Finfish) Management Instrument 2020*. Specifically ‘Prohibition 15’ in the instrument, which legislates the closure, and defines its geographic

area, will need to be updated to reflect the newly defined closure area. Such an amendment will require approval by the PZJA.

7. The geographic area of the 'top hat' area will need to be defined.
8. The draft plan of action moving forward is as follows:

<b>October 2021</b>	AFMA and nominated industry members meet to plan and discuss targeted community consultations. Planning will be supported by industry members, using knowledge gained from the beche-de-mer Harvest Strategy and eastern community advice.
<b>October 2021</b>	FFRAG 9 to note update on planned community consultations
<b>November 2021</b>	Finfish Working Group to note update on planned community consultations
<b>Mar/Apr 2022</b>	Targeted community consultations to be conducted.
<b>Apr/May 2022</b>	AFMA to report the outcomes of community consultations back the RAG and Working Group (OOS)
<b>TBD 2022</b>	PZJA Meeting. Subject to outcomes of community consultations and further RAG and WG advice, the PZJA are to consider approving the amendment of the western line closure.
<b>TBD 2022</b>	Subject to PZJA approval, AFMA to amend the <i>Torres Strait Fisheries (Finfish) Management Instrument 2020</i> to reflect newly defined western line closure.

## BACKGROUND

### 2012

1. The removal of the western closure of the reef-line sector has been a long standing item which has been supported in-principle by the Finfish Working Group.
2. At the FFWG meeting (20 March 2012), TSRA indicated that there was community interest in removing the western closure.

### 2016

3. At its July 2016 meeting the FFWG noted members had varying views on whether or not sufficient consultation on removing the closure had occurred. A key development since initial consultation on this issue has been the Native Title Determination on the Regional Sea Claim, and it was noted that notification to the relevant Registered Native Title Bodies Corporate groups would be undertaken prior to the PZJA making a decision.

### 2017

4. At its March 2017 meeting the FFWG noted progress since the last FFWG meeting to remove the western line closure (as detailed in the agenda paper, work is ongoing to compile outcomes of previous consultation processes). An industry member advised that if the area of the western closure was to be reopened consideration should first be given to:

- a. how much fishing the area could support noting that the fishing grounds are different from those in the east and concern that the area may not be able to support the number of licences in the fishery; and
  - b. the potential for alternative livelihoods or business opportunities for traditional owners such as ecotourism.
5. Other industry members were generally supportive of this proposal and advised that further community consultation should occur before the western area of the fishery was reopened, to gauge community aspirations on future usage.
6. Noting there are no existing agreements in place to guide resource sharing between sectors (fishing, tourism etc.) the FFWG agreed for following action:
  - a. AFMA, TSRA and Malu Lamar to meet out-of-session to consider an appropriate process to canvass community aspirations and considerations for removing the western line closure.
7. AFMA convened a meeting with Malu Lamar and TSRA on 5 April 2017. The following was agreed:
  - Removal of the western line closure is to be contingent on further community consultation with the western communities and consideration of any sustainability risks. The aim of the consultation will be to determine how communities may/or may not like the resources to be managed to benefit both commercial and tourism industries;
  - TSRA will lead this consultation process (undertaking meetings / report findings etc). TSRA will undertake consultation opportunistically combining with other meetings (e.g. AFMA fish receiver meetings, top western projects);
  - AFMA will seek scientific advice (through the future Finfish RAG) on the possible impacts of removing the closure on stocks, noting advice that the fishing grounds/habitat may be different in the west compared to the eastern area. There is concern that the reefs are shallower and possibly more susceptible to localised depletion.
8. AFMA sought preliminary technical advice from the Finfish RAG (FFRAG 1 9-10 Nov 2017) on what inter-session work will likely be required to assess the likely stock impacts from removing the western line closure. The FRAG had limited amount of time available and FRAG requested a further opportunity to consider the matter. The FRAG did however provide the following preliminary observations:
  - Management is not proposing to increase the TACs for coral trout. In line with this it was suggested that removing the closure might spread the current commercial fishing effort to a broader area.
  - RAG noted previous considerations about coral trout catch rates and considered that economic impacts would likely come into effect (hook-shy fish leading to a drop in local catch rates) before ecological impacts might occur.
  - Some consideration was given to how the western habitats may be shallower than eastern habitats but data would be required to assess this.



- More fishing operations and freezers may open in the western Torres Strait in line with the outcomes of the current TSRA infrastructure project meaning there may be a total increase in fishing effort with more fishers entering the sector.

## 2019

9. At their FFRAG 4 meeting (13-14 March 2019) the RAG provided the following advice to support PZJA consideration on releasing a proposal to remove the closure for public comments:

The RAG noted advice from industry members that water turbidity means that fishers in Gudumalagal (top western) communities have fewer months of the year to target finfish compared to eastern, central and south-western Torres Strait communities. The RAG considered that western Torres Strait may be comprised of shallower reef habitats which may have lower carrying capacity than other areas of Torres Strait. Further Traditional Inhabitant boat sector licensed fishers will likely enter the fishery from Western Communities should the closure be removed. The RAG noted that catch data will be collected from operations in these waters through the mandatory Fish Receiver System which will allow monitoring of these extra harvests with analysis through future stock assessments.

The RAG provided the following advice on likely stock impacts from removing the Western Line Closure:

- a) Stocks impacts would likely be negligible, noting removal of the spatial closure would simply increase the total fishable area of the Fishery while all other management arrangements including recommended TACs for coral trout are to remain unchanged; and
  - b) The boundary of the Western Line Closure is not likely to correspond to any natural stock boundary. Therefore there is no requirement for separate stock management arrangements within the Protected Zone for finfish species.
10. At its meeting in April 2019 the PZJA agreed to undertake public consultation on the removal of a closure to commercial fishing for finfish (not Spanish mackerel) west of Longitude 142°32'E.
  11. Consultation outcomes were considered by the FFRAG (27-28 November 2019), FFWG (29 November 2019) and TRLRAG (10-11 December 2019). Advice from each advisory committee is provided in the **Attachment 2.2ha**.
  12. A key issue raised during public consultation and then considered by the various PZJA advisory committees was the potential impact on tropical rock lobster from increased fishing pressure on coral trout. The waters north of Turnagin Island are not part of the main TRL fishing grounds.
  13. Other issues considered by the FFWG and FFRAG relevant to removing the northern part of the closure include:
    - a. How increased fishing pressure on finfish stocks might negatively impact the availability of fish for local kai-kai subsistence fishing through localised depletion and/or reduce catch rates (FFWG and FFRAG). The FFRAG suggested that management measures such as spatial closures could be introduced to minimise the impacts of commercial fishing on traditional fishing (beyond maintaining a high biomass); and

- b. A lack of understanding on the extent of fishing likely to occur if the closure was removed (FFRAG). The FFRAG advised that there is a clear need to consider what the increase in reef-line fishing effort in the western Torres Strait might look like in the long term; i.e. how will fishing mortality on the stock change, how many TIB dinghies might fish, how many TIB primary-tender operations might access the fishery and considering what such scenarios may mean in terms of risk to the stock.
- 14. Noting the advice from Traditional Inhabitant members of the FFWG to open the closure north of Turnagain Island (meeting 29 November 2019) (or Numar Reef as recommended by participants as the recent Fisheries Summit convened by TSRA), AFMA sought further advice from FFRAG (meeting 8) on:
  - a. Likely risks to stocks noting fishing would likely target different finfish species, such as barramundi, salmon and jewfish and at this time, AFMA does not have a good understanding on the likely extent of fishing expected;
  - b. possible options for assessing and monitoring those risks; and
  - c. possible options for mitigating those risks in the short to medium term until more information is available to quantify key risks.

## 2020

- 15. As requested by the Finfish Working Group at their 29 November 2019 meeting, the RAG were asked to provide further advice at FFRAG meeting 8 (4-5<sup>th</sup> November 2020) on the following risks and considerations with lifting the northern part of the closure:
  - a. *General uncertainty on the nature and extent of fishing expected once the closure is removed.* Industry members advised that around 6 operators per community in Gudumalalgal (Boigu, Dauan, Saibai) were interested and able to fish in the finfish fishery. Species of interest are Barramundi, jewfish, garfish, 'zarum' and coral trout
  - b. *Impacts on traditional fishing:* The RAG noted that commercial fishing in and around the relatively small near shore habitats may impact traditional fishing catch rates and sought advice from industry members on the likely interaction between the two sectors (commercial and traditional). Industry member advice was that the impact could be managed as it would likely be a relatively small number of fishers working commercially per community.
  - c. *IUU incentives:* It was noted that the opening may have impacts on incentives for Illegal, Unregulated and Unreported fishing, with jewfish swim bladder being a particularly valuable commodity. Dr O'Neill advised that, on the Queensland East Coast, jewfish have proven to be a challenging species to manage with substantial management actions in place to regulate both commercial and recreational fishing for the vulnerable species.
  - d. *Potential targeting of less productive species:* Dr O'Neill advised that, due to netting impacts, another inshore species - King Threadfin Salmon - were also in a vulnerable position at present due to overfishing.
  - e. *Shared stocks with PNG:* Noting the proximity of Gudumalalgal communities to identified key PNG spawning habitat for Barramundi and likely connectivity between the stocks, the RAG noted that AFMA will need to work closely with the PNG National

Fisheries Authority on proposed changes. The PZJA will also need to consider obligations under the Treaty alongside any proposed changes to Australian management arrangements for Barramundi. The RAG noted that under the Torres Strait Treaty commercial fishing for Barramundi is limited to only Australian Traditional Inhabitants and only in the Torres Strait within a defined area surrounding six islands within the 'top-hat' of the Protected Zone. Under the Treaty PNG retain the right to fish Barramundi in the waters surrounding these communities within the top-hat.

- f. *Gillnetting in PNG*: The RAG noted AFMA advice previously tabled in the FFWG by PNG NFA, that fishers in PNG Western Province have had issues with their catch rates using gillnets to target Barramundi and jewfish. As a result PNG NFA have investigated whether fishers can effectively move to line fishing with lures.
  - g. *Community freezer*: An industry member advised that the infrastructure review had suggested a small portable freezer would best be suited to support these communities in the short term during the opening. It was advised that this could be a low risk, cost-effective investment as it could be relocated should the infrastructure not have sufficient usage.
  - h. *Fishery independent survey*: RAG science members advised that a fishery independent stock survey would be the ideal science to understand the finfish stocks in this area noting though that this is an expensive option.
16. The FFRAG supported the suggestion that a targeted round of consultation occurs in Gudumalulgal to discuss the following three options with communities to support opening the reef-line fishery in this area:

Option	Detail
<b>1: Opening with data collection and monitoring</b>	<p>Noting that it would likely only be a few fishers from each community active in the short term, the fishery could be opened with an agreed obligation from these fishers to contribute to monitoring. Monitoring will help form an understanding of what the fishery might look like (who is fishing where, what species, fishing effort) with annual review. The RAG suggested the following options for monitoring to be discussed with communities:</p> <ul style="list-style-type: none"> <li>▪ CDRs (fish receiver system) status quo arrangement</li> <li>▪ Daily Fishing Logbooks</li> <li>▪ Onboard scientific observers (catch comp, bycatch, discards, TEPs, invasive fish species)</li> <li>▪ Port sampling for biological sampling / verification (potential indicator for future decision rules).</li> </ul>
<b>2: Survey before opening</b>	Fishery Independent Survey before opening to inform what the fishery stock is (standing stock biomass), noting that it is good to assess natural mortality while the stocks are relatively unfished.
<b>3: Adaptive management</b>	Run an adaptive management approach which could allow fishing in a part of the fishery. AFMA/RAG are able to then consider the results/risks and apply the learnings to the rest of the fishery (smaller scale experiment first, low level fishing ahead of heavier fishing).

17. AFMA advised that they would engage top-western community members through upcoming community consultations. AFMA advised they could give information for communities to consider and seek their views on:

- aspirations for the fishery – community expectations on what the fishery will look like (number of operators, location, targeted species);
- likely impacts on subsistence fishing;
- likely high risks associated with targeting jewfish;
- data needs – monitoring that would be possible against indicators to support how the fishery is responding to fishing; and
- the need to review the opening after one year to check whether enough data has been captured to feel safe and continue the opening.

AFMA noted the request from industry Tenny Elisala and the offer from industry members Cr. Rocky Stephen and John Tabo to support the Top-Western consultation with lessons learned from the beche-de-mer Harvest Strategy and eastern community advice.

18. The Working Group at their meeting on 25<sup>th</sup> Nov 2020 noted previous Working Group advice and advice from FFRAG, Tropical Rock Lobster (TRL) RAG discussion, and previous outcomes of public consultation on the proposal to remove the Western Line Closure. The Working Group noted further advice from the FFRAG (meeting 8) on removing the closure in the northern ‘top hat’ area of the Torres Strait Protected Zone only, for example north of Turnagain Island or Numar Reef. Members noted that that the ‘top hat’ area does not overlap with significant TRL fishing grounds. Interactions with the TRL Fishery was a key concern raised during public consultations.
19. Noting advice from the FFRAG (as detailed in the agenda item paper), the Working Group supported AFMA’s intention to undertake further targeted consultation with Gudamalulgal communities, in partnership with nominated industry members of the RAG (Tenny Elisala, Cr Rock Stephen and John Tabo) to broadly develop the conditions for removing the closure in the ‘top hat’ area.
20. The Working Group recommended that potential biosecurity concerns associated with invasive fish species be considered; supporting the Traditional Inhabitant members recommendation to delay community visits until early 2021 to enable more preparation time (AFMA had been working towards including the Western Line Closure matter in meetings scheduled with Gudamalulgal communities for the first week of December 2020). Traditional Inhabitant members noted that communities want to open the area but they haven’t yet had the information to think through the risks and options for managing those risks. In their view therefore, it was important to not rush and be well prepared, and to share and gather the right information.

## 2021

21. The RAG (at FFRAG 9 meeting 14-15 October 2021) noted an update from AFMA and industry members Rocky Stephen, John Tabo Jr, and Tenny Elisala on recent planning sessions to progress targeted consultations in Gudamalulgal communities on the proposed re-opening of the Western Line Closure.
22. The RAG reviewed the plan of action for consultations and approval process for removing the closure. As discussed at previous meetings the RAG noted the following points that will need to be addressed in the lead up to the proposed opening:
- a) The area of the opening will need to be defined;

- b) What are the aspirations of the Gudamalugal communities for a commercial reef line fishery? What species does the community want to target? Are minimum size limits required for currently unregulated fish species?
  - c) What are the merits of the various research options available to support the opening of the fishery?
  - d) What are the likely implications for Traditional fishing? These will need to be mitigated.
- 23. It was raised that understanding the size of the fishery resource will inform the most appropriate management approach, as well as inform investment in fishery infrastructure. Scientific members recommended conducting a survey of the fishery either before opening, or plan to conduct a survey as soon as possible after an opening of the fishery (adaptive management approach). If the Western Line Closure is to be opened, a survey to establish CPUE for the fishery will also be critical in assessing the health of the fishery. Such research will also inform decisions to avoid impacts on Traditional fishing.
- 24. The representative from Malu Lamur advised that a resolution has been reached within the Gudamalugal Nation islands that the boundary of the 'top hat' area should be drawn north of Buru (Turnagain) Island. Malu Lamar are to be invited to join in the next round of targeted consultations.

## Attachment 2.2ha

Summary of PZJA advisory committee consideration and advice on public consultation outcomes on removing the Western line Closure.

### ***FFRAG Meeting 6, 27-28 November 2019, Agenda item 4.1 Western line closure review. Meeting record extract.***

1. FFRAG noted the general outcomes of public consultation on the proposal to remove the 'Western Line Closure' and then considered specific concerns raised by communities. FFRAG advice against each of these concerns is detailed in **Table 4** below.
2. The RAG noted advice from Traditional Inhabitant Industry Members that:
  - many communities were not aware of the closure and for others it has been a long-standing issue to have the closure removed; and
  - while some communities raised concerns with the removal of the Western Line Closure, others are very eager to have it removed as a means to provide an important and much needed economic opportunity.
3. As general advice, the FFRAG noted that the key to understanding the true impacts (or risks to the stock) from removing the closure would be to understand the extent of fishing likely to occur if the closure was removed. The RAG advised that there is a clear need to consider what the increase in reef-line fishing effort in the western Torres Strait might look like in the long term; i.e. how will fishing mortality on the stock change, how many TIB dinghies might fish, how many TIB primary-tender operations might access the fishery and considering what such scenarios may mean in terms of risk to the stock.

**Table 4.** FFRAG advice regarding concerns raised during public comment on the Western Line Closure review.

The potential for increased fishing pressure on coral trout to negatively affect the abundance (availability) of Tropical Rock Lobster (TRL, kaiar) stocks. Some stakeholders have observed and believe there is a positive relationship between coral trout and TRL abundance (more coral trout = more TRL). It was noted that a different view was held by some who believed coral trout compete with or eat TRL. As a result if coral trout numbers in an area are reduced, TRL numbers will increase.	
FFRAG advice	Given the complexity of trophic interactions (many and varied, for example, direct and indirect impacts on (i) competition for food, (ii) habitat and (iii) predatory-prey interactions), it is extremely difficult to predict and assess potential impacts that fishing one species may have on another. There are studies (to be circulated to FFRAG members) from the Great Barrier Reef and other areas also suggest there are ecological relationships between coral trout and other fish groups including herbivorous fish. Herbivorous fish in turn impact habitats (algae levels) which in turn can impact the abundance on animals that rely on certain habitats (e.g. high algae levels can impact the settlement of shellfish/molluscs which can then be a food source for other animals).

	<p>To quantify these interactions and then assess possible fishing impacts there are at least two options:</p> <ul style="list-style-type: none"> <li>• Long-term depletion experiments (remove coral trout and monitor TRL numbers). Around 5-10 years of experimentation and observation would be required but may still yield uncertain results;</li> <li>• Ecosystem modelling. An ecosystem model could be used to provide general guidance on possible impacts i.e. hypothesis testing. This information would be generalised.</li> </ul> <p>The RAG also noted the suggestion that if inner western communities had opposition to removing the closure due to risks to the TRL stocks the closure might be lifted for Gudumalulgal communities only, noting that Top-Western Communities are very supportive of lifting the closure to pursue economic opportunities.</p>
If the Closure is removed, what impact would it have on the TAC (up or down?)	
FFRAG advice	<p>Coral trout within the Torres Strait is currently assumed to form a single stock. Accordingly, the TAC represents a Total Allowable Catch for the stock irrespective of whether or not the Western Line Closure is in place or not. Removal of the Western Line Closure would not warrant a change to the TAC for the purposes of managing risks to the level of the stock.</p>
Fishing effort may be redistributed across the Fishery. Aside from possible increases in effort in new areas, effort may increase in the eastern part of the Fishery as more fishers take an interest in the Fishery.	
FFRAG advice	<p>As detailed above, the RAG advised that the risk from fishing at the stock level, irrespective of where those catches are taken, is not expected to change if the TAC remains the same or continues to be set on the assumption of a single stock. The RAG did consider that there is risk of localised depletion for reef-associated species such as coral trout. Coral trout have been found to have high site fidelity (meaning they don't move far as adults) and monitoring would be required to understand fine scale fishing effort in areas of the fishery over time if understanding localised depletion was a management priority. Science members noted that Vessel Monitoring Systems (VMS) might be a powerful fisheries management tool to help understand this issue.</p>
Increased commercial fishing pressure on finfish stocks in the area of Western Line Closure will negatively impact the availability of fish for local kai-kai.	
FFRAG advice	<p>The RAG noted advice from scientific members that different users of fish stocks (e.g. TIB commercial, sunset, traditional kai-kai fishing) generally have different fishing power. Operators with higher fishing power are generally known to take fish from an area first. It is plausible therefore that if the closure is lifted commercial operators (assuming they are more efficient) may affect kai-kai fishing catch rates overtime. It was suggested that management measures could be introduced to minimise the impacts of commercial fishing on traditional fishing (beyond mainlining a high biomass) if that was a management priority (eg spatial closures).</p>



4. The FFRAG considered that, aside from the status quo with the closure in place, a number of scientific options could potentially be considered to aid understanding the impacts of lifting the closure including:
  - a. Ecological research while the closure remains in place with the outcomes from research to inform a decision on opening/maintaining closure.
    - RAG noted the above advice that ecological research is challenging, and that research into understanding the impacts occurring takes a long time and will be challenging to yield a meaningful result and to understand risks to the stock.
  - b. Ecological research with the closure lifted (research occurring alongside commercial fishing operations could inform maintaining the open area of the fishery)
    - RAG noted similar advice as per point 1 above.
  - c. Closure could be lifted with no research occurring, fishery-dependent data only could be collected for analysis.
    - RAG noted that understanding the risk to the stock would be very challenging as fishery dependent data alone (i.e. logbooks and fish receiver system data) may not be powerful enough.
    - While effort (number of boats entering the fishery) and catch can be monitored, the risks to TRL from trout harvests and the impacts on catch rates for the subsistence users of the stock (from increased commercial take of trout) would not likely be able to be understood from these available data. This is in part due to the difficulties in identifying and measuring the interaction between species, especially noting the variation in TRL abundance year to year.
    - RAG noted mitigation of risk could be achieved by establishing relevant data needs and monitoring requirements to meet these needs. But a relevant management response would need to be developed should monitoring show risk to the stocks was changing; i.e. a policy would be required to describe what levels of catch, changes in effort/participation would cause management to respond.
  - d. An adaptive management approach, where a representative area of the fishery is opened with the response of the area (effort and catch rates) monitored over time.
    - The RAG noted that the benefits of this approach are that potential ecological impacts from this fishing will only apply to a limited area but noted general advice that discerning ecological impacts (e.g. TRL and coral trout interactions) from catch and effort data would be challenging.

***FFWG meeting 29 November 2019. Agenda item 5 Western line closure. Meeting record extract***

5. The FFWG noted the outcomes of public consultation on the potential removal of the Western Line Closure (the Closure) as detailed in agenda paper. The FFWG noted that there is varied support for the removal across communities within the area of the Western Line closure and that Eastern communities largely reserved commenting on the proposal (noting it was a matter for communities affected/within the closure).
6. Generally communities in the Gudamalagal (top-western) area support the removal of the closure while communities in the Kaiwalagalgal (inner-western) area of the closure do not support its removal due to concerns on the potential ecological and technical interactions with the Tropical Rock Lobster (TRL) Fishery and traditional fishing. Other concerns

raised more broadly were in relation to how potential changes in fishing effort (total levels and distribution) might impact risk of localised depletion, kai-kai (traditional/subsistence fishing) fishing catch rates and the TAC for the stock.

7. The FFWG noted advice from the FFRAG that:

- research on ecological interactions between coral trout and TRL (e.g. to understand the risk to the TRL stock from increased trout harvest) would be difficult and costly to perform successfully and that analysing fishery dependent catch data would also yield little understanding about the effect of increased trout harvests on TRL or kai-kai finfish catch rates over time;
- an adaptive management experiment could be performed by opening a selected area of the fishery and monitoring the response of TRL and trout over time however the likelihood of detecting an impact would be low;
- coral trout within the Torres Strait is currently assumed to form a single stock. Accordingly, the TAC represents a Total Allowable Catch for the stock irrespective of whether or not the Western Line Closure is in place or not. Removal of the Western Line Closure would not warrant a change to the TAC for the purposes of managing risks to the level of the stock;
- there is risk of localised depletion for reef-associated species such as coral trout. Coral trout have been found to have high site fidelity (meaning they don't move far as adults) and monitoring would be required to understand fine scale fishing effort in areas of the fishery over time if understanding localised depletion was a management priority;

8. The FFWG noted advice from the Traditional Inhabitant members and observers that Gudumalualgal communities respected the views held by inner-western communities and are only seeking access to finfish in waters north of Turnagin Island. Unlike inner-western communities who participate the TRL Fishery, Gudumalualgal communities have little employment opportunities, including fisheries (there is limited TRL fishing around Gudumalualgal communities). Within their waters, Gudumalualgal communities wish to fish for other-reef line species such as barramundi, salmon and jewfish, not coral trout.

9. Having regard for community views Traditional Inhabitant members and observers supported the removal of the part of the Western Line closure north of Turnagin Island.

10. The AFMA member also supported this approach noting both advice from communities and advice from the FFRAG. The AFMA member noted however that further advice on concerns raised during public consultation would be sought from the TRL Resource Assessment Group in December. This advice would be shared with the FFWG.

11. The TSRA suggested that the Western Line Closure Review could be progressed at the Torres Strait Fisheries Summit planned for April 2020, which would enable a discussion to be had by all stakeholders and attempt to reach some consensus from industry about maintaining or removing the closure.

***TRL RAG meeting 27<sup>th</sup>, 10-11 December 2019. Agenda item 8. TRL interactions with coral trout. Meeting record extract.***

12. The RAG noted that when discussing the proposed removal of the Torres Strait Finfish Fishery's Western Line Closure (WLC) during community visits in April/May 2019, communities expressed varied views in relation to the possible impacts of the removal of the WLC, particularly in relation to impacts on the TRL stock.
13. Concerns expressed included that increases in coral trout harvests may have adverse impacts on the sustainability of the TRL stock. This concern is based on anecdotal reports of shared habitat and industry observations of interactions between the two species.
14. Other comments from an eastern communities indicated that potential increases in harvests of coral trout would be beneficial to the TRL Fishery as it would alleviate coral trout predation on TRL and increase available habitat for TRL. A traditional inhabitant member added that more recently, Maluiligal communities have expressed a desire to retain the WLC. This is due to diver safety concerns in shallow water where the risk of shark interactions is increased after line fishing has occurred in the same area. The RAG noted that Maluiligal communities are supportive of the desire for Gudumalulgal communities to have the closure removed north of Turnagain Island where the risk of diver safety is reduced as TRL diving is less prevalent.
15. The RAG noted that both the Finfish RAG and Finfish Working Group considered this issue at their recent meetings (27-29 November 2019) and advised that given the complexity of trophic interactions (many and varied, for example, direct and indirect impacts on (i) competition for food, (ii) habitat and (iii) predatory-prey interactions), it is extremely difficult to predict and assess potential impacts that fishing one species may have on another.
16. A scientific member agreed that trophic interactions are difficult to quantify however technical interactions are measurable (e.g. between divers and sharks, between vessels or between fishing gear types).
17. Given the anecdotal reports above, the RAG advised that specifically, the potential risks of increased diver/shark interactions resulting from berley and baiting for commercial reef line fishing should be considered when assessing the removal of the WLC.
18. The RAG also noted that technical interactions of line fishing on diving is likely to be less important for Gudumalulgal communities where diving is less prevalent due to turbid, shallow water and where line fishing is more favourable.

## Spanish mackerel fishery Working Group

### Communique 17-18 May 2021

The inaugural East Coast Spanish Mackerel Working Group met on 17 and 18 May 2021 in Brisbane. This was the first meeting of the newly appointed working group. The purpose of the meeting was to provide information on the Sustainable Fisheries Strategy, review the current management and stock issues and commence discussions on developing a harvest strategy for this fishery.

Members were invited to provide a general update from the region or the sector they represent. Several members commented on the issue of shark depredation, which is thought to be a wide-spread issue affecting other fisheries across multiple jurisdictions. Members generally agreed that large numbers of Spanish mackerel are lost to depredation and supported further research to quantify the extent of depredation, identify the species responsible and better understand what is driving the apparent increased prevalence of shark interactions.

Members also raised other issues that may impact on the abundance of Spanish mackerel, including seasonality and environmental drivers of recruitment such as water quality, urban development and oceanographic changes. While these may impact Spanish mackerel stocks, they are outside the control of Fisheries Queensland and need to be accounted for in management arrangements. Some members raised bycatch and discarding in other fisheries that are incidentally capturing Spanish mackerel and contributing to overall fishing mortality (for example, net fisheries). Other issues that were raised included the need to account for managing different types of recreational fishers – those that may incidentally catch Spanish mackerel (as part of reef line fishing activities) and those that may target Spanish mackerel, the abundance and management of bait fish and the need for management intervention in the short-term.

The working group noted information to help inform a shared understanding of the status of east coast Spanish mackerel stocks. It was noted that the commercial harvest has averaged 300 tonnes annually since 2004, however total harvest is well below the current total allowable commercial catch (TACC) for the species. It was noted that Fisheries Queensland's monitoring programs are picking up increased recreational fishing participation and current east coast Spanish mackerel recreational harvest is estimated to be approximately 170 tonnes.

The working group was provided a preliminary presentation on the results of the 2021 east coast Spanish mackerel stock assessment (not yet published) and how this will inform future decision making in the fishery. Fisheries Queensland advised the draft biomass for Spanish mackerel is estimated to be 17% of unfished biomass. The working group noted the limit reference point of 20% unfished biomass is the point below which a fishery is recommended to be closed under the Sustainable Fisheries Strategy and under National Guidelines. While there are some uncertainties, this is a complex stock assessment with good confidence about the outputs. Industry members noted concerns that a new stock assessment model was used, which produced lower biomass estimates than the previous assessment in 2018.

The working group noted that the stock assessment is currently undergoing independent scientific peer review, which will also be published in coming months. The working group requested more detail on projections for different rebuilding strategies for discussion at the next meeting. Given the stock is shared with New South Wales the working group felt it was important to invite them to attend the next meeting to discuss rebuilding strategies.

Fisheries Queensland provided a presentation on the methodology and outcomes from the BDO social and economic indicators report for commercial and charter fisheries. The working group noted the social and economic indicators dashboard that is available on the department's website is an important tool for businesses to view performance of the fishery. While the fishery's economic performance is not positive, all members agreed that this information is important in assessing the performance of the fishery, and when considering the economic impacts of management or other changes.

The working group were presented with an overview of the current management arrangements in place for Spanish mackerel. Given the low biomass estimate, the working group agreed that the management arrangements and fishing rules for all sectors would need to be reviewed to inform management interventions and a rebuilding strategy for this stock.

All members noted the importance of Spanish mackerel for local supply of fish, particularly in regional Queensland where the species is popular. Given the status of the stock, the working group asked about the feasibility of making changes ahead of the 1 July 2021 fishing season, starting in 6 weeks. Fisheries Queensland provided information on the process to review management of this stock and develop a harvest strategy ahead of the 1 July 2022 fishing season. The working group agreed that management change needed to be in place as soon as possible noting that it was likely to be significant and consultation with other stakeholders would be required. The working group noted the need for a number of meetings in 2021 to consider management options for further consultation later in 2021.

Fisheries Queensland provided information on the monitoring and research programs that are in place for the Spanish mackerel fishery. The working group noted the extensive monitoring data over a long time series for east coast Spanish mackerel, with 13% of the commercial catch represented in the data set over the last 10 years. This is higher than many other fisheries, and members noted the continued contribution of commercial and recreational fishers in volunteering this information and the good working relationship with the Fishery Monitoring team. The working group recognised the importance of the combined data collected from commercial fishers and recreational fishers, which provides more confidence about the science underpinning both the status and management of this stock. The working group were keen to see this level of monitoring continue.

The next meeting will be in late June or early July. Members have sought some information on rebuilding projections, how recreational harvest is calculated, release mortality, environmental influences, fishing effort (for example, standardised catch rates), targeting behaviour between the coral reef line and Spanish mackerel fisheries and biological information from monitoring and research. The next meeting will focus on working through possible management interventions, stock rebuilding strategies and initial development of a harvest strategy.

**The Spanish Mackerel Working Group members are:** Animal Science Queensland (Chair – Sian Breen), Fisheries Queensland (Director, Management and Reform – Kimberly Foster, Principal Fishery Manager – Tony Ham, Senior Fishery Manager – Darren Roy, Fisheries Manager – Ash Lawson, Fisheries Scientist – Joanne Langstreth, Queensland Boating and Fisheries Patrol – Chris Morrison), commercial fishing (Chris Hain, Tony Lanzi, Anthony Vass, Richard Gilmore), recreational fishing (Ryan Tully, Gary Powis, William Bowtell), Great Barrier Reef Marine Park Authority (Darren Cameron) and conservation sector (Debbie Chamberlain).

## Reef line fishery Working Group

### Communique 22-23 April 2021

The Reef Line Working Group met on 22-23 April 2021 in Cairns. This was the first meeting of the newly appointed working group. Former members were thanked for their contribution and new members were welcomed. The purpose of the working group meeting was to make a recommendation on the deferred harvest strategy decision for TACC setting for coral trout from 2020, provide recommendations for TAC setting for red throat emperor and to review the status and monitor the performance of the fishery based on 2020 data.

Fisheries Queensland provided a broad update on the implementation of the Sustainable Fisheries Strategy 2017-2027, more specific reform changes for the reef line fishery and conditions associated with wildlife trade operation accreditation for the reef line fishery, which has recently been approved to 18 January 2024.

Members were invited to provide a general update from their respective sectors. The commercial industry members provided updates on the impact of COVID-19 on the fishing sector. Export markets remain volatile and challenging. Increasing operation costs and little change in long-term beach price is generating concern about financial viability for fishing businesses. A combination of factors were raised that negatively influence confidence and wellbeing within the commercial fishing sector. Members agreed that the reef line fishery harvests a sustainable, line caught premium product and the industry is looking for support to promote the fishery both domestically and internationally to improve return on investment for participants. Industry welcomed the announcement of the vessel tracking working group and reiterated concern about ongoing costs and loss of productivity when units aren't reliable.

The Charter member provided an update on impacts to charter fishing businesses, stating that given their reliance on tourism, 2020 was effectively a write off for operators due to COVID-19 restrictions. With the reopening of domestic borders, the charter season in 2021 is flourishing, but relies on continued interstate tourism. The recreational fishing members noted that there has been more public interest in the management of Queensland's fisheries, with mostly positive conversation about arrangements in place. The Great Barrier Reef Marine Park Authority (GBRMPA) and conservation members supported the position that the fishery is in a good place, and that support for continual improvement is still required to address some remaining concerns.

Fisheries Queensland provided a 2020 calendar year update on the status of the fishery including revised standardised catch rates and harvest levels. The working group noted that while landings were slightly lower in 2020 than the 10-year (2011-2020) average, the impact of COVID-19 and disrupted domestic and international markets on harvest was less than expected.

Fisheries Queensland provided a refresher on the stock assessment undertaken for common coral trout in 2020. The working group noted the stock assessment estimated the spawning biomass for common coral trout in 2019 to be 59% of unfished levels, resulting in a Total Allowable Catch (TAC) of 1 073 tonnes to rebuild the stock to 60% spawning biomass. The working group then discussed improvements to the TAC's calculation process, in particular the transparent use and application of the recommended biological catch limit from the stock assessment, discount factors to account for uncertainty and the scaling factor to calculate an 'all coral trout' TAC. Based on the 2020 coral trout stock assessment and applying the harvest strategy decision rules a Total Allowable Commercial Catch (TACC) of 858 tonnes was recommended, a 305 tonne reduction from the current TACC of 1163. Fisheries Queensland advised that the harvest strategy provides a maximum change rule of 200 tonnes, resulting in a final recommended TACC of 963 tonnes for the 2021-22 fishing season.



Industry members noted concerns that the reduction in the recommended TACC comes from a new stock assessment model which shows a lower biomass estimate than the previous model and had significant concerns with the potential economic impact on quota lease price associated with large TACC changes. The working group acknowledged the deterioration in the economic conditions of the fishery and the impost on commercial fishers imposed by a reduction in the TACC, but recognised the importance of following the harvest strategy process. The working group members supported adopting the final recommended TACC of 963 tonnes for the 2021-22 fishing season.

The working group agreed this would improve confidence in the management framework and the long-term sustainable outlook for the fishery. The working group then reviewed updated recreational and charter harvest estimates and noted that they were within the sector allocation decision rules, as such, no recreational or charter management changes were recommended. The working group noted this advice relates to the setting of the TACC for coral trout for the 2021/22 fishing season, and the working group will be asked to consider an updated stock assessment and provide advice on the coral trout TACC in 2022.

Fisheries Queensland provided a presentation on the 2020 redthroat emperor (RTE) stock assessment. The working group noted the stock assessment estimated the spawning biomass for RTE to be at 72% of unfished levels in 2019, resulting in a TAC recommendation of 930 tonnes to fish down to the 60% biomass target. Applying the sectoral allocations in the harvest strategy, a TACC of 558 tonnes was recommended, a net reduction in the historic (2004) TACC of around 53 tonnes. The working group then reviewed updated recreational and charter harvest estimates and noted that they were well below the sectoral allocation in the harvest strategy, and as such supported no change to recreational or charter management. The working group recognised that while the commercial and charter representatives on the working group do not target RTE, adopting the harvest strategy process is important and supported adopting the final recommended TACC of 558 tonnes for the 2021-24 fishing seasons.

Queensland Boating and Fisheries Patrol provided an update on fisheries and marine park compliance within the fishery, noting that compliance in the reef line fishery is generally good. GBRMPA also provided an update on compliance with marine park requirements, and the working group noted all sectors have had reported non-compliance issues with green zones and other fishing requirements within the marine park area. Working group members identified challenges with species identification, particularly for cod species, which can hinder compliance with fishing rules. The commercial sector identified that with vessel tracking now in place, a review of safe-anchorage requirements and clarification of zoning boundaries would assist the sector to be safer and more compliant. Industry members sought assistance from Fisheries Queensland to organise an out of session meeting with AMSA to discuss issues with marine safety and operational issues associated with line-of-sight restrictions on dories.

Fisheries Queensland provided a presentation on the methodology and outcomes from the BDO social and economic indicators report for commercial and charter fisheries. The working group noted the social and economic indicators dashboard that is available on the department's website is an important tool for businesses to view performance of the fishery. It was noted that the reef line fishery overall shows better performance compared to other Queensland fisheries, however, there are some businesses that are not working as efficiently as others. The recreational and charter members expressed the importance in measuring and comparing the social and economic information from the recreational and charter fisheries alongside the commercial sector information. The conservation member noted it is also important to obtain accurate information on exported product for this fishery, beyond initial point of sale, to highlight the importance of wildlife trade operation export accreditation to this fishery.



All working group members agreed to the importance of this social and economic information in assessing the performance of the fishery, and when considering the economic impacts of management or other changes. Members noted that survey participation from the reef line fishery was 19% and agreed they would encourage greater participation in future surveys. Fisheries Queensland said this will be particularly important to help measure and inform understanding the economic impacts of the COVID-19 pandemic.

Fisheries Queensland provided an update on the new standardised commercial fishing reporting requirements that will commence on 1 September 2021. The working group noted the primary change for the reef line fishery is the introduction of a pre-trip notice that is required before commencing a fishing trip. Working group members asked clarifying questions and appreciated the use of worked examples throughout the presentation.

In considering the introduction of the TEP animal logbook, the conservation and GBRMPA member noted their concern that no take species that are not listed as TEP animals are not required to be reported in any logbook. Fisheries Queensland noted this will need to be discussed internally and will be added for discussion at the next working group meeting.

The working group noted a presentation and update on the new commercial fishing smartphone application (the app). The app will cover a range of fisheries and is designed to encompass the new reporting requirements coming into effect from 1 September 2021. The app also provides functionality to check whether vessel tracking units are operating and manual reporting functionality if a unit fails at sea. The working group noted the app will evolve over time with additional fisheries and enhanced features added. Fisheries Queensland outlined that engagement with industry through development of the app is a big focus and is seeking working group input on an engagement strategy. The working group noted that the recreational fishing app was released late last year and has now been downloaded more than 20 000 times. Feedback has been positive and the app is undergoing continual improvements and updates.

As part of general business, the working group discussed the following:

- Following the recent release of the 'Seaspiracy' Netflix documentary, James Cook University and AMCS both published responses to the documentary. Industry asked whether Fisheries Queensland will also respond, noting it would provide support to industry and defend Fisheries Queensland's management.
- A Vessel Tracking Working Group has been established to help support the departments broad review of the implementation and administration of vessel tracking. The group is primarily an industry consultative body to provide operational advice throughout the departments 18-month review process.
- Fisheries Queensland noted work is being undertaken into using vessel tracking data to validate and improve fisheries data and information (e.g. assisting in determining targeted effort, refining Fishery Monitoring survey areas and defining fishing footprints), and welcomes industry's idea of value adding through using vessel tracking data.
- There have been many requests throughout the meeting for government support in marketing and endorsing the reef line fishery and it was emphasised that industry has a large role to play in supporting and endorsing the fishery.

The working group noted that it would be useful to formally discuss and identify fishery research priorities in working group meetings. It was requested that members consider and keep track of research priority ideas and bring them to the working group meetings for tabling (e.g. shark depredation research).

The next meeting will likely be an online meeting during the October spawning closure to discuss recreational fishing survey results and Wildlife Trade Operation conditions that are due to be reported on to the Commonwealth in mid-2022. The next TAC setting meeting will be in March 2022 when the fishery will return to scheduled decision making under the harvest strategy with an updated coral trout stock assessment.

**The Reef Line Working Group members are:** Fisheries Queensland (Chair - Eddie Jebreen, Director (Management and Reform) – Kimberly Foster, Principal Fishery Manager – Tony Ham, Senior Fishery Manager – Ryan Keightley, Fisheries Manager – Chad Lunow), commercial fishing (Sean Stiff, Jake Kingdon, Chris Bolton, Susan Davenport) marketing/export (Barry Dun, Michael Wakeling), recreational fishing (Jason Bradford), charter fishing (Lynton Heffer) and Great Barrier Reef Marine Park Authority (Darren Cameron), conservation sector (Simon Miller) and external researcher (Prof. Morgan Pratchett).

<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>UPDATES FROM MEMBERS Papua New Guinea National Fisheries Authority</b>	<b>Agenda Item 2.3 For Noting</b>

## RECOMMENDATIONS

1. That the WG **NOTE** the update to be provided by the PNG National Fisheries Authority (NFA).

## KEY ISSUES

2. AFMA has a standing invite for officials from the PNG National Fisheries Authority (NFA) to attend all PZJA consultative forums. If in attendance, NFA officials will provide an update on the PNG Finfish fisheries at the meeting.
3. Over 9-10 September 2021 the Torres Strait Treaty Traditional Inhabitants Meeting (TIM) and Joint Advisory Council (JAC) meetings were held. Reports for each meeting are attached (**Attachments 2.3a** and **2.3b**).
4. Relevantly both meetings discussed matters around the Daru MOU and New City proposal (see paragraph 12 of the TIMs report and paragraph 20 of the JAC report). Both meetings emphasised the need to be included in any consultations on these and other such proposals.

## REPORT FROM THE 2021 TORRES STRAIT TREATY TRADITIONAL INHABITANTS MEETING

Virtual, 9 September 2021

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1. The Traditional Inhabitants Meeting (TIM) was held virtually on 9 September 2021.
2. The TIM provides Traditional Inhabitants under the Torres Strait Treaty with a forum to discuss and exchange views on the implementation of the Treaty.
3. The meeting was co-chaired for Papua New Guinea (PNG) by Councillor Kebei Salee, Sigabadaru and Councillor Getano Lui (Jnr), Iama (Yam) Island. A list of meeting attendees is at Attachment A.
4. The TIM welcomed the update from the Papua New Guinea (PNG) Immigration and Citizenship Authority (ICA) and Australian Torres Strait Treaty Liaison Officer that Traditional Visits under the Treaty have been put on hold due to the COVID-19 pandemic and border closures. The TIM agreed to defer several of the outstanding recommendations made at the 2019 TIM on Traditional Visits and cross-border activities to the 2022 TIM meeting.
5. The TIM noted the importance of a permanent PNG Department of Foreign Affairs and International Trade (DFAIT) Border Liaison Officer (BLO) on Daru Island to assist with managing the shared border during the COVID-19 pandemic and welcomed advice that the position would be filled in the first quarter of 2022. The TIM noted advice that DFAIT's Peter Mirino would continue as DFAIT's lead from Port Moresby, working closely with Hendrick Naimo from PNG ICA who is implementing BLO functions on-the-ground on Daru Island.
6. The TIM acknowledged the ongoing suspension of Traditional Visits and traditional activities due to international border closures enacted in response to the global COVID-19 pandemic at the beginning of 2020 by local government (the Torres Strait Island Regional Council), and by both the Papua New Guinea and Australian Governments. The TIM acknowledged the unprecedented impact that the COVID-19 pandemic has had on the Treaty and noted that there will likely be implications for the Treaty's implementation going forward.
7. The TIM acknowledged the ongoing risks of COVID-19 transmission to communities on both sides of the border and agreed that all Traditional Visits and traditional activities should remain on hold for the foreseeable future. Australian Traditional Inhabitants emphasised the need to protect the lives of vulnerable Torres Strait communities, and underscored that Traditional Visits will need to be reviewed once border restrictions are eased, at an appropriate time in the future, to ensure that residual COVID-19 risks and other community-level impacts are managed. The TIM noted that Australia and PNG will undertake separate discussions around future border and Traditional Visit management and approaches regarding incoming Traditional Visits to their respective jurisdictions.
8. The TIM acknowledged continuing unauthorised border crossings by PNG Treaty Village constituents seeking medical care on Australia's Saibai and Boigu Islands during the international border closures. The TIM affirmed that the health and safety of their communities is paramount and that such border movements should not occur.
9. The TIM noted the importance of COVID-19 vaccinations to protect communities from COVID-19. The TIM agreed to request an update at the JAC on COVID-19 vaccinations in the Treaty Villages and Torres Strait communities. Australian Traditional Inhabitants did not support a proposal from PNG Traditional Inhabitants that fully vaccinated PNG Treaty Village constituents be allowed to undertake Traditional Visits into Australia's Torres Strait Islands, but committed to continuing dialogue in regards to the border closures.
10. PNG Traditional Inhabitants highlighted the need for adequate medical care for PNG Treaty Villages, particularly for emergencies such as snake bites. Noting strong concerns from Australian Traditional



Inhabitants that any border crossings for medical purposes will raise the risk of COVID-19 transmission into their communities, the Australian Government strongly encouraged PNG Treaty Villages constituents to seek medical care at Mabudawan Health Centre (MHC), which is located in the PNG Treaty Village of Mabudawan. The TIM agreed to seek an update on MHC (including its staffing) at the JAC, and requested that PNG and Australia ensure that it remains fully operational and appropriately staffed.

11. PNG Traditional Inhabitants thanked the Australian Government for its development assistance in the South Fly region, noting the range of areas of support. The TIM noted advice from Australian Traditional Inhabitants that any Australian-supported development initiatives in Western Province's South Fly district must be delivered through PNG channels and not Australia's Torres Strait Islands, to minimise the impacts on their communities and already-limited infrastructure and resources as well as ongoing COVID-19 risks.
12. PNG Traditional Inhabitants noted that they have not been provided information or consulted on the recent Daru Fisheries Memorandum of Understanding, Daru New City Proposal, or similar infrastructure proposals. The TIM noted advice from DFAIT that they were seeking further information across government on the proposals and will report back to the JAC. The TIM stressed the importance of being consulted on these and other proposals, in line with the spirit of the Treaty. The TIM affirmed their concerns around the potentially detrimental effects that such proposals could have on the environment, sustainability of resources in the region and livelihoods, particularly the overfishing of marine resources. The TIM agreed to seek an update on these proposals from the relevant agencies at the JAC. Australian Traditional Inhabitants confirmed that they do not support a review of the Treaty, in reference to a public Australian petition on the same subject.

Signed on 9 September 2021 virtually in Port Moresby and Canberra



Councillor Kebei Salee  
Co-Chair and Leader of the Papua New Guinea  
Traditional Inhabitant Delegation



Councillor Getano Lui Jnr  
Co-Chair and Leader of the Australian Traditional  
Inhabitant Delegation

## REPORT OF THE 28<sup>TH</sup> TORRES STRAIT TREATY JOINT ADVISORY COUNCIL MEETING

Virtual, 10 September 2021

1. The Joint Advisory Council (JAC) was held virtually on 10 September 2021.
2. The Forum was co-chaired for Papua New Guinea (PNG) by Mr Joseph Varo, Deputy Secretary, Department of Foreign Affairs and International Trade (DFAIT), and for Australia by Bassim Blazey, Assistant Secretary, PNG Branch, Australian Department of Foreign Affairs and Trade (DFAT).
3. In accordance with Article 19 of the *Torres Strait Treaty* (the Treaty), Council members comprised national, state, and provincial representatives, and Traditional Inhabitant representatives. The delegation list is at **Attachment A** and the JAC functions are set out in **Attachment B**.
4. This document will be transmitted to the Papua New Guinean and Australian Foreign Minister.

### Treaty Implementation and management of Traditional Visits

5. The JAC welcomed reports from the Traditional Inhabitants Meeting (TIM) Co-chairs on 9 September 2021 (**Attachment C**) and acknowledged the importance of Traditional Inhabitant views.
6. The JAC noted concerns raised by PNG Traditional Inhabitants around the suspension of Traditional Visits and traditional activities due to international border closures enacted in response to the global COVID-19 pandemic at the beginning of 2020 by the Torres Strait Island Regional Council and both the Papua New Guinea and Australian Governments.
7. The JAC noted concerns raised by Australian Traditional Inhabitants around the ongoing COVID-19 risks to their communities and need for continued border closures, as well as the need for adjustments to Traditional Visits once borders reopen to ensure residual COVID-19 risks and other community-level impacts are managed. Australian Government agencies including DFAT and Australian Border Force (ABF) committed to working further on this out-of-session with Australian Traditional Inhabitants.
8. The JAC noted the importance of a permanent DFAIT BLO on Daru Island to assist with managing borders during the COVID-19 pandemic and welcomed advice that the position would be filled in the first quarter of 2022. Traditional inhabitants noted that the BLO position has been vacant since 2019. The JAC noted advice that the DFAIT BLO would continue to lead from Port Moresby in the interim period, working closely with the PNG Immigration and Citizenship Authority BLO on-the-ground in Daru.
9. The TIM noted establishment of a new Western Provincial Administration (WPA) Border Liaison Officer (BLO) position to assist with provincial management of borders. It was agreed that DFAIT will provide advice to DFAT out-of-session on responsibilities and ways of working with DFAIT, PNG Immigration and Citizenship Authority and the WPA BLO.
10. The JAC noted agreement at the 28<sup>th</sup> PNG–Australia Ministerial Forum on the need for early consultation on any development proposals in or near to the Torres Strait Protected Zone that could impact on the interests of either country, particularly Traditional Inhabitants. The JAC requested that this includes consideration of such proposals by the JAC and Traditional Inhabitants.

### Health and Development Assistance

11. The JAC noted updates on the COVID-19 situation in PNG and Australia, particularly the new and highly infectious Delta variant, and recent outbreaks across Western Province's North, Middle and South Fly Districts and across several states and territories in Australia.
12. The JAC noted agreement at the 28<sup>th</sup> PNG-Australia Ministerial Forum that COVID-19 continues to pose a serious threat and health advice and vaccinations will underpin decisions to reopen borders.
13. The JAC agreed that vaccination provided the best protection against COVID-19 and welcomed an update on vaccination efforts in the South Fly and Torres Strait. Vaccination levels across both the Torres Strait and South Fly regions need to be increased considerably to be able to consider reopening the shared Western Province-Torres Strait border.
14. The JAC noted that the Health Issues Committee meeting will be held on 12 November 2021 and an update on discussions will be provided at the 29<sup>th</sup> JAC meeting in 2022.
15. The JAC noted that, as part of Australia's commitment to deepen engagement in PNG priority regions under the Comprehensive Strategic and Economic Partnership (CSEP), Australia is progressing a *Western Province Strategy* in collaboration with the Fly River Provincial Administration to shape Australia's long-term engagement and assist PNG communities to resiliently manage and maximise their own resources. This was articulated in a Memorandum of Understanding (MoU) between the WPA and the Australian High Commissioner to PNG [signed May 2021] which outlines a range of joint development initiatives across Western Province.
16. The JAC noted advice from Australian Traditional Inhabitants that any Australian-supported initiatives in Western Province must be delivered through PNG and not Australia's Torres Strait Islands, to minimise the impacts on their communities and already-limited infrastructure and resources.
17. The JAC welcomed a detailed report on the functioning and staffing of the Mabudawan Health Centre noting that it was fully resourced as a Level Three health facility.

### Environment and Fisheries

18. The JAC noted that the PNG Conservation and Environment Protection Authority and Australian Department of Agriculture, Water and Environment are working to determine with stakeholders a suitable time for EMC 28 (likely March 2022) and that updates from EMC 27 are being sought.
19. The JAC noted that the PNG National Fisheries Authority (NFA) and Australian Fisheries Management Authority (AFMA) will progress the Fisheries Bilateral Meeting in 2022.
20. The JAC raised concerns around the risk of overfishing of the fisheries resources in the Torres Strait, emphasising the need for early consultation with AFMA and Traditional Inhabitants. The JAC noted an update on the proposed development of a major fisheries and industrial development on Daru Island (that there was no evidence of any progress on these two initiatives) and acknowledged the concerns of Traditional Inhabitants on both sides regarding risks to the environment and sustainable fisheries. The JAC further noted that any consultations on new development initiatives that will have implications for the implementation of the Treaty, either in or adjacent to the Torres Strait Protected Zone, including but not limited to fisheries developments in the region, should include the JAC.



### Customs and Cross Border Law Enforcement

21. The JAC thanked Traditional Inhabitants for their support during the border closures but noted some PNG Traditional Inhabitants [860 passenger arrivals including 181 PNG nationals accessing health services on Australia's Torres Strait Islands since March 2020] have continued to travel to Australia's Saibai and Boigu Islands for health care. The JAC agreed that the borders are to remain closed for the foreseeable future, including for the purposes of seeking medical care in Australia.
22. The JAC noted that PNG Traditional Inhabitants must access health care in PNG, including at the fully operational Mabudawan Health Centre, to protect communities on both sides against cross-border COVID-19 transmission. The Western Province Government committed to discussing further with the Western Provincial Health Authority and development partners such as Australia to ensure MHC is fully staffed, trained and equipped.
23. The JAC emphasised the need to prevent and disrupt transnational crimes such as people smuggling and drug and firearms trafficking and encouraged relevant PNG and Australian border and law enforcement agencies to increase collaboration on managing the shared Western Province-Torres Strait border during the COVID-19 pandemic. The JAC agreed for Joint Cross-Border Patrols to recommence, in a COVID-safe manner, to deter illegal activities and movements. JAC welcome PNG Narcotics Bureau to be part of Law Enforcement Agency along the common borders of PNG including at Torres Strait Protected Zone.
24. The JAC welcomed advice that the Community Safety and Security Facility on Saibai Island is operational (official launch scheduled for 2022). The facility will assist Australia uphold the COVID-19 border closures, manage Treaty Traditional Visits and activities in the long-term and provide community safety and security services to Torres Strait communities.

### Biosecurity

25. The JAC noted the reports from the PNG National Agriculture, Quarantine and Inspections Authority (NAQIA) and Australian Department of Agriculture, Water and the Environment (DAWE).
26. Australia and PNG, through DAWE and NAQIA, continue to collaborate to help manage biosecurity risks for the benefit of both countries notwithstanding recent restrictions arising from COVID-19 response measures.
27. Australia confirmed that Traditional Inhabitants in the Torres Strait Protected Zone continued to display high levels of compliance with applicable biosecurity regulations during the period since the last JAC meeting.
28. Australia provided advice regarding continued investments in improved biosecurity surveillance and regulation systems across northern Australia including in Torres Strait. Recent initiatives have included: additional measures to regulate the northward movement of biosecurity threat species from Mainland Australia to Torres Strait and further north; additional investment in biosecurity officer resources in Torres Strait; and dissemination of improved products promoting awareness and compliance with applicable biosecurity regulations for cross border movements (north and south) between PNG and the Torres Strait Protected Zone.

### Maritime Safety

29. The JAC noted the report from Australian Maritime Safety Authority (AMSA) on maritime safety activities and acknowledged the ongoing cooperation between PNG NMSA and Torres Strait communities to further enhance ship safety, marine pollution prevention and response and search and rescue in the region. The PNG National Maritime Safety Authority (NMSA) will provide an update at the next JAC.

### Other Business

30. The JAC noted the proposed initiatives on a quota allocation of workers from the Treaty Villages in Australia's labour mobility programs, as well as a Teacher Practice Program, and agreed to discuss these items at the next JAC meeting.
31. The JAC noted advice from Australian Traditional Inhabitant Co-Chair of his interest in seeking a change of the name of Torres Strait to Zenadth Kes, clarifying that this would not affect the formal name of the Torres Strait Treaty.

### Date and Venue of Next Meeting

32. The JAC agreed that the 29<sup>th</sup> JAC meeting will be hosted by Australia in 2022.
33. Agencies agreed to progress matters out of session, in accordance with the outcomes of the JAC meeting, and report on progress at the 29<sup>th</sup> JAC meeting.

Signed virtually on 10 September 2021 in Port Moresby and Canberra



**Mr Joseph Varo**  
Co-Chair and Leader of the Papua New Guinea  
Delegation



**Mr Bassim Blazey**  
Co-Chair and Leader of the Australian  
Delegation

## ATTACHMENT A – DELEGATION LIST

PNG Traditional Inhabitants (Treaty Councillors of South Fly Fore Coast Kiwai RLLG)

PAPUA NEW GUINEA DELEGATION		
Department	Representative	Title
Department of Foreign Affairs and International Trade (DFAIT)	Joseph Varo (JAC Co-Chair)	Deputy Secretary
Department of Health	Ken Wai	Deputy Secretary
Department of Prime Minister and National Executive Council (PMNEC)	Tony Kaib	Director General – Security Coordination
Department of Prime Minister and National Executive Council (PMNEC)	Barbarinue Bagli (Ms)	
Department of National Planning	Martin Pomat	Assistant Secretary
Department of Provincial and Local Level Government	Jacqueline Winuan	
Department of Provincial and Local Level Government	Philo Karabau	
PNG Customs	Nazila Yalambing	
PNG Immigration and Citizenship Authority	Winis Map	
NAQIA	Michael Areke	
Department of Health	Catherina Poko	National Coordinator – Vaccination Program
DFAIT	Peter Mirino	Director, PNG-Solomon Islands Border, Border and Security Division
Western Provincial Administration (WPA)	Robert Aphonse	Provincial Administrator
WPA	Wilfred Gaso	Deputy Provincial Administrator
WPA	Elias Anden	Coordinator National Function Agency
WPA	Rupert Tabua	Deputy Provincial Administrator Resources Development
WPA	Gelam Mark	Border Liaison Officer
WPA	Shirley Kebei	Admin Officer
WPA/ Fore Coast Kiwai Local Level Government	Duobe Amura	Manager, Fore Coast Kiwai Local Level Government (FCKLLG)

South Fly District Administration (SFD)	Tawa Gebia	District Administrator
Royal PNG Constabulary (RPNGC, Daru)	Ewai Segi	Incoming Provincial Police Commander
PNG Defence Force (Daru)	Vincent Wriken	Chief Warrant Officer
PNG Immigration and Citizenship Authority (ICA, Daru)	Henrick Naimo	Manager
Department of Provincial and Local Level Government Affairs (DPLLGA, Daru)	Robin Bazu	Border Admin Officer
Fore Coast Kiwai Local Level Government	Epesi Dabu	Project Officer
<b>Traditional Inhabitant Representatives</b>		
Sigabadaru	Kebei Salee	TIM Co-chair, Councillor for Sigabadaru
Ture Ture	Abua Roy	Councillor for Ture Ture
Sui	Murray Dimia	Councillor for Sui
Parama	Jimmy Walter	Councillor for Parama
Katatai	Tibau Kaware	Councillor for Katatai
Kadawa	Biza Gera	Councillor for Kadawa
Mabudawan	Ma'a Sampson Uku	Councillor for Mabudawan
Kori (a)	Gregory Nabaka	Councillor for Kori (a)
Old Mawatta	Butium Koidawane	Councillor for Old Mawatta
Buzi/Ber	Banu Namai	Councillor for Buzi/Ber
Mari/Tais	Bill Menai	Councillor for Mari/Tais
Bula/Jarai	Bize Goi Menai	Councillor for Bula/Jarai

AUSTRALIAN DELEGATION		
Department	Representative	Title
Department of Foreign Affairs and Trade (DFAT)	Bassim Blazey (JAC Co-Chair)	Assistant Secretary, PNG Branch
Australian High Commission to PNG (AHC), DFAT	Geoff King	Counsellor (Subnational Development)
AHC, DFAT	Lara Andrews	Counsellor (Health)
AHC, AFP	Susan Smith	A/Superintendent PNG
AHC, Home Affairs	Andrew Edgar	Counsellor
DFAT	Johanna Stratton	A/Director, PNG Political and Torres Strait Section
DFAT	Jacqueline Herbert	Torres Strait Treaty Liaison Officer
DFAT	Annie Douglas	Policy Officer, PNG Branch
AHC, DFAT	Katherine Parkinson	First Secretary (Political)
AHC, DFAT	Emeline Cammack	First Secretary (Health Security)
AHC, DFAT	Amanda Young	First Secretary (Subnational Development)
Australian Border Force	Michael Talbot	A/Superintendent, OVERARCH
Australian Federal Police	Rees Folpp	A/Superintendent, Northern Command
Australian Fisheries Management Authority (AFMA)	Selina Stoute	Manager, Torres Strait Fisheries
AFMA	John Jones	Compliance Manager, Torres Strait Fisheries
Department of Agriculture, Water and the Environment (DAWE)	Wayne See Kee	Assistant Secretary, Biosecurity Operations Division (BOD)
DAWE	Murray Korff	Director, BOD
Department of Health (DoH)	Hayley Benson (HIC Co-chair)	Assistant Director, Blood Borne Viruses, Sexually Transmissible Infections & Torres Strait Health Section
DoH	Murimi Njora (HIC Co-Chair)	Assistant Director, Blood Borne Viruses, Sexually Transmissible Infections & Torres

		Strait Health Section
Department of Home Affairs	Nedra Kelaart	A/Director, PNG Section
Department of Premier and Cabinet (QLD)	Andrew Burke	Intergovernmental Relations
Department of Prime Minister & Cabinet (PM&C)	Kristian Nilsson	Advisor, International Division
PM&C	Rachel Kolek	Advisor, National Security Division
Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnership (QLD)	Danny Morseu	Regional Manager
National Indigenous Australians Agency (NIAA)	Nadja Mack	Director, Land Policy and Environment Branch
NIAA	Shay Simpson	Advisor, Land Policy and Environment Branch
Queensland Health	Marlow Coates	Executive Director, Torres and Cape Hospital and Health Service
<b>Traditional Inhabitant Representatives</b>		
Torres Strait Island Regional Council (TSIRC)	Getano Lui	TIM Co-chair and Councillor for Iama Island
TSIRC	Aven Noah	Councillor for Mer (Murray) Island
TSIRC	Conwell Tabuai	Councillor for Saibai Island
TSIRC	Torenzo Elisala	Councillor for Dauan Island

## ATTACHMENT B – JAC FUNCTIONS (EXCERPT FROM THE TORRES STRAIT TREATY)

### Article 19

#### Torres Strait Joint Advisory Council

1. The Parties shall jointly establish and maintain an advisory and consultative body which shall be known as the Torres Strait Joint Advisory Council (called in this Article "the Advisory Council").
2. The functions of the Advisory Council shall be-
  - (a) to seek solutions to problems arising at the local level and not resolved pursuant to Article 18 of this Treaty;
  - (b) to consider and to make recommendations to the Parties on any developments or proposals which might affect the protection of the traditional way of life and livelihood of the traditional inhabitants, their free movement, performance of traditional activities and exercise of traditional customary rights as provided for in this Treaty; and
  - (c) to review from time to time as necessary, and to report and to make recommendations to the Parties on, any matters relevant to the effective implementation of this Treaty, including the provisions relating to the protection and preservation of the marine environment, and fauna and flora, in and in the vicinity of the Protected Zone.
3. The Advisory Council shall not have or assume responsibilities for management or administration. These responsibilities shall, within the respective areas of jurisdiction of each Party, continue to lie with the relevant national, State, Provincial and local authorities.
4. In the exercise of its functions, the Advisory Council shall ensure that the traditional inhabitants are consulted, that they are given full and timely opportunity to comment on matters of concern to them and that their views are conveyed to the Parties in any reports and recommendations made by the Advisory Council to the Parties.
5. The Advisory Council shall transmit its reports and recommendations to the Foreign Ministers of the Parties. After consideration by appropriate authorities of the Parties, consultations may be arranged with a view to the resolution of matters to which the Advisory Council has invited attention.
6. Unless otherwise agreed by the Parties, the Advisory Council shall consist of eighteen members, that is nine members from each Party who shall include-
  - (a) at least two national representatives;
  - (b) at least one member representing the Government of Queensland in the case of Australia and one representing the Fly River Provincial Government in the case of Papua New Guinea; and
  - (c) at least three members representing the traditional inhabitants,
 with each Party being free to decide from time to time from which of the aforementioned categories any other of its members will be drawn.
7. The Advisory Council shall meet when necessary at the request of either Party. Consecutive meetings of the Advisory Council shall be chaired alternately by a representative of Australia and a representative of Papua New Guinea. Meetings shall be held alternately in Australia and Papua New Guinea or as may from time to time be otherwise arranged.



<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>UPDATES FROM MEMBERS Native Title</b>	<b>Agenda Item 2.4 For Noting</b>

## RECOMMENDATIONS

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

## BACKGROUND

2. On 7 August 2013 the High Court of Australia confirmed coexisting Native Title rights, including commercial fishing, in the claimed area (covering most of the Torres Strait Protected Zone). This decision gives judicial authority for Traditional Owners to access and take the resources of the sea for all purposes. Native Title rights in relation to commercial fishing must be exercisable in accordance with the *Torres Strait Fisheries Act 1984*.
3. Traditional Owners and Native Title representative bodies have an important role in managing Torres Strait fisheries. It is important therefore that the WG keep informed on any relevant Native Title issues arising.

<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>TOTAL ALLOWABLE CATCH ADVICE Spanish mackerel – 2022-23 season</b>	<b>Agenda Item No. 3.1 For Discussion and Advice</b>

## RECOMMENDATIONS

That the Working Group (RAG):

1. **NOTE** the Finfish Fishery Resource Assessment Group (RAG) will be considering outcomes of the 2021 Spanish mackerel stock assessment and developing advice on the Recommended Biological Catch for Spanish mackerel for the 2022-23 fishing season at its meeting on 18-19 November 2021. Outcomes of the RAG meeting will be tabled with the Working Group as soon as possible following the meeting; and
2. **CONSIDER** advice from the RAG that the best estimates of likely catches outside of the commercial fishery remain unchanged from the 2021-22 fishing season (**Table 1**):
  - a) 15 tonnes for subsistence (traditional fishing/kai kai);
  - b) 5 tonnes for recreational fishing; and
  - c) 0 tonnes for charter fishing and PNG catch sharing.
3. **CONSIDER** advice from the RAG on an appropriate RBC for the 2022-23 fishing season (to be provided);
4. **CONSIDER** RAG and Working Group advice to date, on a harvest strategy for Spanish mackerel; and
5. **DISCUSS** and **PROVIDE ADVICE** on a Total Allowable Catch for Spanish mackerel for the 2022-23 fishing season.

## KEY ISSUES

1. At its meeting scheduled for 18-19 November 2021, the RAG will review the results of the updated Spanish mackerel stock assessment and Recommended Biological Catch (RBC) estimates to be presented by scientific members Dr Michael O'Neill and Dr Rik Buckworth under the funded project "*Torres Strait Spanish mackerel stock assessment*" (project number 200815).
2. In preparation for updating the stock assessment and estimating an RBC for the 2022-23 fishing season, at its last meeting<sup>1</sup>, the RAG reviewed the new catch and age data available from the 2020-21 fishing season, and provided recommendations on:
  - a) treatments to be applied to data inputs;
  - b) specific model analyses and 'sensitivity analyses' to be undertaken; and
  - c) the RBC calculation method.
3. Although a harvest strategy for the Spanish mackerel fishery is yet to be completed, progress has been made by the RAG and Finfish Fishery Working Group (WG) on several components

<sup>1</sup> FFRA meeting 9, 14-15 October 2021

of a potential harvest strategy for the species. This work has sensibly guided both RAG and WG advice on recent RBC and TACs. In particular,

- a) the guiding principles and key fishery attributes (factors that should help shape the development of the harvest strategy); and
- b) target and limit reference points.

4. **Table 2** provides a summary of RAG advice on relevant components of the draft Spanish mackerel harvest strategy from its meeting on 31 October - 1 November 2019 (meeting 5). Progress to date reflects Working Group advice received at multiple joint RAG/WG harvest strategy workshops.
5. **Attachment 3.1a** summarises RAG and WG advice for the 2021-22 season, demonstrating how the RAG and WG applied the harvest strategy guiding principles.

### ***Catches outside the commercial fishery - Spanish mackerel***

6. When setting a TAC, all sources of fishing mortality (catch) are taken into account and, if needed, a discount is applied to the RBC. This generally means the TAC equates to the RBC for the species minus expected catches that may be taken outside of the commercial fishery (for example recreational and traditional catches). This is consistent with the principles of the *Commonwealth Harvest Strategy Policy*.
7. For the 2021-22 fishing season, the RAG recommended increasing previous catch estimates for traditional and recreational fishing based on advice from traditional inhabitant members (meeting 8, 4-5 November 2020). Increases recommended were from 10 tonnes for subsistence to 15 tonnes and from 2 tonnes for recreational to 5 tonnes. Consistent with previous years, the RAG agreed that charter fishing catches were likely to be minimal and accepted AFMA advice that Australia and PNG were unlikely to enter into catch sharing arrangement under the Treaty in 2021-22 fishing season. Both were subsequently left unchanged for the 2021-22 fishing season. The FFWG supported this approach (meeting on 25 November 2020).
8. At its recent meeting (meeting 9, 14-15 October 2021) the RAG recommended applying the same estimates for the 2022-23 fishing season noting that there was no new information available to guide a different approach. A summary of advice is provided in **Table 1**.

**Table 1.** RAG advice on best estimates of catches outside of the commercial Spanish mackerel fishery.

Source of catches	Expected catch (t)	Comments
Subsistence catch (kai kai) by traditional inhabitants	15	Based on data from <i>Busilacchi 2013</i> this includes total of catch estimates for Mer, Masig and Erub Islands. The FWG agreed in July 2016 that the catch figures from the <i>Busilacchi 2008</i> research are the best estimates of traditional take of finfish. While originally reported by CSIRO as 12 t this was further refined to 5.155 t. At FFRAG meeting 4, the RAG recommended that an estimate of 10 t be used for decision making noting data was only from three islands, the number of TIB fishing endorsements has increased and effort creep may be occurring. At FFRAG meeting 8, the RAG accepted advice from industry members and the TSRA member that estimate should be increased to 15 tonnes to account for anecdotal information that 10 tonnes would be an underestimate.

Recreational	5	<p>Previously the RAG advised that based on QDAF survey (2013) which included TS, 2 tonnes was appropriate. At FFRAG meeting 8, the RAG agreed to recommend the estimate be increased to 2 tonnes having regard for accepted industry member advice that the recreational boat numbers have increased over time, with a lot more contractors resident in Torres Strait taking boats out to communities to fish in their spare time.</p> <p>Following FFRAG meeting 8, QDAF advised AFMA that under the 2019-20 Queensland stat-wide recreational fishing survey, there were only 7 catch records from 2 people on 4 fishing days in Region B (Torres Strait). There was only one record of a coral trout and none for Spanish mackerel.</p>
Charter	Likely to be minimal	Available QLD logbook records show Charter boat line catches are low. Logbook records for the period between 1995 and 2014 report a total of 19.58 tonnes of mixed species taken from Torres Strait waters. The RAG has advised based on the available evidence from QDAF logbook data from charter catches are likely to be minimal.
PNG catch sharing	0	Catch sharing arrangements have not been entered into for Spanish mackerel. PNG-NFA declined to enter into catch sharing arrangements under the Treaty for 2020-21 fishing season.

**Table 2.** Status of Spanish mackerel draft harvest strategy components as reviewed by FFRAG at its meeting on 31 Oct-1 Nov 2019 (meeting 5)

Guiding principles and key fishery attributes – factors that helped shape the development of the Harvest Strategy	
Recommended	Consistency with the Commonwealth Fisheries Harvest Strategy Policy and Guidelines (HSP, 2018). This is consistent with objectives of the <i>Torres Strait Fisheries Act 1984</i> (the Act).
	Have regard for traditional knowledge and the ability of communities to manage fishery resources locally, through acknowledging and incorporating customary and traditional laws, recognising; Malo Ra Gelar, Gudumalulgal Sabe, Maluailgal Sabe, Kulkaigal Sabe.
	Recognise commercial fishing by traditional inhabitants is important for local employment, economic development and for the passing down of traditional knowledge and cultural lore. Enough fish need to be left in the water for future fishers to make money and to protect the traditional way of life, livelihoods and cultural values.
	Spanish mackerel are a shared resource important for subsistence, commercial, traditional, charter and recreational sectors. Shared stock under the Torres Strait Treaty with PNG, stock to be shared if PNG nominate to do so.
	<p>TACs should vary according to stock status (up and down):</p> <ul style="list-style-type: none"> <li>• If biomass decreases be cautious. Stock is not to go below the limit;</li> <li>• If biomass is increasing be conservative; 'bank' fish.</li> </ul> <p>RAG noted that 'banking' fish was challenging to capture in the decision rules of a harvest strategy with stocks generally building towards a target reference point in a prescribed way based on assessment outcomes.</p> <p>RAG noted that the prescription for this in-principle objective from traditional owners was in regard to when the stock was increasing, to not necessarily increase the TAC but possibly only after a trend/consecutive years of increasing stock. RAG also advised that this approach and wording should also consider the level of certainty and precaution underlying future decision making. RAG suggested that this wording required greater clarity in the final harvest strategy but the spirit of the objective was understood and would likely only apply to the fishery when the stock has eventually build above the Target Reference Point and increases in TACs (via a potential fish-down of the stock to B Target by increasing harvests) are</p>

	suggested by the assessment estimate of biomass. It was considered that clear decision rules to implement this stakeholder desire would need to be developed with stakeholders, potentially as the Strategy is reviewed over time.
	Having regard for the current stock size ( $B_{31}$ ) and that $B_{60}$ is not quickly achieved (possibly greater than 12 years) without significant reductions in catch which may in turn cause significant economic and social impacts on the Fishery, a shorter-term target reference point is first required.
	Torres Strait Spanish mackerel stock are assumed separate from other regional stocks. They have limited mixing with the Queensland East Coast and the Gulf of Carpentaria stocks (see Buckworth et al. 2007 and Newman et al. 2009).
	There is potential for variations in availability and abundance of Spanish mackerel in the Fishery, due to their movement, schooling and aggregation patterns for feeding and spawning, recruitment and mortality.
	Spanish mackerel are a shared resource important for subsistence, commercial, traditional, charter and recreational sectors.

<b>Operational objectives</b> What we want the harvest strategy to achieve.	
<b>Recommended</b>	Maintain the stock at (on average), or return to, a target biomass point ( $B_{TARG}$ ) equal to a stock size that aims to protect the traditional way and life and livelihood of traditional inhabitants and is biologically and economically acceptable.
	Maintain stocks above the limit biomass level ( $B_{LIM}$ ), or an appropriate proxy, at least 90 per cent of the time.
	Reduce fishing levels if a stock is below $B_{TARG}$ but above $B_{LIM}$ .
	Implement rebuilding strategies, if the stock moves below $B_{LIM}$ .

<b>Reference points</b> A reference point is a specified level of an indicator used as a basis for managing a stock or fishery. Reference points will generally be based on indicators of either the total or spawning stock size (biomass) or the amount of harvest (fishing mortality). Reference points show where we want (target) and don't want (limit) the stock levels in the fishery to be.		
<b>Recommended</b>	Unfished biomass ( $B_0$ ) = $B_{1940}$ = 100%.	The year 1940 is considered the start of the commercial operations in the Fishery. The unfished biomass $B_0$ therefore is the model-estimate of spawning stock biomass in 1940.
	Target ( $B_{TARG}$ ) reference point = $B_{48}$	$B_{48}$ <sup>2</sup> is the default target (a proxy for $B_{MEY}$ - biomass at maximum economic yield) in the Commonwealth HS Policy.
	Limit reference point ( $B_{LIM}$ ) = $B_{20}$	$B_{LIM}$ is the spawning biomass level below which the ecological risk to the stock is unacceptable and the stock is defined as 'overfished'. This is an agreed level which we do not want the stock to fall below. $B_{20}$ is the default limit proxy in the Commonwealth HS Policy <sup>3</sup> .
<b>Outstanding</b>	Long term B TARG = $B_{60}$	<p>Further analysis and advice is required on the suitability of <math>B_{60}</math> as a long-term B TARG, in comparison to other target biomass levels above BMSY having regard for the biology of the species and performance of the Strategy in meeting its objectives.</p> <p>Stakeholders have recommended that the Strategy ensures enough fish are left in the water to support commercial fishing but also protect the traditional way of life and livelihoods of traditional inhabitants.</p> <p>Advice to date is that a higher target biomass level (referring to 60%), would increase catch rates and improve profits in the fishery over other lower reference points, such as <math>B_{48}</math>. RAG advice on the suitability of <math>B_{60}</math> against other possible higher target biomass levels is necessary. There are likely to be trade-offs between medium-term returns from the fishery (significantly reduced TAC)</p>

<sup>2</sup> Comm HSP: The target reference point for key commercial fish stocks is the stock biomass required to produce maximum economic yield from the fishery ( $B_{MEY}$ ). For multispecies fisheries, the biomass target level for individual stocks may vary in order to achieve overall maximum economic yield from the fishery. In cases where stock-specific  $B_{MEY}$  is unknown or not estimated, a proxy of 0.48 times the unfished biomass, or 1.2 times the biomass at maximum sustainable yield ( $B_{MSY}$ ), should be used. Where  $B_{MSY}$  is unknown or poorly estimated, a proxy of 0.4 times unfished biomass should be used. Alternative target proxies may be applied provided they can be demonstrated to be compliant with the policy objective.

<sup>3</sup> Comm HSP: All stocks must be maintained above their biomass limit reference point ( $B_{LIM}$ ) at least 90 per cent of the time. Where information to support selection of a stock-specific limit reference point is not available, a proxy of 0.2 times unfished biomass should be used.



		<p>and longer-term returns (more fish in the water meaning less cost to catch and therefore higher returns. Also, there would be more fish in the water for other users).</p> <p>Quantitative analysis and/or evidence from comparable fisheries may enable more evidence-based advice and decision making on the longer-term target.</p>
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## ATTACHMENT 3.1a

**Summary of Spanish mackerel RBC advice for the 2021-22 season****Updated stock assessment and results**

9. Prior to the 2016–17 fishing year, a Spanish mackerel TAC of 187.7 tonnes had been in place since 2007–08. This TAC was based on the average catch between 2001 and 2005 and included historic high catches reported in the fishery.
10. Since 2017-18, a Recommended Biological Catch (RBC) has been calculated to cover all fishing sector harvests and have been based on updating the stock assessment model with new data. The model has been updated annually since, and based on the outcomes and interim harvest strategies, the TAC has been reduced each season; see table 1.

**Table 1.** Spanish mackerel TACs by year from 2007-08 to present.

Year	TAC (tonnes)
2007-08 to 2016-17	187.7
2017-18	132
2018-19	110
2019-20	82
2020-21	59

11. The latest stock assessment considered by the PZJA Finfish Resource Assessment Group (FFRAG) on 4-5 November 2020 was based on the same annual age-structured model as the 2019 assessment, which uses all available harvest, catch rate data and fish age-frequency data. This model is referred to as the 1940 model, inferring the year representing unfished biomass (B<sub>0</sub>). The update to this model included 2019-20 an additional year of harvest data (fishing year) and an additional eight years of historical age-frequency data
12. All data inputs into the assessment were applied in line with recommendations from FFRAG 7 (8 October 2019). This included advice on reconstructing a catch history for the fishery prior to 1989, including harvests for illegal, unreported and unregulated foreign fishing, treating standardised catch rates (tender data to be excluded, fishing power to be included) and advice on using all newly available fish age-frequency data as inputs.
13. Nine specific agreed model analyses were performed rather than the 35 model scenarios run for the previous 2019 stock assessment update. Six of these model runs were for the 1940 model and three model runs were for the alternative exploratory model referred to as the 1989 model.
14. The exploratory 1989 model was developed and investigated by the stock assessment project team in line with recommendations from FFRAG7. The purpose of this investigation was to examine whether the model would be informative if it only included data from the time when compulsory Sunset logbook data reporting commenced. That was from 1989.
15. Having considered the results of the 1989 model and advice from all scientific members, the FFRAG agreed that the 1989 model remained exploratory but worthy of further development overtime. The FFRAG agreed that the 1940 model run provided the most reliable assessment of the stock and an acceptable basis to evaluate the status of the stock and to calculate an RBC for the 2021-22 fishing season.

16. Based on the six agreed 1940 model runs, the results of the updated 2020 stock assessment show:

- a) The estimated 2019-20 median spawning biomass of Torres Strait Spanish mackerel was 30% (B30), ranging between 26% (B26) and 35% (B35), of unfished biomass in 1940 (B0). This represents a seven percent increase from the 2019 estimated spawning biomass for 2018-19 of 23 (B23) per cent (ranging between 14-37%) of unfished biomass in 1940 (B0);
- b) None of the median biomass estimates from the six model scenarios were below the agreed limit reference point (BLIM is defined as 20% of the 1940 biomass level ( $0.2 \times B_0$ )) although the lower confidence intervals of some model runs were below BLIM;
- c) Unlike the declining trend since 2009-10, the standardised catch rate (number of fish per operation day) of legal-sized Spanish mackerel, using logbook data from Sunset fishing operations, increased in 2019-20 (a statistically significant increase);
- d) Age-frequency data now available from 2019-20, shows estimates of recruitment have returned to around the average; and
- e) Recent fishing pressure is not exceeding FMSY (the harvest rate for Maximum Sustainable Yield (MSY) from the stock). This means overfishing is not occurring.

### Selecting an appropriate RBC calculation method

17. To guide advice on an RBC for the 2021-22 fishing season, noting there is no agreed, final harvest strategy in place for the Torres Strait Finfish Fishery, the FFRAG considered a range of RBC calculations. These are described in **Table 2** and outlined below.

18. In forming their RBC advice, the FFRAG:

- a) considered five different constant (non hockey-stick) harvest rates applied to the six results from the 1940-model. Each level of harvest rate related to building the stock to different target reference points ( $F_{MSY}$  through to  $F_{60}$ );
- b) agreed to forecast the stock biomass to the 2021-22 fishing season based on an assumed level of harvest in 2020-21 (55 t = 39 t sunset, 4 t TIB harvest (based on the mean of the past three TIB fishing seasons), 10 t subsistence, 2 t recreational and 0 t for charter catches) and assuming average recruitment occurring. Therefore the RAG discounted approaches based on the 2019-20 estimate of biomass (Table 2, Approaches 7, 8, 9, 10 and 11);
- c) agreed to assume average, rather than depressed recruitment in future fish population risk-projections. Unlike the findings from last stock assessment, the most recent recruitment deviations for each of the model runs were all positive. The FFRAG therefore agreed there was insufficient basis to assume below average recruitment in the future projections. Therefore the FFRAG discounted all approaches that assumed reduced recruitment (Table 2, Column 5);
- d) reviewed fish population projections to evaluate risk to the stock. Consistent with the 2019 approach used by the FFRAG, it was agreed to consider how many years in a model run and simulation the stock would drop below the limit reference point ( $B_{20}$  or 20% of the

unfished spawning biomass level in 1940 ) during a 12 year-time period (three times the age of full sexual maturity)<sup>4</sup>. The FFRAG agreed, in line with the *Commonwealth Harvest Strategy Policy*, that if more than 10% of model runs (based on over 1000 simulations), dropped the stock below  $B_{LIM}$  that this would represent unacceptable risk to the stock. Therefore the RAG discounted approaches which represented unacceptable risk to the stock (Table 2, Approach 1 Constant  $F_{MSY}$  and Approach 2, Constant  $F_{40}$ );

- e) considered industry member advice at the meeting and the principles recommended by industry for developing a harvest strategy for the fishery to be conservative by '*hastening slowly*' and by '*banking*' fish if the biomass is increasing. Therefore the FFRAG discounted Approach 3 (Constant  $F_{48}$ ) with an RBC calculation of 112 t as this represented too great of an increase in RBC over the 2019-20, 71 t RBC level. Likewise, the FFRAG discounted Approach 5 (constant  $F_{60}$ ) with an RBC calculation of 75 t as it offered little increase from the current season 71 t RBC noting that the assessment outcomes did suggest an increase in RBC was warranted based on improvements in CPUE and modelled recruitment;
- f) noting that 75 t RBC (constant  $F_{60}$ ) was considered too low, and 112 t RBC (Constant  $F_{48}$ ) was considered too high the FFRAG requested the project team to present a compromise approach of an RBC based on the mean point between  $F_{48}$  and  $F_{60}$ . This approach (Table 2, Approach 6) would represent an RBC of 94 t;
- g) reviewed fish population projections for 105 t and 94 t harvests to evaluate the likelihood of the stock building to  $B_{48}$  over the 12 year projected time period (three times the average age of sexual maturity);
- h) The FFRAG considered  $B_{48}$  or  $B_{50}$  to be a sensible interim target reference point, noting that  $B_{48}$  is the default proxy for  $B_{MEY}$  when no economic data are available (under the *Commonwealth Harvest Strategy Policy*).  $B_{MEY}$  measures the biomass of fish to yield the sustainable maximum-economic-yield (MEY) from the stock.  $B_{MEY}$  also relates to the long-term aspirational target reference point of  $B_{60}$  recommended by industry under the harvest strategy work completed to date.
- i) The FFRAG noted that only one of the six 1940-model runs would be reaching the reference point of  $B_{48}$  (with a constant harvest of 105 tonnes) after 12 years. Therefore, the RAG discounted the approach labelled 4 (Constant  $F_{50}$ ) as although the harvest poses acceptable risk to the stock, this level of harvest will likely not build the stock to the interim  $B_{48}$  target reference point within 12 years. However, the constant harvest of 94 t did build the stock to  $B_{48}$  by 12 years.

### **RBC advice**

19. In line with the agreed RBC calculation method described above of removing less appropriate RBC options (summarised in **Table 2** below), the FFRAG recommended a 94 tonne RBC for Spanish mackerel for the 2021-22 season. The FFRAG agreed that this RBC:
  - a) is based on the application of a constant harvest rate equivalent to the mean point between  $F_{48}$  and  $F_{60}$  to the estimated biomass in the 2020-21 fishing season;

<sup>4</sup> The FFRAG reviewed and agreed to the rationale of the 12-year timeframe being three times the full age of maturity i.e., based on age-length information by four years of age most fish are fully mature and contributing to the stock.

- b) would build the stock on average to the interim target reference point (for  $F_{48}$ ) within a reasonable timeframe of 12 years (three times the age of sexual maturity) and assuming average recruitment to be occurring;
- c) poses an acceptable low risk of the stock falling below the limit reference point (less than 10% of model runs and simulations dropping the stock below 20% of unfished spawning stock biomass in 1940); and
- d) reflects the preference of industry members to have a harvest strategy that is balanced and careful by '*hastening slowly*' by '*banking*' fish if the biomass is increasing.

**Table 2.** Summary of options presented to the FFRAG as outputs from the 1940 model runs in the 2020 Spanish mackerel stock assessment update. Yellow highlighted approaches were those considered by the RAG as potentially appropriate RBCs for recommendation.

No.	Name of RBC approach	Biomass year for the RBC calculation	% runs below $S_{20}$ over 12 years and 6 analyses		Median
	1940-model		Assuming average recruitment	Assuming reduced recruitment	2021-22 RBC (tonnes)
1	Constant $F_{MSY}$	2021-22	12%	24%	146
2	Constant $F_{40}$	2021-22	12%	23%	145
3	<b>Constant <math>F_{48}</math></b>	<b>2021-22</b>	9%	15%	<b>112</b>
4	<b>Constant <math>F_{50}</math></b>	<b>2021-22</b>	8%	13%	<b>105</b>
5	<b>Constant <math>F_{60}</math></b>	<b>2021-22</b>	7%	9%	<b>75</b>
6	<b>Mean of <math>F_{48}</math> and <math>F_{60}</math></b>	<b>2021-22</b>	8%	N/A	<b>94</b>
7	Constant $F_{MSY}$	2019-20	8%	12%	99
8	Constant $F_{40}$	2019-20	8%	12%	97
9	Constant $F_{48}$	2019-20	7%	9%	77
10	Constant $F_{50}$	2019-20	7%	9%	73
11	Constant $F_{60}$	2019-20	6%	8%	53

<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>TOTAL ALLOWABLE CATCH ADVICE</b> <b>Coral trout – 2022-23 season</b>	<b>Agenda Item No. 3.2</b> <b>For Discussion and Advice</b>

## RECOMMENDATIONS

That the Working Group:

1. **NOTE** the Finfish Fishery Resource Assessment Group (FFRAG) will be developing advice on the Recommended Biological Catch for coral trout for the 2022-23 fishing season at its meeting 18-19 November 2021. Outcomes of the FFRAG meeting will be tabled with the Working Group as soon as possible following the meeting; and
2. **CONSIDER** advice from the FFRAG (to be provided) and **DISCUSS** and **PROVIDE ADVICE** on a Total Allowable Catch for Coral trout for the 2022-23 fishing season.

## KEY ISSUES

1. The status of coral trout has been assessed against both the results of a Management Strategy Evaluation (MSE) undertaken in 2006 (Williams et al. 2007, 2011) and more recently, a preliminary stock assessment undertaken by Dr George Leigh (QDAF) and Dr Matthew Holden (University of Queensland) under the previously funded project “*Harvest strategies for the Torres Strait Finfish Fishery*”.
2. At its meeting on 14-15<sup>th</sup> October 2021 (meeting 9), the FFRAG noted the 2020 *ABARES Fishery Status Report* for the Torres Strait Finfish Fishery. It was raised by a scientific member that although coral trout are currently classified as not being overfished, and not subject to overfishing, due to the increasing length of time since the last evaluation of the coral trout stock, there is an increasing risk of it becoming unknown what the productivity of the stock is. This was flagged to the FFRAG that unless a stock assessment can be endorsed, then there is a risk that the fishery may be classed as ‘status uncertain’ for being over-fished/subject to overfishing.
3. At its 31 October-1 November 2019 meeting (meeting 5) the FFRAG recommended that a stock assessment be conducted during the 2021-22 fishing season, once further data is available. At the time, the FFRAG considered that postponing the stock assessment for three years would allow enough time for additional data to be included. The additional data priorities identified being:
  - a) Review and possible inclusion of data from a 1994-95 CSIRO fish survey data in the Torres Strait (*Influence of Coastal Processes on Large Scale Pattern in Reef Fish Communities of Torres Strait, Australia*, Milton & Long, CSIRO 1997);
  - b) Improved catch and effort data from TIB fishers; and
  - c) Fishery independent data such as an underwater survey or biological sampling. Biological sampling for coral trout has been commenced in the 2020-21 fishing season for the first time.

4. At its meeting on 8 October 2020 (meeting 7), the FFRAG did not recommend undertaking a stock assessment for coral trout as a research priority for potential funding in 2020-21 nor did the FFRAG support a Fishery Independent Survey at that time.
5. Gratefully, Dr Hutton has summarised coral trout data from the 1995-1996 CSIRO dive survey and updated the CPUE data time series for coral trout. The FFRAG will be considering this analysis at its meeting scheduled for 18-19 November 2021 (meeting 10).
6. Recent commercial catches of Coral trout in the Fishery are summarised below:
  - 21 tonnes in 2014-15
  - 38.4 tonnes in 2015-16.
  - 25.7 tonnes in 2016-17
  - 27.3 tonnes in 2017-18
  - 17.3 tonnes in 2018-19
  - 32.5 tonnes in 2019/20
  - 18.9 tonnes in 2020-21
7. Further detail on previous TAC advice is provided in the Background section.

## BACKGROUND

8. A coral trout TAC of 135 tonnes has been in place since 2007–2008 (note historically the TAC was 134.9 tonnes but the PZJA agreed to simplify the TAC for the 2019-20 fishing season). This TAC was based on the average catch between 2001 and 2005 and included historic high catches reported in the fishery.
9. For the 2017–18, 2018-19, 2019-20 and 2020-21 fishing seasons the FFRAG and FFWG have recommended maintaining the TAC without change.
10. In the absence of a formal stock assessment, the status of the coral trout stock has been evaluated against the results of a Management Strategy Evaluation (MSE) undertaken in 2006 (Williams et al. 2007, 2011). In this MSE exercise, 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. 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).
11. At its meeting on 13-14 March 2019 the FFRAG considered a preliminary stock assessment for coral trout. The FFRAG accepted the assessment as preliminary noting the stage of development of the assessment and the range of uncertainties within the assessment. The FFRAG noted the results of the preliminary stock assessment suggest the coral trout stock is healthy with around 80 per cent of virgin biomass available. The FFRAG noted that all of the model estimates of current spawning biomass were above 65 per cent estimated virgin biomass.
12. At meeting on 25 November 2020 the FFRAG again recommended maintaining the coral trout TAC at 135 t for the 2021-22 season noting, catches remain low in the fishery (catches for the 2019-20 fishing season were 32.34 tonnes), the 2019 preliminary stock assessment outcomes, and industry advice that catches were unlikely to increase significantly in next fishing season.



13. At its meeting on 25 November 2020 the FFWG supported the FFRAG advice and also recommended that the coral trout TAC remain at 135t for the 2021-22 fishing season.
14. The Working Group further noted FFRAG advice on the data priorities for the Fishery and information needed to support the development of a more accurate stock assessment that could be relied upon to adjust the TAC, and therefore have greater confidence around the future harvest levels. The Working Group noted the importance of such information to guide investment decisions and therefore potential expansion of the Fishery. The priorities include a fishery independent dive survey of abundance, together with improvements to the accuracy of logbook reporting (effort, species 'split'), biological sampling and habitat mapping.

### ***Catches outside of the Fishery***

15. To date, the TAC has not calculated with an explicit deduction to account for likely catches taken outside the fishery (kai kai, recreational, charter). 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.
16. At its meeting on 27-28 November (meeting 6), the FFRAG recommended that AFMA undertake a work plan to support FFRAG consideration of likely catches ahead of the following fishing season. To date, this work has not been actioned as due to the underutilised nature of the fishery (catches far below the available TAC).
17. The RAG agreed to retain this action item, noting however, that progressing this action needs to be assessed against other FFRAG priorities and in light of any future research investment to develop an approach for measuring non-commercial fishing for the region
18. At its meeting on 14-15th October the FFRAG noted the progression of the project *Developing an approach for measuring non-commercial fishing in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods*, which was completed in 2021. This project proposed a timeline of future monitoring projects to measuring non-commercial catch, including coral trout.

<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>Management</b> <b>Spanish mackerel &amp; grey mackerel size limits</b>	<b>Agenda Item 4.1</b> <b>For DISCUSSION and</b> <b>ADVICE</b>

## RECOMMENDATIONS

### 1. That the Working Group:

- a) **NOTE** it is a condition of the wildlife trade operation (WTO) approval for the Torres Strait Finfish Fishery for the Torres Strait Protected Zone Joint Authority to review the appropriateness of the current minimum size limits for Spanish Mackerel;
- b) **NOTE** previous consideration by the Working Group of the appropriateness of the size limit for grey mackerel (meeting 12-13 July 2016);
- c) **NOTE** that the Finfish Resource Assessment Group (RAG), having regard for available information on the biology of the stock, catch information for the fishery, and an understanding of fishing practices and capacity, recommends that the minimum size limit for Spanish mackerel be retained on the basis that:
  - arrangements in the fishery are effective in managing risks to the stock from fishing given the very low level of catch taken in the Fishery of fish sized between the estimated minimum length at maturity (90cm total length (TL)) and the current minimum size limit MSL (75cm TL);
  - the relative size structure of catches in the fishery continue to be monitored overtime and the risk to the stock be reassessed as necessary; and
  - an increase to the minimum size limit would likely have a disproportionate impact on the TIB sector. Given the RAG's advice in (a) above, a size limit increase may impact the pursuit of other management objectives under the Act, specifically to develop and implement licensing policy, to the desirability of promoting economic development and employment opportunities for traditional inhabitants.
- d) **NOTE** that the RAG, having regard for available information on the biology of the stock, catch information for the fishery recommends that the minimum size limit for grey mackerel be increased from 50cm (TL) to 75cm (TL) on the basis that:
  - the size limit is the sole species-specific management measure in place for the species and should therefore align with minimum length at maturity which is understood to be 75cm.

### 2. That the Working Group, having considered advice from the RAG and having regard for the objectives under the *Torres Strait Fisheries Act 1984* and for the Fishery, **DISCUSS** and **PROVIDE ADVICE** on the appropriateness of the current minimum size limits for Spanish mackerel and grey mackerel.

## KEY ISSUES

1. 'Condition 7' of the WTO approval requires the PZJA to review the appropriateness of the Spanish mackerel MSL in the Torres Strait Finfish Fishery. The current minimum size limit for Spanish mackerel in the Fishery is 750mm total length (TL).
2. As part of its advice on remaking the legislative instrument for the Fishery in 2016, the Working Group also considered advice from the Scientific Member on the appropriateness of minimum size limit for grey mackerel (*Scomberomorous semifasciatus*) (meeting on 12-13 July 2016). At the time the Working Group noted:
  - a) that the minimum size limit for grey mackerel was well below the size at maturity and below the size limit for the East Coast Fishery;
  - b) a more appropriate size limit for grey mackerel would be 75cm;
  - c) grey mackerel are not a common catch in the Torres Strait fishery and there are no logbook records of this species being caught in the Torres Strait; and
  - d) that any changes on the limit for grey mackerel should be deferred as the priority is to have the instrument remade at the earliest opportunity.
3. AFMA is now seeking both RAG and Working Group advice the appropriateness of both minimum size limits. Relevant information on the current size limits is provided under the Background section.

### **RAG advice**

4. At its meeting on 14-15 October 2021 (meeting 9) the RAG considered the size limits for both species and recommended that the limit for Spanish mackerel be retained (75cm total length) and the limit for grey mackerel be increased from 50cm to 75cm total length. The RAG recommendations are provided in recommendation 1c and 1d of this paper above.
5. In making its recommendation the RAG noted the following in relation to Spanish mackerel:
  - a) size limits are typically applied in fisheries management to allow fish spawn at least once before being fished. In doing so, size limits can offer an additional safeguard against fishing impacts on the reproductivity capacity of a stock;
  - b) the minimum length at maturity for female Spanish mackerel is approximately 90cm TL.
  - c) female SM reach maturity at 2 years of age or older. The length distribution of sampled Torres Strait female SM of a verified age of at least two years was reviewed (see **Attachment 4.1a**). This sampled length distribution revealed that 50% of female SM reach maturity by 103.5cm.
  - d) the estimated proportion of Spanish mackerel catch in the Fishery that comprise fish below the estimated length at maturity (90cm TL) and the current MSL (75cm TL) is very low (approximately 3.7%) (Langstreth J.C. and O'Neill M.F., 2020). This level of take is not considered to pose a risk to the sustainability of the stock. The fishery is overwhelmingly based on fish sized above 90cm TL and total fishing mortality is limited by the Total Allowable Catch (TAC).
  - e) Spanish mackerel is known to school in size specific cohorts. As reported to AFMA, the sunset sector actively moves between schools to avoid catching fish less than 90cm to meet market demands. In contrast, Traditional Inhabitant industry members advised that the TIB sector does not have the same operational flexibility to move to

new grounds to target different schools. The TIB sector fish from small boats (typically 6 m or less) and are generally restricted to fishing within their community waters. Members advised that different sized mackerel are available locally at different times in the season;

- f) there is some evidence in the biological sampling data collected to date, to indicate that the TIB sector may catch smaller fish on average when compared to the sunset sector. However, the data also showed that the significant proportion of fish were still above 90cm TL; and
- g) it is likely that the post-release survival rates for this species is low, meaning that fish returned to the water would likely not survive.

6. In relation to Grey mackerel the RAG noted:

- a) the minimum length at maturity for female grey mackerel is approximately 75cm TL.
- b) female grey mackerel reach maturity at 2 years of age or older. The length distribution of sampled grey mackerel of a verified age of at least two years was reviewed (see **Attachment 4.1a**). This sampled length distribution revealed that 50% of female grey mackerel reach maturity by 84.2cm.
- c) a size limit of 75cm TL would align with the current understanding of species' biology, and allow fish to spawn at least once before being fished;
- d) grey mackerel is generally not taken in the fishery;
- e) although fishing for grey mackerel in the fishery is rare, having a size limit provides a safeguard against risk to the stock if fishing effort was to increase.
- f) unlike Spanish mackerel and commensurate with the level of fishing for the species, grey mackerel is not subject to a TAC or stock assessment process;

### Considerations

7. The review is to be guided by the objectives of the *Torres Strait Fisheries Act 1984* (the Act) and those for the Fishery.

8. Objectives of the Act which are:

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

9. Objectives for the Torres Strait Spanish Mackerel Fishery (as published on the PZJA website) are:
  - a) to manage the mackerel resource so as to achieve its optimal utilisation;
  - b) to maximise the opportunities for Traditional Inhabitants of both Australia and Papua New Guinea to participate in the commercial fishery; and
  - c) to promote the fishery as a line fishery.
10. Objectives for the Torres Strait Finfish (Reef Line) Fishery (as published on the PZJA website) are:
  - a) to manage the resource so as to achieve optimum utilisation; and
  - b) to maximise opportunities for Traditional Inhabitants of Australia and PNG to participate in the commercial fishery.
11. If size limits are to be changed, amendments will need to be made to the *Torres Strait Fisheries Management Instrument No. 14*. Minimum size limits for both Spanish and grey mackerel are contained within *Schedule 1* of this instrument.
12. Noting the administrative steps required to change a size limit, AFMA sought advice from the RAG on how urgently the size limit variation should be implemented. The RAG advised that given the level of fishing pressure on this species and therefore risk, it did not consider it an immediate priority. AFMA advised that it would likely be a more efficient and effective use of management resources to progress the size limit change, if agreed by the PZJA, when a package of amendments are next proposed for the *Torres Strait Fisheries Management Instrument No. 14*.

## BACKGROUND

### Spanish mackerel

13. The current minimum size limit of Spanish mackerel (75cm total length) was agreed to by the PZJA in 2003. Prior to this decision the size limit was 45cm total length. An exact of the PZJA decision is below (PZJA meeting 15, 12-13 June 2003):
  - a) *"In early 2001, Torres Strait mackerel and line fishers recommended to the Finfish Working Group that the minimum legal size for Spanish mackerel be increased from 450 mm to 750 mm (total length). The commercial fishery in Torres Strait targets specimens greater than 750 mm and increase in minimum size would also bring the Torres Strait in line with the Queensland east coast and the Gulf fisheries. The recreational fishing size limit in the Torres Strait is also 750mm."*
14. As noted by the PZJA in 2003 increasing the Torres Strait size limit to 75cm meant that arrangements would be consistent with those applied in the Queensland East Coast Spanish mackerel Fishery. The rationale for applying the 75cm size limit on the east coast is documented Queensland Government report: *Assessment of the Queensland East Coast Spanish Mackerel Fishery 2004*:
 

*"Sexual maturity in females usually occurs at 90 cm Total Length (TL), a size larger than the current Minimum Legal Size (MLS) of 75 cm TL, which applies to all sectors of the ECSMF. DPI&F recognises that this MLS does not afford the standard protection to the Spanish mackerel stocks of ensuring fish are not targeted before reaching sexual maturity, as is the case in general fisheries management practice and as exemplified by the DPI&F statement "Size limits are based on biological research into each species' reproductive cycles. Minimum size limits allow fish to spawn at least once and thereby contribute to the growth of that species population before capture" (Source: DPI&F web-*

site). DPI&F argues that it is reasonable to retain the current MLS because:

- *Current catch only has a small component of fish smaller than the size of first maturity (~4.9% and 15% of commercial and recreational sectors, respectively);*
- *Released Spanish mackerel have low survival rates due to stress of capture and serious physical damage caused by hooks;*
- *There are human occupational safety concerns in releasing large active fish (e.g. at or below the size range of first maturity);*
- *Yield-per-recruit (YPR) calculations indicate that the optimum size for harvesting Spanish mackerel is actually below the current MLS at 70 cm TL2 ;*
- *Fishermen are very efficient in targeting schools according to their size; and*
- *While there is commercial incentive for fishermen to target fish larger (85-90 cm TL) than the MLS, it would be inefficient and environmentally ineffective to not allow fishers to land fish between 75-90 cm."*

15. In contrast, the Torres Strait and East Coast size limits are different to those applied in other jurisdictions:

- a) Western Australia has set the minimum size limit at 90cm TL; and
- b) Northern Territory has not set a minimum size limit for the species.

#### *Biology and catch*

16. Established length-at-maturity data for Spanish mackerel sampled from Mornington Island and the Torres Strait, found that the minimum fork length (FL) of mature female fish is 800mm (McPherson, G.R. 1993).

17. 800mm FL equates to approx. 900mm total length (TL). (Begg, G., et al. 2006)

18. Recent monitoring data for Torres Strait Spanish mackerel fishery show that the proportion of catch under the 800mm FL size at maturity is low. Refer to figure 7 from Langstreth J.C. and O'Neill M.F., 2020 below, which found that in 2019-20, 3.7% of fish caught (combined TIB & TVH) were below this 800mm FL size.

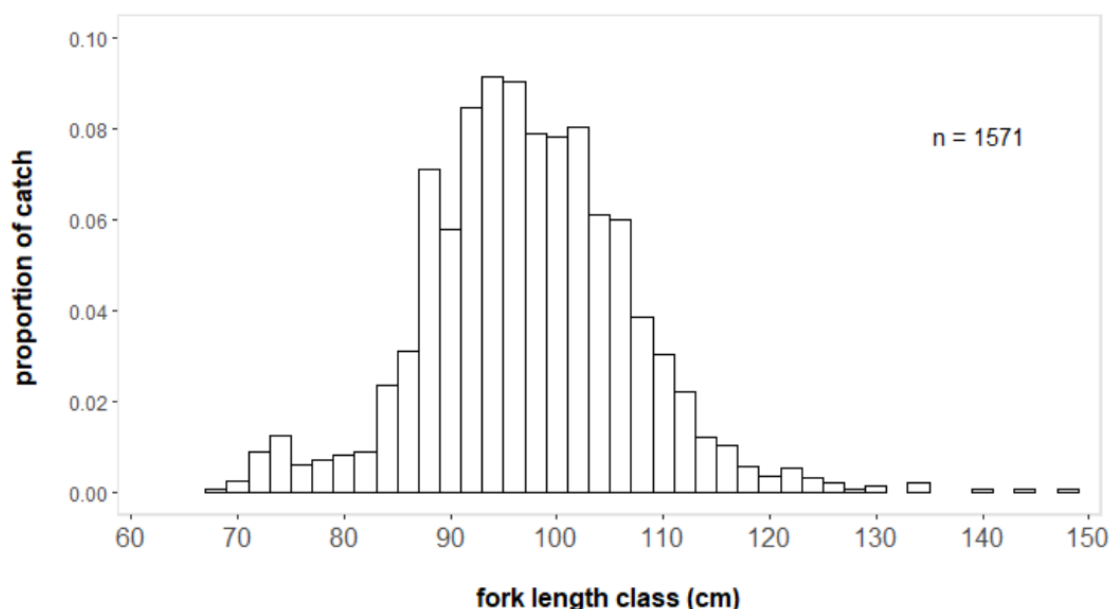
19. Langstreth J.C. and O'Neill M.F., 2020 also noted that "length structures sampled in 2019-20 are very similar to those reported from on-board surveys conducted in 2000-2002 and 2005 (Begg et al. 2006; O'Neill and Tobin, 2016)."

20. Advice received by AFMA from the sunset sector prior to the October RAG meeting in (meeting 9) was that:

- a) Some fishers are known to avoid 'nursery areas' in southern Torres Strait which contain smaller fish (750-900mm), as they are not desirable to buyers.
- b) Bramble Kay and northern Torres Strait in general is known to have bigger fish.
- c) Smaller fish are said to often be present in the early season (June-July), but throughout the majority of the season not many are caught.
- d) Some fishers are known to start fishing in August in order to avoid catching the smaller size class of fish.

21. In relation to the TIB sector, Traditional Inhabitant industry members of the RAG have advised that the TIB sector does not have the same operational flexibility to move to new grounds to target different schools (RAG meeting 9).

**Figure 7. Length structure of the commercial Torres Strait Spanish mackerel catch in 2019-20. TIB and TVH sub-sectors combined. Number of individual primary boats = 5. N-value (n=1571) is number of fish represented.**



### Grey mackerel

22. The current minimum size limit for Grey mackerel is 50cm total length. In contrast, the Torres Strait size limit are different to those applied in other jurisdictions
- Queensland has set the minimum size limit at 60cm TL;
  - Western Australia has set the minimum size limit at 75cm TL; and
  - Northern Territory has not set a minimum size limit for the species.

### Biology and catch

23. Established length-at-maturity data for grey mackerel found that the minimum fork length (FL) of mature female fish is 651mm FL (Cameron, D. and Begg, G.A. 2002).
24. 651mm FL equates to approx. 752mm TL (Cameron, D. and Begg, G.A. 2002).
25. At the working groups meeting on 12-13 July 2016 the Scientific Member, Dr O'Neill advised that minimum size limit of 50cm for grey mackerel was well below the size at maturity and should be set nearer to 75cm, which is the minimum size limit for Spanish mackerel. Dr O'Neill also noted that the minimum size limit for grey mackerel in the QLD east coast fishery was 60cm, but even this is not adequate considering the biological parameters of this species (i.e. previous research established that the size at sexual maturity for grey mackerel to be between 65-75cm fork length (FL) for females and 55cm (FL) or greater for males.
26. The WG in 2016 noted that there were no recorded logbook catch of the species in the Torres Strait Finfish Fishery. As of 2021, there was still no recorded catch of the species.



## References

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- McPherson, G.R. 1993. *Reproductive biology of the Narrow Barred Spanish mackerel (Scomberomorus commerson Lacepede, 1800) in Queensland waters*. Asian Fisheries Science 6: 169-82.
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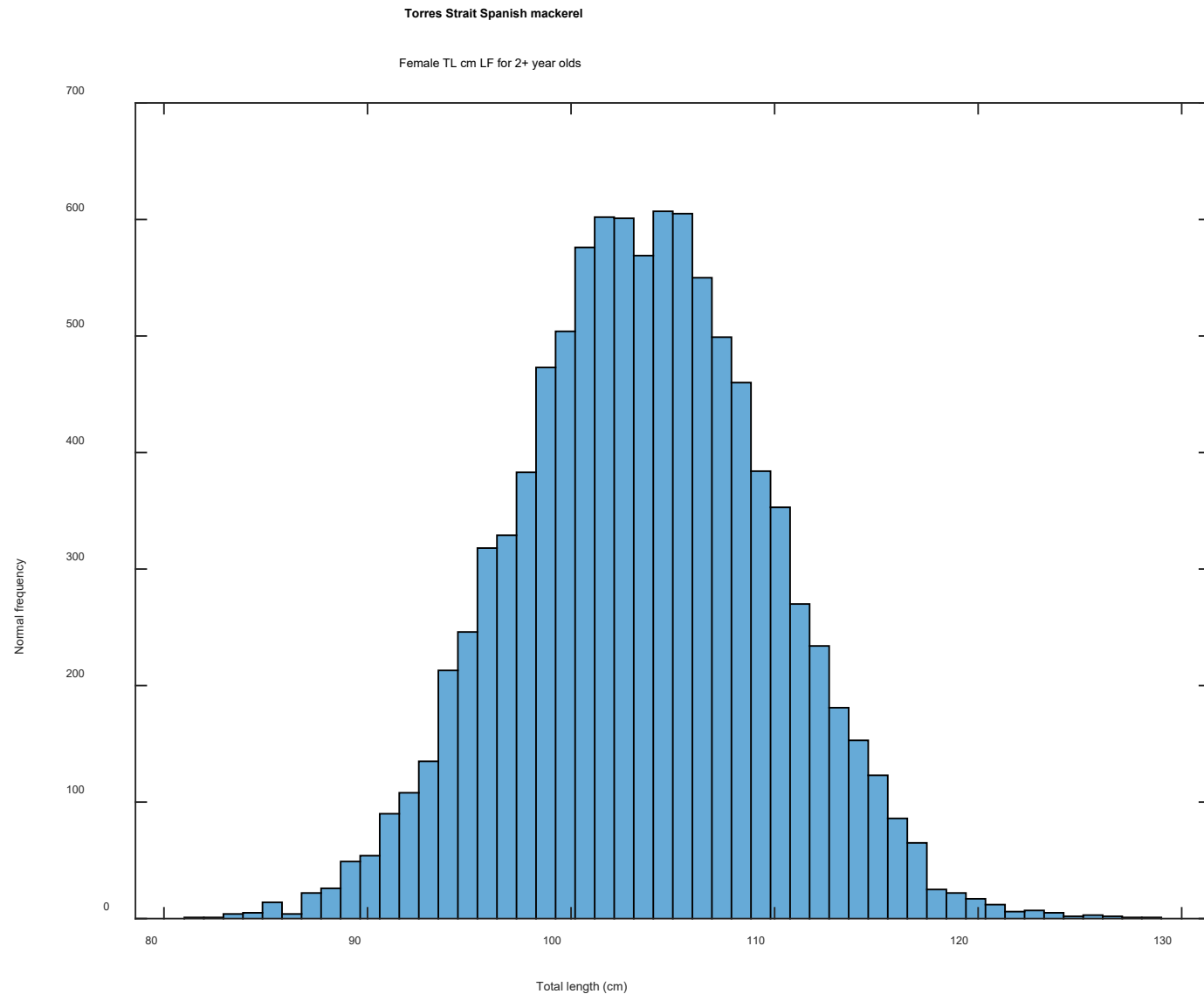
# Size limit information

Agenda item 4.1

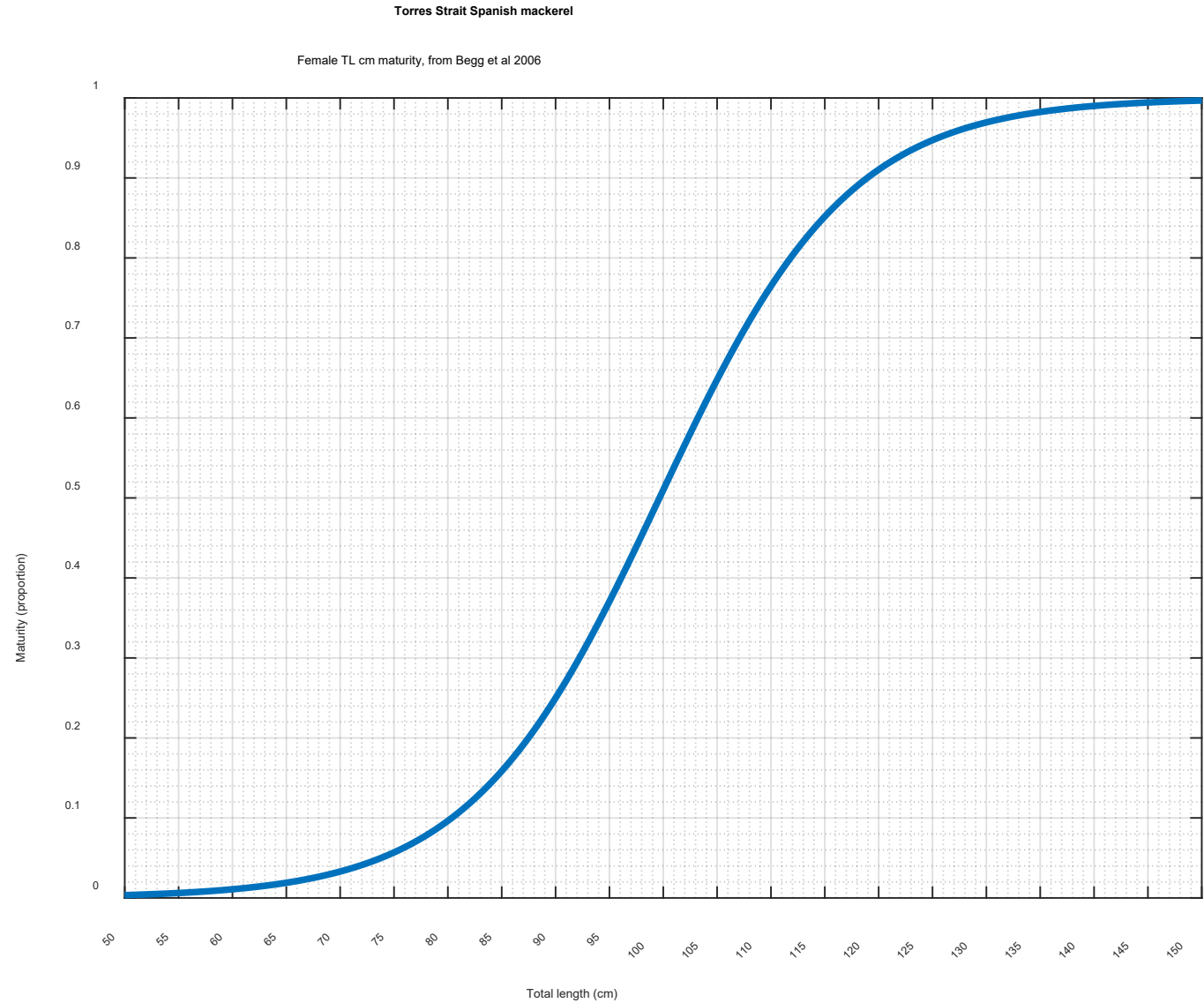
# Spanish mackerel

Female age at  
maturity  $\geq 2+$   
years

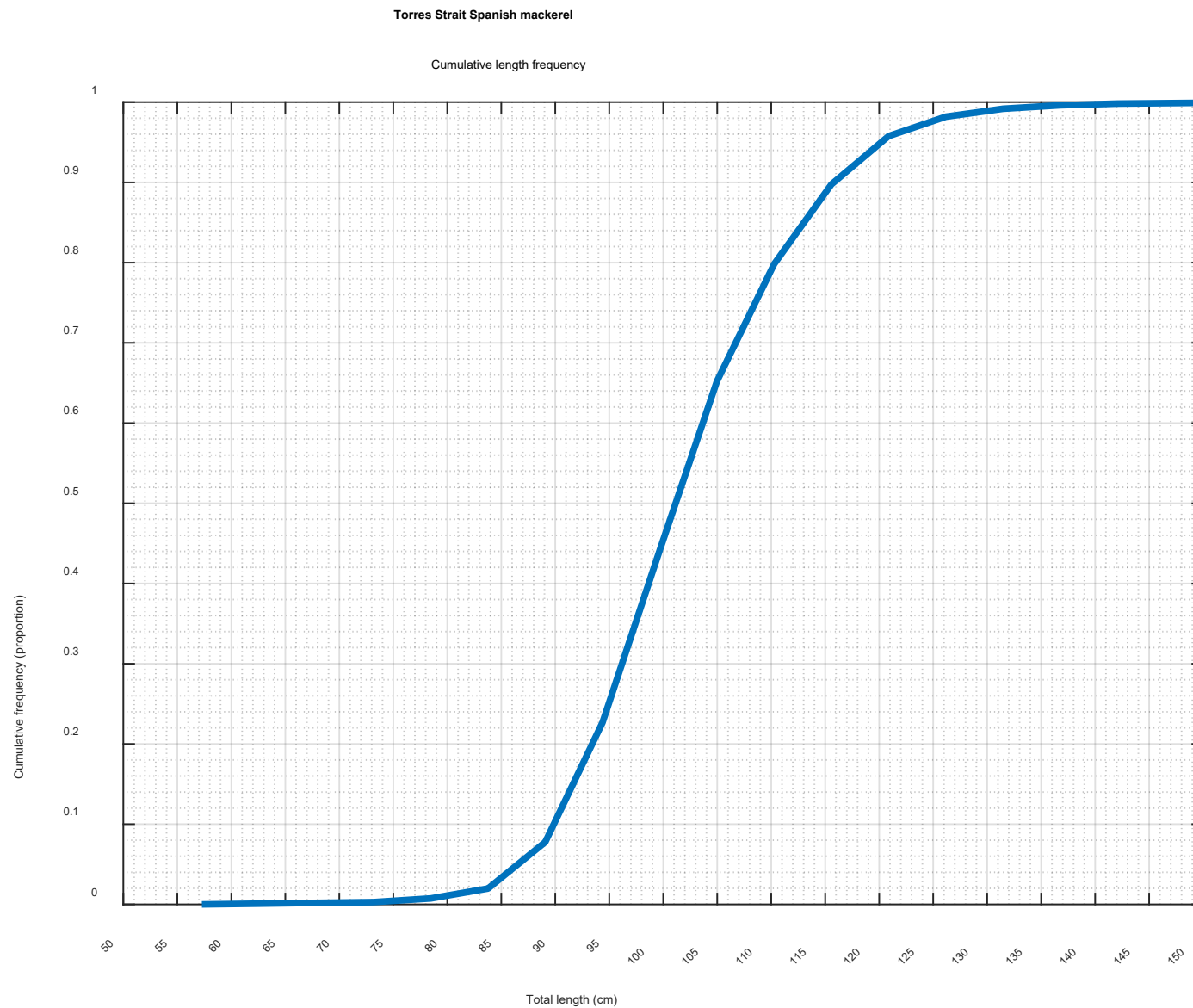
$$\mu = 103.5, \sigma = 6.2$$



# Female length – maturity curve



Cumulative LF  
– all fish and  
years of stock  
assessment  
data

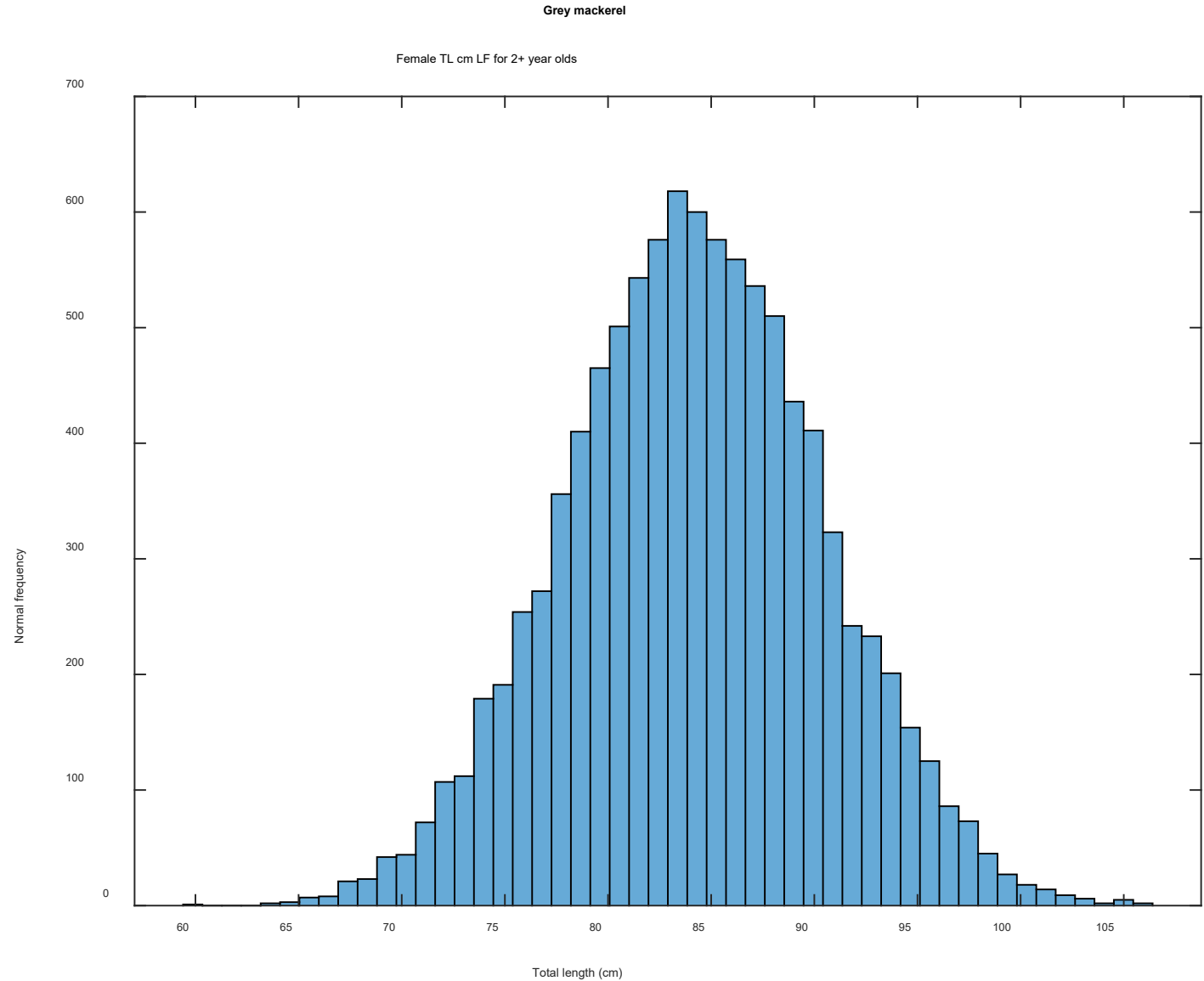


# Grey mackerel



Female age at  
maturity  $\geq 2+$   
years

$$\mu = 84.2, \sigma \sim 6.2$$



<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>MANAGEMENT</b> <b>Harvest Strategy Development</b>	<b>Agenda Item No. 4.2</b> <b>For Discussion and Advice</b>

## RECOMMENDATIONS

That the Working Group:

1. **REVIEW** work to date on developing harvest strategies for Spanish mackerel and coral trout;
2. **CONSIDER** advice from the Resource Assessment Group (RAG) on outstanding harvest strategy components to be progressed and tested, and a possible workplan for finalising harvest strategies for Spanish mackerel and coral trout (to be provided); and
  - a) **NOTE** the RAG will be reviewing work to date on developing harvest strategies for Spanish mackerel and coral trout at its meeting 18-19 November 2021. Outcomes of the RAG meeting will be tabled with the Working Group as soon as possible following the meeting.
3. **DISCUSS** and **PROVIDE ADVICE** on a workplan to develop WG advice on final draft harvest strategies for Spanish mackerel and coral trout.

## KEY ISSUES

1. The AFMA funded project “*Harvest Strategies for the Torres Strait Finfish Fishery*” project (Project number 2016/0824) was completed in 2019. At its meeting on 31 October - 1 November 2019 (meeting 5) the RAG reviewed outputs achieved to date and identified gaps that require further development. Progress made on the harvest strategies was the result of project work and recommendations from the RAG, Working Group and broader industry members that participated in several harvest strategy workshops.
2. Advice from the RAG (meeting 5, 31 Oct - 1 Nov 2019) on Spanish mackerel is outlined in **Table 1**. **Table 2** provides a summary of progress for coral trout however the RAG did not review this table given the need at the time for focus on Spanish mackerel. Progress to date on the harvest strategies (as summarised in the tables) reflects advice from both the RAG and WG noting several joint RAG/WG harvest strategies workshops were convened.
3. Despite not having finalised a harvest strategy for the Spanish mackerel fishery, the RAG, Working Group and PZJA has taken into account advice to date on key elements and guiding principles of a harvest strategy for the species.
4. At its meeting in October 2020 (meeting 7) the RAG recommended a follow-up project to build on the outputs of this project and continue development of the strategies for Spanish mackerel and coral trout. A project scope was published on in late 2019 (**Attachment 4.2a**) and a pre-proposal was received and reviewed by the TSSAC at their teleconference on 8 April 2021. The TSSAC decided not to support the finfish harvest strategy project, noting that:

- a. it was the lowest priority of the four projects put forward;
  - b. there was insufficient funding to support all four projects; and
  - c. given the past work that has already occurred on the finfish harvest strategy, the project proposal presented highlighted a need to further refine the scope of this project before seeking proposals again in future years.
5. The WG is being asked to reconsider a workplan to develop WG advice on a final draft harvest strategy. The RAG will also be considering progress to date and the need to clearly identify outstanding harvest strategy components to be progressed and tested. In doing so AFMA recommends that both the RAG and WG consider the utility of progressing elements within the RAG, intersessionally by a RAG sub-group and/or through discrete project work commissioned through the PZJA research program (TSSAC).

**Table 1.** Status of Spanish mackerel draft harvest strategy components as reviewed by FFRAG at its meeting on 31 Oct- 1 Nov 2019 (meeting 5). Note this table is an updated version to that attached to the record for the FFRAG meeting 5.

Guiding principles and key fishery attributes – factors that helped shape the development of the Harvest Strategy	
Recommended	Consistency with the Commonwealth Fisheries Harvest Strategy Policy and Guidelines (HSP, 2018). This is consistent with objectives of the <i>Torres Strait Fisheries Act 1984</i> (the Act).
	Have regard for traditional knowledge and the ability of communities to manage fishery resources locally, through acknowledging and incorporating customary and traditional laws, recognising; Malo Ra Gelar, Gudumalulgal Sabe, Maluailgal Sabe, Kulkaigal Sabe.
	Recognise commercial fishing by traditional inhabitants is important for local employment, economic development and for the passing down of traditional knowledge and cultural lore. Enough fish need to be left in the water for future fishers to make money and to protect the traditional way of life, livelihoods and cultural values.
	Spanish mackerel are a shared resource important for subsistence, commercial, traditional, charter and recreational sectors. Shared stock under the Torres Strait Treaty with PNG, stock to be shared if PNG nominate to do so.
	TACs should vary according to stock status (up and down): <ul style="list-style-type: none"> <li>• If biomass decreases be cautious. Stock is not to go below the limit;</li> <li>• If biomass is increasing be conservative; 'bank' fish.</li> </ul>
	Having regard for the current stock size ( $B_{31}$ ) and that $B_{60}$ is not quickly achieved (possibly greater than 12 years) without significant reductions in catch which may in turn cause significant economic and social impacts on the Fishery, a shorter-term target reference point is first required.
	Torres Strait Spanish mackerel stock are assumed separate from other regional stocks. They have limited mixing with the Queensland East Coast and the Gulf of Carpentaria stocks (see Buckworth et al. 2007 and Newman et al. 2009).
	There is potential for variations in availability and abundance of Spanish mackerel in the Fishery, due to their movement, schooling and aggregation patterns for feeding and spawning, recruitment and mortality.

	Spanish mackerel are a shared resource important for subsistence, commercial, traditional, charter and recreational sectors.
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<b>Operational objectives</b> What we want the harvest strategy to achieve.	
<b>Recommended</b>	Maintain the stock at (on average), or return to, a target biomass point ( $B_{TARG}$ ) equal to a stock size that aims to protect the traditional way and life and livelihood of traditional inhabitants and is biologically and economically acceptable.
	Maintain stocks above the limit biomass level ( $B_{LIM}$ ), or an appropriate proxy, at least 90 per cent of the time.
	Reduce fishing levels if a stock is below $B_{TARG}$ but above $B_{LIM}$ .
	Implement rebuilding strategies, if the stock moves below $B_{LIM}$ .

<b>Indicators</b> Indicators provide information on the state of the stock and how the stock is doing against agreed reference points (reference points are addressed below and are a specified level of these indicators)	
<b>Recommended</b>	Biomass – Catch and effort data from daily fishing logbooks is used as a proxy for abundance in the stock assessment model which is used to calculate biomass of the stock as a proportion of unfished biomass ( $B_0$ ).
<b>Outstanding</b>	Fishing mortality ( $B$ ) based indicators. The stock assessment model can estimate a level of $F$ to move the stock towards the target. There was some consideration from the FFRAG of using an $F$ -based indicator in the harvest strategy. Advice is sought from the FFRAG on whether there is value in further exploring this as an option.

Reference points		
A reference point is a specified level of an indicator used as a basis for managing a stock or fishery. Reference points will generally be based on indicators of either the total or spawning stock size (biomass) or the amount of harvest (fishing mortality). Reference points show where we want (target) and don't want (limit) the stock levels in the fishery to be.		
Recommended	Unfished biomass ( $B_0$ ) = $B_{1940}$ = 100%.	The year 1940 is considered the start of the commercial operations in the Fishery. The unfished biomass $B_0$ therefore is the model-estimate of spawning stock biomass in 1940.
	Target ( $B_{TARG}$ ) reference point = $B_{48}$	<p><math>B_{48}</math><sup>1</sup> is the default target (a proxy for <math>B_{MEY}</math> - biomass at maximum economic yield) in the Commonwealth HS Policy.</p> <p>FFRAG supported the <math>B_{48}</math> target reference point and outlined the following rationale for adopting this value.</p> <p>FFRAG noted that the most recent assessment update was estimating <math>B_{MSY}</math> for the stock as being close to the Commonwealth Harvest Strategy Policy of <math>B_{40}</math> which is a commonly accepted indicator in fisheries as a target reference point for maintaining a level of biomass (not catches) focused on maximising sustainable harvest (yield) from the fishery.</p> <p>Noting identified uncertainty in our data and stock assessment model there is a need to be precautionary and apply a 'buffer'. Traditional owners have also advised an objective for the fishery is to have a target biomass level that supports good catch rates. For these two reasons, a multiplier is applied to set the target biomass at a higher level than <math>B_{MSY}</math>. It was noted in other fisheries this may be considered as a <math>B_{MEY}</math> target reference point or proxy (to maximise economics from harvest taken) but in this fishery, <math>B_{MEY}</math> is unable to be calculated without reliable price data from catches.</p> <p>The RAG agreed that a 20 per cent buffer would be applied to <math>B_{MSY}</math> in order to set <math>B_{TARG}</math> (1.2 times <math>B_{MSY}</math> of <math>B_{40}</math> = <math>B_{48}</math>), though consideration (based on QDAF experience) was given to alternative multipliers given work undertaken by Pascoe et al. to estimate the best</p>

<sup>1</sup> Comm HSP: The target reference point for key commercial fish stocks is the stock biomass required to produce maximum economic yield from the fishery ( $B_{MEY}$ ). For multispecies fisheries, the biomass target level for individual stocks may vary in order to achieve overall maximum economic yield from the fishery. In cases where stock-specific  $B_{MEY}$  is unknown or not estimated, a proxy of 0.48 times the unfished biomass, or 1.2 times the biomass at maximum sustainable yield ( $B_{MSY}$ ), should be used. Where  $B_{MSY}$  is unknown or poorly estimated, a proxy of 0.4 times unfished biomass should be used. Alternative target proxies may be applied provided they can be demonstrated to be compliant with the policy objective.

		<p>proxy economic target reference point in data-poor fisheries. FFRAG considered comparisons of costs to revenue ratios and appropriate multipliers from the research but noted that the examples were not comparable with the Torres Strait Finfish Fishery.</p> <p>It was noted that a desktop study could be funded to calculate this optimum B<sub>MSY</sub>: B<sub>MEY</sub> point noting that setting a biomass level that is high will trade off available harvest and the number of boats active in the fishery.</p>
	Limit reference point (B <sub>LIM</sub> ) = B <sub>20</sub>	<p>B<sub>LIM</sub> is the spawning biomass level below which the ecological risk to the stock is unacceptable and the stock is defined as 'overfished'. This is an agreed level which we do not want the stock to fall below. B<sub>20</sub> is the default limit proxy in the Commonwealth HS Policy<sup>2</sup>.</p>
<b>Outstanding</b>	Long term B TARG = B <sub>60</sub>	<p>Further analysis and advice is required on the suitability of B<sub>60</sub> as a long-term B TARG, in comparison to other target biomass levels above B<sub>MSY</sub> having regard for the biology of the species and performance of the Strategy in meeting its objectives.</p> <p>Stakeholders have recommended that the Strategy ensures enough fish are left in the water to support commercial fishing but also protect the traditional way of life and livelihoods of traditional inhabitants.</p> <p>Advice to date is that a higher target biomass level (referring to 60%), would increase catch rates and improve profits in the fishery over other lower reference points, such as B<sub>48</sub>. RAG advice on the suitability of B<sub>60</sub> against other possible higher target biomass levels is necessary. There are likely to be trade-offs between medium-term returns from the fishery (significantly reduced TAC) and longer-term returns (more fish in the water meaning less cost to catch and therefore higher returns. Also, there would be more fish in the water for other users).</p> <p>Quantitative analysis and/or evidence from comparable fisheries may enable more evidence-based advice and decision making on the longer-term target.</p>

<sup>2</sup> Comm HSP: All stocks must be maintained above their biomass limit reference point (BLIM) at least 90 per cent of the time. Where information to support selection of a stock-specific limit reference point is not available, a proxy of 0.2 times unfished biomass should be used.



<b>Decision Rules (also called Harvest Control Rules)</b> These rules are designed to maintain and/or return the stock to the target reference point.		
<b>Recommended</b>	If stock falls below the limit reference point ( $B_{LIM}$ ).	The Fishery is closed (all commercial fishing for Spanish mackerel is to cease) and subject to a rebuilding strategy. The nature of the rebuilding strategy will be determined on the basis of the stock assessment (to be applied immediately) and the rate of recovery (i.e. number of years to achieve a biomass greater than $B_{LIM}$ ).
	Re-opening the Fishery <sup>3</sup>	Following closure of the Fishery, the Fishery can only be re-opened when a stock assessment determines the Fishery to be above the biomass limit reference point.
<b>Outstanding</b>	If the stock is above the limit reference point but below the target reference point.	<p>The RBC is to be set at level that allows for the stock to build towards the target. Importantly the decision rule can be designed to build the stock at different rates (e.g. the number of years for the stock to build to the target reference point or the rate of building near the target or limit).</p> <p>An outstanding action has been for the FFRAG to consider scenarios with multiple timeframes to build the stock to reach <math>B_{48}</math>.</p>
<b>Outstanding</b>	If stock is overfished (below $B_{LIM}$ )	<p>Consistent with the Commonwealth HS policy the FFRAG and FFWG have recommended that commercial fishing for Spanish mackerel should cease if the stock falls below <math>B_{LIM}</math>. Further FFRAG discussion and advice is now sought to consider additional decision rules and actions required to guide rebuilding and to trigger any necessary reviews of the HS, noting the HS should be designed to avoid the stock breaching the limit.</p> <p>FFRAG are to note and discuss the HS policy requirements to be included in the Spanish Mackerel HS if the stock falls below <math>B_{LIM}</math>:</p> <ul style="list-style-type: none"> <li>a) that targeted commercial fishing for Spanish mackerel will cease</li> <li>b) a rebuilding strategy will be developed to build the stock above <math>B_{LIM}</math> with a reasonable level of certainty</li> <li>c) if <math>B_{LIM}</math> is breached while the fishery is operating in line with HS, the HS must be reviewed.</li> </ul>

<sup>3</sup> Comm HSP: Once a stock has been rebuilt to above the limit reference point with a reasonable level of certainty, it may be appropriate to recommence targeted fishing in line with its harvest strategy, which will continue to rebuild the stock towards its target reference point.

		<p>FFRAG to provide advice on:</p> <ul style="list-style-type: none"> <li>a) A process to understand how the stock has rebuilt above <math>B_{LIM}</math> with certainty in the absence of commercial fishing e.g. model projections.</li> <li>b) whether a decision rule with a lower level of fishing pressure would be appropriate if the stock is above but close to <math>B_{LIM}</math>.</li> </ul> <p>FFRAG noted that four years would likely be the minimum possible recovery time (based on biology of the animal) to rebuild the stock back above <math>B_{LIM}</math> and the existing model could be used to forecast how the stock would respond with zero catches if closed to commercial fishing.</p>
<b>Outstanding</b>	Utilisation related Decision Rules (desired fishing intensity) noting a fishery may have indicators and reference points including spawning stock size (biomass) or the amount of harvest (F or fishing mortality i.e. utilisation of the resource).	<p>Decision rules have yet not been established for harvest related performance metrics such as future 'target' catches or 'target' catch rates desired by industry per primary vessel or per TIB dory day. Given that limited catch and effort data has only recently become available from TIB sector, the HS focus has been on agreeing biomass-based reference points and decision rules. Additionally, at the last FFRAG/FFWG meeting with regard to considering various longer-term target biomass reference points, industry expressed a strong preference for management to focus on building the biomass back to BTARG in the coming years, before exploring any other scenarios.</p> <p>FFRAG are asked to confirm this approach and consider how future decision rules may incorporate increased growth of the TIB sector.</p>
<b>Outstanding</b>	Precautionary increases to total allowable catches.	<p>Stakeholders recommended that if the stock assessment outcomes suggested increases in the TACs, these increases should only occur slowly through some kind of change limiting rule, noting that an increased TAC would likely not affect the TIB sector with the low present level of utilisation. Stakeholder advised a preference for 'banking' these fish to contribute to the biomass and future catch rates rather than harvesting this extra stock.</p> <p>At a previous FFRAG/WG meeting a number of challenges were identified with applying a change limiting rule for possible TAC increases. Instead the RAG/WG placed priority on</p>

		examining different building rate scenarios which may achieve this desired precautionary outcome. FFRAG are asked to confirm this approach and provide advice on how to progress change-limiting rules if necessary.
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Monitoring and assessment cycle	
<b>Recommended</b>	Based on the most recent estimate of the stock status (0.31 times unfished biomass) and declining biomass (and CPUE) trend, a stock assessment should be performed annually until the biomass is estimated to be above B <sub>40</sub> .
<b>Outstanding</b>	<p>Subject to any further advice from the HS project team, FFRAG advice is sought on:</p> <ul style="list-style-type: none"> <li>a) An appropriate assessment cycle when the stock is above B<sub>40</sub> and/or methods for evaluating future assessment cycles.</li> <li>b) Likely data needs to support monitoring stock performance under the Strategy over time.</li> <li>c) Standard procedures for applying the decision rules to the stock assessment outcomes, and, any other minimum stock assessment scenarios, and/or, sensitivities.</li> </ul> <p>FFRAG noted that although other options balancing risk and cost might be considered, given the decline in catch rates, transitional nature of the fishery, lack of fishery independent monitoring and suggestions of environmental influences on the fishery, there is a strong rationale to conduct yearly stock assessments for Spanish mackerel.</p> <p>FFRAG considered that examining CPUE in intervening years between full assessments (as an alternative) would be possible as an indicator of stock health but running a full assessment using the model would be more cost effective - given that running CPUE standardisations alone does require time and resources and the accepted full model can be run.</p> <p>FFRAG recommended that until MSE testing had been conducted, and the stock could be demonstrated to be at or above B<sub>40</sub> (as a B MSY proxy), yearly stock assessments are required.</p>

**Table 2.** Status of Coral trout draft harvest strategy components tabled at RAG 5. This table was not considered in detail by the RAG.

<b>Guiding principles and key fishery attributes</b> Factors that helped shape the development of the Harvest Strategy	
<b>Recommended</b>	Consistent with the Commonwealth Fisheries Harvest Strategy Policy and Guidelines (HSP, 2018). This is consistent with objectives of the <i>Torres Strait Fisheries Act 1984</i> (the Act).
	Have regard for traditional knowledge and the ability of communities to manage fishery resources locally, through acknowledging and incorporating customary and traditional laws, recognising; Malo Ra Gelar, Gudumalulgal Sabe, Maluailgal Sabe, Kulkalgal Sabe.
	Recognise commercial fishing by traditional inhabitants is important for local employment, economic development and for the passing down of traditional knowledge and cultural lore. Enough fish need to be left in the water for fishers to make money and to protect the traditional way of life, livelihoods and cultural values.
	Coral trout are a shared resource important for subsistence, commercial, traditional, charter and recreational sectors.
	TACs in the Torres Strait Finfish Fishery should vary according to stock status (up and down): <ul style="list-style-type: none"> <li>• If biomass decreases be cautious. Stock is not to go below the limit;</li> <li>• If biomass is increasing be conservative; 'bank' fish.</li> </ul>
	Since the 2007 Government funded licence buyback there has been limited effort in the fishery and the available total allowable catch has been under-caught.
	Four coral trout species commercially caught in Torres Strait. These four species (Common, Islander, Passionfruit and Blue-spot) are managed under a 'species group arrangement with a shared total allowable catch. There is a risk of local depletion of any of the four species in the Coral trout 'species group' as the existing assessment model assumes all four species are one stock.
<b>Operational objectives</b> What we want the harvest strategy to achieve.	

<b>Recommended</b>	Maintain the stock at current levels given: <ul style="list-style-type: none"> <li>the assessment is preliminary meaning it does not supply enough evidence to support changing the TACs without further development and catch data to support it; and</li> <li>noting the present high estimate of biomass and recent low harvests, industry are supportive of a conservative <math>B_{TARG}</math> for the stock to manage the fishery at a level which leaves more fish in the water than a straight MSY target rate<sup>4</sup>.</li> </ul>
	Maintain stocks above the limit biomass level ( $B_{LIM}$ ), or an appropriate proxy, at least 90 per cent of the time.
	Reduce fishing levels if a stock is below $B_{TARG}$ but above $B_{LIM}$ .
	Implement rebuilding strategies, if the stock moves below $B_{LIM}$ .

<b>Indicators</b> Indicators provide information on the state of the stock and how the stock is doing against agreed reference points (reference points are listed below and are a specified level of these indicators)	
<b>Recommended</b>	Biomass – Catch and effort data from daily fishing logbooks is used as a proxy for abundance in the stock assessment model which is used to calculate biomass of the stock as a proportion of unfished biomass ( $B_0$ ).
<b>Outstanding</b>	The current stock assessment is considered preliminary and as a result, the biomass calculation is not yet relied on as an accurate indicator of abundance or biomass. The FFRAG/FFWG did recommend a CPUE proxy for $B_{80}$ to be used as a trigger for future stock assessment (see <i>Monitoring and Assessment</i> below). Further discussion and advice is sought from the FFRAG on development of these and other indicators.

<b>Reference points</b> A reference point is a specified level of an indicator used as a basis for managing a stock or fishery. Reference points will generally be based on indicators of either the total or spawning stock size (biomass) or the amount of harvest (fishing mortality). Reference points set out where we want (target) and don't want (limit) the desired stock levels in the fishery to be.	
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<b>Recommended</b>	Unfished biomass ( $B_0$ ) = $B_{1950} = 100\%$ .	The year 1950 is considered to be the start of the commercial operations in the Fishery. The unfished biomass $B_0$ therefore is the model-estimate of spawning stock biomass in 1940.
	Target ( $B_{TARG}$ ) reference point = $B_{60}$	<p>The target biomass <math>B_{TARG}</math> is the spawning biomass level equal to 60% of <math>B_0</math> to take account of the fact that the resource is important for the traditional way of life and livelihood of traditional inhabitants, is leased to sunset licence holders and the target biomass level must be biologically and economically acceptable.</p> <p>The current agreed <math>B_{TARG}</math> is based on the assumption that <math>B_{MSY}</math> is 50% of <math>B_0</math> for this species and <math>B_{TARG}</math> should be set at 1.2 <math>B_{MSY}</math>.</p> <p>Stakeholders were supportive of a target that can take into account the patchiness of the stock (small areas with good trout catch rates separated by large areas of desert), the preliminary nature of the stock assessment, the risk of localised depletion, the basket of four species and that a proportion of the stock is not available.</p>
	Limit reference point ( $B_{LIM}$ ) = $B_{20}$	$B_{LIM}$ is the spawning biomass level below which the ecological risk to the stock is unacceptable and the stock is defined as 'overfished'. This is an agreed level which we do not want the stock to fall below. $B_{20}$ is the default limit proxy in the Commonwealth HS Policy <sup>5</sup> .
<b>Outstanding</b>	Consideration of alternative approaches to guide decision making in the fishery.	<p>Reference points for coral trout have been agreed though, as per below, additional work is required on development of decision rules to move the stock relative to these points.</p> <p>Given that the initial stock assessment model does not provide a sufficient basis to support formation of decision rules, FFRAG advice is sought on possible alternative approaches for a strategy to guide decision making, for example the FFRAG may want to consider tiered harvest strategies approaches from data-poor fisheries. Such tiered strategies may set out a precautionary base-level (or status quo) position, outline what data are required to progress the fishery and what the next tier may mean for a fishery in terms of improved understanding/decreased risks to the stock and less precautionary catch levels.</p>

<sup>5</sup> Comm HSP: All stocks must be maintained above their biomass limit reference point (BLIM) at least 90 per cent of the time. Where information to support selection of a stock-specific limit reference point is not available, a proxy of 0.2 times unfished biomass should be used.

<b>Decision rules (also called harvest control rules).</b>		
These rules are designed to maintain and/or return the stock to the target reference point.		
<b>Recommended</b>	Maintain current TAC until next Stock assessment	There is no current agreed decision rule for setting catch limits. The FFRAG/FFWG meeting recommended that the current constant RBC of 134.9 tonnes be adopted as the interim RBC until the stock assessment is updated. The current preliminary assessment indicates the stock is likely to be greater than 80% of the unfished biomass level. In the future the decision rules would recommend a harvest level (as a recommended biological catch -RBC) on the basis of evaluating the resource status.
	If stock falls below the limit reference point ( $B_{LIM}$ ).	The Fishery is closed (all commercial fishing to cease) and subject to a rebuilding strategy. The nature of the rebuilding strategy will be determined on the basis of the stock assessment (to be applied immediately) and the rate of recovery (i.e. number of years to achieve a biomass greater than $B_{LIM}$ ).
	Re-opening the Fishery <sup>6</sup>	Following closure of the Fishery, the Fishery can only be re-opened when a stock assessment determines the Fishery to be above the biomass limit reference point.
<b>Outstanding</b>	Maintain current TAC until next Stock assessment	FFRAG are to provide further advice on the operational objective for maintaining the stock at present levels, specifically what an appropriate level of harvest might be to maintain the present impact on the stock, noting: <ul style="list-style-type: none"> <li>a. while the available TAC has been 134.9 t a maximum of 46 t of harvest has been reported taken per year since the 2007 buyout;</li> <li>b. potential risks to individual species within the species basket (the four different coral trout species) noting the species distribution and catch composition is not well understood which add uncertainty around the biomass estimates;</li> <li>c. there is no absolute certainty as to when additional data will be available to Fishery (improved TIB data, independent dive survey).</li> </ul>
<b>Outstanding</b>	If stock falls below $B_{LIM}$	Consistent with the Commonwealth HS policy the FFRAG and FFWG have recommended that commercial fishing for coral trout should cease if the stock falls below $B_{LIM}$ . Further FFRAG discussion and advice is now sought to consider

<sup>6</sup> Comm HSP: Once a stock has been rebuilt to above the limit reference point with a reasonable level of certainty, it may be appropriate to recommence targeted fishing in line with its harvest strategy, which will continue to rebuild the stock towards its target reference point.



		<p>additional decision rules and actions required to guide rebuilding and to trigger any necessary reviews of the HS, noting the HS should be designed to avoid the stock breaching the limit.</p> <p>FFRAG note and discuss the HS policy requirements to be included in the Spanish Mackerel HS if the stock falls below <math>B_{LIM}</math>:</p> <ul style="list-style-type: none"> <li>a) that targeted commercial fishing for Spanish mackerel will cease,</li> <li>b) a rebuilding strategy will be developed to build the stock above <math>B_{LIM}</math> with a reasonable level of certainty.</li> <li>c) If <math>B_{LIM}</math> is breached while the fishery is operating in line with HS, the HS must be reviewed.</li> </ul> <p>FFRAG to provide advice on:</p> <ul style="list-style-type: none"> <li>c) A process to understand how the stock has rebuilt above <math>B_{LIM}</math> with certainty in the absence of commercial fishing e.g. model projections.</li> <li>a) whether a decision rule with a lower level of fishing pressure would be appropriate if the stock is above but close to <math>B_{LIM}</math>.</li> </ul>
<b>Outstanding</b>	If the stock is above the limit reference point but below the target reference point.	The RBC is to be set at level that allows for the stock to build towards the target. Importantly a decision rule must be designed and agreed to build the stock at different rates (e.g. the number of years for the stock to build to the target reference point or the rate of building near the target or limit). FFRAG are to advise on a process for this decision rule to be developed.
<b>Outstanding</b>	Harvest based decision rules (desired fishing intensity) a fishery may have indicators and reference points including spawning stock size (biomass) or the amount of harvest (F or fishing mortality).	Decision rules have not yet been established for harvest related performance metrics (measuring how the stock is being used) such as future 'target' catches or 'target' catch rates desired by industry per primary vessel or per TIB dory day. The focus so far has been placed on agreeing biomass based reference points and decision rules.

<b>Outstanding</b>	Precautionary increases to total allowable catches.	<p>Stakeholders recommended that if the stock assessment outcomes suggested increases in the TACs, these increases should only occur slowly through some kind of change limiting rule, noting that an increased TAC would likely not affect the TIB sector with a low present level of utilisation. Stakeholder advised a preference for 'banking' these fish to contribute to the biomass and future catch rates rather than harvesting this extra stock.</p> <p>At the last FFRAG/WG meeting a number of challenges were identified with applying a change limiting rule for possible TAC increases. Instead the RAG/WG placed priority on examining different building rate scenarios which may achieve this desired precautionary outcome. FFRAG are asked to confirm this approach and provide advice on how to progress change-limiting rules if necessary</p>
<b>Monitoring and assessment cycle</b>		
<b>Recommended</b>	<p>FFRAG has recommended that a stock assessment should be conducted during the 2021-22 season, once further data is available, ahead of setting catch limits for the 2022-23 season. Postponing the stock assessment for three years would allow enough time for additional data to be included. The additional data priorities identified are:</p> <ul style="list-style-type: none"> <li>a) the 1994-95 CSIRO fish survey data which may form a valuable baseline datum;</li> <li>b) improved catch and effort data from TIB fishers; and</li> <li>c) fishery independent data such as an underwater survey or biological sampling.</li> </ul>	
	<p>Trigger reference points (or breakout rules) were recommended for the years between stock assessments. The agreed trigger reference points will use standardised CPUE data as a proxy for biomass and the yearly fishery catch data to ensure the maximum yield of the fishery zones are not being exceeded.</p> <p>The specific trigger points for when an assessment would be undertaken the next season are:</p> <ul style="list-style-type: none"> <li>a) In line with the recommended target reference point (B TARG = B<sub>60</sub>) and taking into account the conservative approach preferred by industry, if the biomass of coral trout is less than B<sub>60</sub> (B TARG) then an integrated stock assessment will be conducted. To determine the biomass level, this trigger will use CPUE data as a proxy for biomass. It was agreed that the average CPUE from 2012 until 2017 (inclusive) would be used as an indicative reference point of the CPUE at B<sub>80</sub> (average = 120.8 kg per vessel per day) from which the CPUE at B<sub>60</sub> can be calculated and used as the trigger reference point. Given the ratio of 80:60 is equal to 0.75 then the trigger reference point which would</li> </ul>	

	<p>activate the rule that an assessment must be undertaken is: <i>if the standardised CPUE falls below 90.6 kg per (primary) vessel per day</i> (computed as <math>0.75 \times 120.8 = 90.6</math>).</p> <p>b) If the combined yearly total catch of the four coral trout species from both commercial sectors is greater than 90 tonnes. Ninety tonnes was agreed because this 2/3 of the current constant RBC of 134.9 tonnes.</p> <p>If either (a) or (b) above occurs, the stock assessment must be repeated the following year in order to monitor the condition of the stock.</p>
<b>Outstanding</b>	<p>FFRAG to provide advice on likely data needs to support monitoring stock performance under the Strategy over time.</p> <p>The FFRAG advice should also take into account the possible scenario where assessments are able to be funded in accordance with the recommended cycle and/or the additional data recommended to support a further stock assessment are not readily available.</p> <p>FFRAG to provide advice on procedures for interpreting the stock assessment outcomes under HS and how decision rules are to be applied based on these outcomes. While a stock assessment may be triggered through analysis of CPUE data in intervening years between assessment FFRAG advice is sought on what the process should be following this trigger being met and what decision rules should be applied based on the outcomes of this stock assessment i.e. whether the TAC should be changed to reflect this suggested change in biomass.</p>

**Torres Strait Finfish Fishery: *Harvest strategy development for the Torres Strait Finfish Fishery (Spanish mackerel and coral trout)***

A Harvest Strategy (HS) for the Torres Strait Finfish Fishery (TSFF) is required to guide future decisions on sustainable commercial catch limits and potential expansion of the fishery using indicators of stock status. The strategy will help the fishery achieve its ecological, economic and social management objectives consistent with the *Torres Strait Fisheries Act 1984*, *Torres Strait Finfish Fishery Management Plan 2013* and the *Commonwealth Fisheries Harvest Strategy Policy and Guidelines*.

A HS for the key target species of Spanish mackerel and coral trout will also guide future investment on finfish research, assessment, data collection and monitoring to make sure the shared interests of Torres Strait Traditional Inhabitants and other fishery stakeholders are balanced in developing biologically, socially and economically sustainable fishing opportunities.

An AFMA-funded project, led by CSIRO, titled: *Harvest Strategies for the Torres Strait Finfish Fishery* was funded in 2017/18 and 2018/19. The Finfish RAG considered the outputs of this project at their FFRAG 6 (October 2019) meeting. The RAG noted outputs achieved to date and identified gaps that require further development. At their FFRAG 7 meeting (October 2020) the RAG recommended a follow-up project to build on the outputs of this project and continue development of the strategies for Spanish mackerel and coral trout.

It is expected that development of this HS will involve a series of stakeholder workshops to ensure traditional inhabitant fishers provide input into the final HS design. It is noted that a tiered HS may be appropriate for the Finfish Fishery, recognizing the current status of the Spanish mackerel stock and available data for coral trout at present.

**Desired outcomes:**

In consultation with AFMA, FFRAG and fishery stakeholders, the HS project team will develop and recommend an updated HS framework for Spanish mackerel and coral trout, noting a tiered HS may be appropriate, detailing:

1. Target and limit reference points agreed by stakeholders.
2. Indicators of stock status.
3. Harvest control rules (decision rules) which can guide fishery stakeholders and managers on responses should these targets / limits be reached.
4. data requirements to support the harvest strategy.
5. Options for monitoring and assessment to meet these data requirements for the tier levels as the fisheries develop.

Applicants are encouraged to submit an optional two part proposal. The first part of the proposal is to be an application to address the above points with a timeframe and budget. The second optional part of the application could be a proposal with a modified budget and timeframe to also include management strategy evaluation testing alongside or as a succinct program of work following the initial HS development.

Applicants wishing to submit a proposal can contact AFMA for further information.

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<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>TORRES STRAIT FINFISH FISHERY MANAGEMENT PRIORITIES</b>	<b>Agenda Item 5</b> <b>For discussion and advice</b>

## RECOMMENDATIONS

1. That the Working Group **DISCUSS** and **PROVIDE ADVICE** on management priorities for the Finfish Fishery in 2022-23.

## KEY ISSUES

1. FFWG advice is being sought on recommended management priorities for the 2022-23 financial year. AFMA seeks advice from each Working Group (WG) on priorities to ensure management resources are effectively focused.
2. The WG is asked to review the management priorities as discussed at the WG meeting on 25 November 2020. Noting these priorities, the WG is to provide advice on how these items should be progressed, and introduce any new management priorities for consideration.

## BACKGROUND

3. AFMA proposed the following management priorities for the 2021/22 financial year at the WG meeting on 25 November 2020. Working Group members were asked to provide advice on these recommended management priorities. Members did not recommend any other priorities but provided the following advice on those outlined by AFMA:
  - a) *Progress the development of a harvest strategy.* Supported as a priority. However, it was noted that clear guidance from AFMA to prospective funding applicants on expected deliverables is needed. It was noted that the RAG and Working Group have been developing a harvest strategy approach for Spanish mackerel over the last four years and arguably there are no immediate risks for coral trout given the low fishing effort. However, the Working Group recognised that it is best practice to develop agreed harvest strategies to provide certainty to stakeholders on the information requirements and decision rules for setting TACs in the fishery. This certainty enables more informed business decisions and importantly supports industry and community leaders in building broader stakeholder support for improving data for the Fishery. To ensure a clear return on investment, members agreed that it was essential that a future project build on work already completed to develop a harvest strategy for the fishery. In this regard all potential applicants were encouraged to contact AFMA to discuss proposals prior to submission.
  - b) *Supporting possible changes to the Western Line Closure.* Supported as a priority. It was noted as a long-standing issue, but that good progress has been made more recently to understand the views of Torres Strait Islanders throughout the region and to develop risk-based management options. It was noted that advice needed to be made clear on allowable fishing methods.

- c) *Supporting the PZJA's consideration of quota unit allocation options.* The Working Group noted the PZJA decision and rationale. That being to consider quota unit allocation options for the Finfish Fishery alongside the review it must undertake for the Traditional Inhabitant quota unit allocation in Tropical Rock Lobster Fishery. The AFMA member advised that having clearly defined catch entitlements (i.e. quota units) will be important to support the transfer of the sunset leasing arrangements from TSRA to non-government entity/ies. Members noted that the PZJA has not yet allocated quota in the Finfish Fishery despite there being a plan of management in place to do so. The AFMA member advised that, following Australian Government buyout of licences held by non-traditional inhabitants in 2008 and therefore potential effort, the PZJA agreed that it was no longer a priority to introduce quota management. Some Traditional Inhabitant members raised strong concerns that a quota allocation process could start to divide their people and cause in-fighting. In their view it should be a matter for the new Zenadth Kes Fishing Company (the entity) to consider whether to pursue such an option. The Working Group noted the sensitivities around allocation and whilst there was support to involve the new entity as a means of involving stakeholders, members noted AFMA member advice that the nature and extent of any involvement would be subject to the role of the entity. Details on this are to be released by TSRA once the entity is established (refer to TSRA update under agenda item 2.2).
  - d) *Formalising total allowable catches for the Finfish fishery.* Supported as a priority noting the Working Group's previous consideration and support for ensuring the TAC is binding on all sectors. The Working Group noted that, in the absence of having quota management under the management plan, current arrangements do not limit catches by the Traditional Inhabitant sector. Having an enforceable TAC was noted as a necessary part of carefully managing catches in the fishery.
  - e) *Potential application of VMS on tenders.* The Working Group did not consider this a high priority at this time, however, supported further information being tabled on the pros and cons on having VMS on tenders (boats that work in conjunction with a primary boat). Some Traditional Inhabitant members did not support having VMS on TIB boats but supported the measure applying to the sunset sector noting concerns with sunset boats breaching the 10nm closures around eastern communities. The AFMA member noted that the FFRAG had previously considered the use of VMS as an option for addressing the spatial data needs. The AFMA member further advised that whilst VMS is generally considered to be a cost-effective compliance tool, there was still much analysis to be done by AFMA on matters such as implementation costs across all licence holders to support further consideration of this initiative. AFMA maintains this as a lower priority, subject to resourcing.
4. As of November 2021, AFMA proposes the following against these management priorities:
- a) *Progress the development of a harvest strategy.* **Remains a high priority.**
  - b) *Supporting possible changes to the Western Line Closure.* **Remains a high priority.**
  - c) *Supporting the PZJA's consideration of quota unit allocation options.* **Remains a high priority – noting this item is subject to PZJA consideration.**
  - d) *Formalising total allowable catches for the Finfish fishery.* **Remains a medium priority.**



- e) *Potential application of VMS on tenders.* **Remains a medium priority.**

<b>Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>TORRES STRAIT FINFISH FISHERY RESEARCH PRIORITIES</b>	<b>Agenda Item 6</b> <b>For DISCUSSION &amp; ADVICE</b>

## RECOMMENDATIONS

1. That the Working Group **NOTE**:
  - a) that although not yet funded, approximately \$477,000 of the 2022/23 available research budget is expected to fund multiyear Finfish and TRL related projects including:
    - (i) Torres Strait Spanish mackerel stock assessment;
    - (ii) Spanish mackerel and coral trout biological sampling; and
    - (iii) Scoping study for an alternative index of abundance for the Torres Strait Spanish mackerel stock.
  - b) That this means that at present (i.e. in the absence of securing further funding) expected remaining AFMA and TSRA research funding available in the 2022/23 financial year is approximately \$93,000 across all Torres Strait fisheries.
  - c) that the Finfish Fishery Resource Assessment Group (FFRAG) advice on research priorities as detailed in **Table 1**; and
2. That the Working Group, having considered advice from FFRAG, **DISCUSS** and provide **ADVICE** on the research priorities provided in the rolling five year research plan for 2022/23 to 2026/27 (the Research Plan) for the Torres Strait Finfish Fishery (**Attachment 6a**), including advice on feasibility, timing and indicative costing of essential, unfunded research project(s).

## KEY ISSUES

1. At its meeting on 14-15 October 2021 (meeting 9) the FFRAG discussed the current status of research priorities. **Table 1** contains updated advice against each priority. Noting that most essential research priorities previously identified for the Fishery are being addressed, further RAG advice is needed on progressing a harvest strategy for the fishery, and other desirable research needs are contingent on work being progressed in other projects/jurisdictions first, the RAG recommended that a catch rate standardisation project for coral trout as the highest research priority for funding in 2022-23. The RAG also supported the ERA has an essential priority, noting the conditions of the Wildlife Trade Operation approval for the fishery.
2. The RAG is meeting again on 18-19 November 2021 and will provide further advice on a work plan for progressing the Harvest Strategy. Advice from this meeting will be provided to the Working Group as soon as it is available.
3. The Working Group is invited to consider the RAG advice, status of current research priorities and provide advice on future research needs.

4. Two recently funded (in 2019-20) and completed projects that are applicable across all Torres Strait Fisheries. These are:
  - a) *Measuring non-commercial fishing (indigenous subsistence fishing and recreational fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods; and*
  - b) *Climate variability and change relevant to key fisheries resources in the Torres Strait – a scoping study.*
5. Outcomes of these projects were considered by FFRAG at its meeting on 14-15 October 2021 (meeting 9) and will be presented to the Working Group at its next meeting.

## BACKGROUND

### ***TSSAC Research Funding Process***

6. Each year the PZJA TSSAC invites applications for funding to undertake research to support the management of Protected Zone Fisheries. The TSSAC seek input from each fishery advisory committee to identify research priorities.
7. PZJA fisheries research is generally funded by AFMA. The AFMA research budget is generally set at around \$420,000 each year. In addition to the AFMA research funding, TSRA has recently committed in-principle to contributing \$150,000 each year towards PZJA fisheries research. This allows around \$570,000 annually for all Torres Strait research.
8. Additional funding can also be sought from other bodies such as the Fisheries Research and Development Corporation (FRDC), when needed, and when projects align with FRDC objectives.
9. Assuming no change to available AFMA and TSRA funding, considering expected research commitments and in the absence of securing further funding, available researching funding across all Torres Strait Fisheries in the 2022-23 financial year will be around \$93,000.
10. A detailed breakdown of committed TSSAC funds for multi-year projects 2021/22 – 2024/25 is provided at **Attachment 6b**.

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

11. TSSAC operates under a SRP which guides priority setting for research in Torres Strait fisheries over a five year period. The SRP specifies the research priorities and strategies that the PZJA intend to pursue in Torres Strait fisheries, and provides background to the processes used to call for, and assess, research proposals. The research priorities can be broad, covering all topics within the SRP, some of which may be funded by AFMA, and some of which may require funding from other funding bodies.
12. There are 3 research themes within the SRP, under which the FFRAG and FFWG could identify research priorities for the Finfish Fishery (**Attachment 6c**). There are several strategies under each theme and suggested ideas to help RAGs and Working Groups to think about the sorts of projects which may fit within these themes and strategies.
13. The TSSAC requires each fishery to develop a rolling five year research plan, which fits into the themes identified in this SRP.

**Table 1.** Research priorities for the Torres Strait Finfish Fishery as updated at FFRAG 9 meeting on 14-15 October 2021 (extract from the draft meeting record)

Research need	Objectives and component tasks	Priority as at 2020-21 (essential/desirable)	Status (as of September 2021)	FFRAG 9 advice
Biological sampling (Spanish mackerel and coral trout)	Project funded for age, sex and length data for Spanish mackerel to support stock assessment.	<b>Essential</b>	Multiyear project funded for 2021/22 – 2023/24 (project number 2020/0814).	No change. The advised that this is research need remains an essential priority. The need is currently being addressed through a funded project.
Spanish mackerel stock assessment	Need for ongoing assessment of key commercial species.	<b>Essential</b>	Multiyear project funded for 2021/22 – 2023/24 (project number 200815).	No change. The advised that this is research need remains an essential priority. The need is currently being addressed through a funded project.
Harvest strategy development	<p>Strategy with harvest control rules and agreed reference points required to support management.</p> <p>It is a condition of the FF WTO that by 30 June 2023 a HS must be developed for the fishery.</p> <p>As per FFRAG 9 advice it was noted that the optimum ratio of <math>B_{MSY}</math> (maximum sustainable yield) to <math>B_{MEY}</math> (maximum economic yield) will need to be taken into account as part of the harvest strategy process.</p> <p>FFRAG supported a desktop study (e.g. applying Pascoe et al. work to the Torres Strait Spanish mackerel stock c.f. QDAF east coast work) to determine the optimum ratio between <math>B_{MSY}</math> and <math>B_{MEY}</math> and the appropriate proxy economic target for the fishery.</p>	<b>Essential</b>	<p>Previous scope and components were not funded.</p> <p>New scope to be developed as needed and requires an indicative cost estimate.</p>	<p>The RAG advised that this remains an essential priority. However, further RAG advice is required to develop a work plan to finalise a harvest strategy. This will include the identification and scoping of any further research needs. It was noted that harvest strategies for Spanish mackerel and coral trout would be different and therefore may be addressed in separate work plans.</p> <p>The RAG advised that the future work to develop the harvest strategies should examine the optimum ratio of <math>B_{MSY}</math> (maximum sustainable yield) to <math>B_{MEY}</math> (maximum economic yield). This is work is no longer considered a standalone research need.</p>
Management Strategy Evaluation (MSE) of draft harvest strategy	Requirements of Cwth HS Policy and Guidelines to undertake MSE prior to implementation.	<b>Essential</b>	Not currently funded. Detailed scope to be developed as needed.	The RAG recommended that this research need be changed to essential noting that it is both best practice and Australian Government Policy to undertake MSE testing of potential harvest strategy options. As detailed above, further RAG advice is required to develop a work plan to finalise a harvest strategy (ies). This will include

Research need	Objectives and component tasks	Priority as at 2020-21 (essential/desirable)	Status (as of September 2021)	FFRAG 9 advice
				the identification and scoping of any further research needs.
Ecological Risk Assessment (ERA)	It is a condition of the FF WTO that by <b>30 June 2023</b> an ERA must be undertaken for the TS Finfish Fishery	<b>Essential</b>	Not currently funded. Estimated cost \$20,000	The RAG advised that this research need remains an essential priority. To be progressed by AFMA under AFMA's broader ERA contract with CSIRO.
Alternative index of abundance for Spanish mackerel – scoping study	Develop an alternative to CPUE data to provide stock status/abundance	<b>Essential</b>	Multiyear project funded for 2021/22 – 2023/24 (project number 200817).	No change. The RAG advised that this research need remains an essential priority and is currently being addressed through a funded project. The funded project is designed to evaluate the feasibility of the CKMR genetic technique method for the Fishery.
Coral trout stock assessment development	<ul style="list-style-type: none"> <li>RAG has noted work required to further develop the preliminary stock assessment and address the range of uncertainties identified.</li> <li>The additional data priorities are:               <ol style="list-style-type: none"> <li>analysing the identified 1994-95 CSIRO survey data</li> <li>examining improved TIB catch and effort data incorporating underwater visual survey data if conducted.</li> <li>Undertake further habitat mapping work</li> <li>Collect fishery independent data</li> </ol> </li> </ul>	<b>Desirable</b>	Not currently funded. Identified data priorities to be addressed prior to scoping.	The RAG clarified that this research need should only be considered for funding once the identified data priorities have been addressed. The RAG further advised that in the interim, CPUE trends in the fishery should be analysed to assess the status of the fishery. The RAG identified this work as a separate research need (see below). The RAG also noted that future stock assessment needs for the fishery would be guided by the harvest strategy.
Coral trout catch-per-unit-effort standardisation	<p>Catch Per Unit Effort is an important input into the assessment and may be used to monitor the performance of the Fishery in years without a full assessment being undertaken. Having an agreed CPUE standardization is the first necessary step towards using CPUE to inform management decisions.</p> <p>A small project is required to further refine the current CPUE standardisation methods and to update the CPUE time series with new catch and effort data.</p>	<b>Essential</b>	Previous application not funded. Previous proposal sought funding of around 12k.	In the absence of a stock assessment and harvest strategy for coral trout, the RAG recommended further work be undertaken as a priority, to update the standardised CPUE analysis for coral trout. In consultation with the RAG, the project would refine the standardisation method as needed and produce an updated CPUE time series. This analyse would inform the RAG's assessment of the fishery.

Research need	Objectives and component tasks	Priority as at 2020-21 (essential/desirable)	Status (as of September 2021)	FFRAG 9 advice
	<p>The CPUE series is to be based on:</p> <ul style="list-style-type: none"> <li>• any recommended refinements of the CPUE standardisation methodology developed through the AFMA funded project: Harvest Strategy of the Torres Strait Finfish Fishery (project number: 2016/0824); and</li> <li>• all available catch and effort data.</li> </ul>			
Spanish mackerel stock structure	Define the spatial scale of management and connectivity of Torres Strait populations of SM with adjacent areas (Gulf, Qld, Coral Sea, PNG) potentially through collection of samples for genetic relatedness.	<b>Desirable</b>	Multiyear project currently funded for 2021/22 – 2023/24 (project number 200817).	<p>No change. The RAG advised that this research need remains a desirable priority and is currently being addressed through a funded project.</p> <p>A specific objective of the funded CKMR project is to assess the stock structure of the Spanish mackerel fishery. This project will design a full-scale mark-recapture project that would undertake genetic sampling to identify close genetic relationships between recaptured fish. This information can be used to extrapolate accurate calculations of the size of the entire spawner biomass.</p>
Estimating catches outside the commercial fishery	Acquiring data of catch taken from non-commercial fishers.	<b>Essential</b>	Relevant research project funded and completed (project number 190827). Project recommendations are under consideration.	The RAG noted that this research need may continue to be addressed through the PZJA's broader need to develop an approach for measuring non-commercial catch across Torres Strait Fisheries. The RAG therefore did not recommend scoping a Finfish Fishery specific research project currently. The RAG recommended that this priority be reassessed as relevant research is completed.
Shark depredation	Study to investigate increased shark interaction with fishery operations and depredation impacts on Finfish Fishery catch rates (how to capture and track over time or investigate potential mitigation options).	<b>Desirable</b>	Not funded or scoped.	The RAG advised that this is not a priority research need at this time. The RAG recommended that this priority be reassessed as relevant research is completed in other fisheries (jurisdictions).
Otolith morphology	Developing an index of mackerel ages based on the shapes and sizes of otoliths recorded	<b>Desirable</b>	Not funded or scoped.	The RAG advised this not priority research need at this time and can be removed from the research plan. This is because an alternative ageing technique (epigenetic

Research need	Objectives and component tasks	Priority as at 2020-21 (essential/desirable)	Status (as of September 2021)	FFRAG 9 advice
				ageing) is instead being assessed by project number 200817 (CKMR).
*Optimum ratio of $B_{MSY}$ (maximum sustainable yield) to $B_{MEY}$ (maximum economic yield)	*Info added to harvest strategy table. While stakeholders may select a higher future target reference point (e.g. $B_{60}$ ) to support good catch rates and stock sharing, noted this will mean a trade-off for a lower RBC as less harvest will occur to keep more fish in the water and less boats will be active in the fishery. A project could attempt to determine the optimum ratio between $B_{MSY}$ and $B_{MEY}$ and the appropriate proxy economic target for the fishery.	<b>Desirable</b>	Not funded or scoped.	The RAG advised that this research need should be addressed as part of any broader work to develop a Harvest Strategy and can be removed as a stand-alone item from the research plan.





# DRAFT Rolling Five Year Research Plan 2022/23 - 2026/27

## Torres Strait Finfish Fishery



Compiled by AFMA with FFRAAG advice

September 2021

## **ABOUT THIS PLAN**

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

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

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

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

## RESEARCH PRIORITIES

**Table 1.** Five-year Torres Strait Finfish Fishery research plan for 2022/23 to 2026/27.

Proposed Project	Objectives and component tasks	Year project to be carried out and indicative cost*						Evaluation		
		2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	Priority essential / desirable	Priority ranking 1-5 (1 = highest)	Theme
Biological sampling program (length freq, sexing, ageing)	Project funded for age, sex and length data for Spanish mackerel to support stock assessment.	\$122,000 (currently funded)	\$128,000 (currently funded)	\$135,000 (currently funded)	0	0	0	Essential	1	1a
Spanish mackerel stock assessment	Need for ongoing assessment of key commercial species.	\$57,000 (currently funded)	\$59,000 (currently funded)	\$61,000 (currently funded)	0	0	0	Essential	2	1a
Harvest strategy development.	Strategy with harvest control rules and agreed reference points required to support management.  It is a condition of the FF WTO that by <b>30 June 2023</b> a HS must be developed for the fishery.	0	Not currently funded, requires an indicative cost estimate.	0	0	0	0	Essential	3	1a
Ecological Risk Assessment (ERA)	It is a condition of the FF WTO that by <b>30 June 2023</b> an ERA must be undertaken for the TS Finfish Fishery	0	\$20,000 (not funded)	0	0	0	0	Essential	3	1a
Alternative index of stock abundance	Develop an alternative to CPUE data to provide stock status/abundance	\$93,000 (currently funded)	0	0	0	0	0	Essential	4	1a
Coral trout stock assessment	Need for ongoing assessment of key commercial species.	0	\$30,000 (not funded)	\$30,000 (not funded)	0	0	0	Desirable	5	1a
Management Strategy Evaluation (MSE) of draft harvest strategy	Requirements of Cwth HS Policy and Guidelines to undertake MSE prior to implementation.	MSE work requires funding and HS development to be completed first						Desirable	5	1a
Stock structure of Spanish mackerel.	Define the spatial scale of management and connectivity of Torres Strait populations of SM with adjacent areas (Gulf, Qld, Coral Sea, PNG) potentially through collection of samples for genetic relatedness.	Not funded, genetic samples banked for future studies.  Not designed or costed. Torres Strait otoliths collected under sampling project will be stored to facilitate future genetic sampling.						Desirable	5	1a, 1b
Estimating catches outside the commercial fishery.	Acquiring data of catch taken from non-commercial fishers.	Outcomes of scoping project (funded in 2019/20) will inform likely future work if a program is to be implemented.						Desirable	5	1a, 3b

Shark depredation	Study to investigate increased shark interaction with fishery operations and depredation impacts on Finfish Fishery catch rates (how to capture and track over time or investigate potential mitigation options).	Not designed or costed	Desirable	5	
Otolith morphology	Developing an index of mackerel ages based on the shapes and sizes of otoliths recorded	Not designed or costed. Torres Strait otoliths collected under sampling project will be stored and could be used for this project.	Desirable	5	
Optimum ratio of $B_{MSY}$ (maximum sustainable yield) to $B_{MEY}$ (maximum economic yield)	While stakeholders may select a higher future target reference point (e.g. $B_{60}$ ) to support good catch rates and stock sharing, noted this will mean a trade-off for a lower RBC as less harvest will occur to keep more fish in the water and less boats will be active in the fishery. A project could attempt to determine the optimum ratio between $B_{MSY}$ and $B_{MEY}$ and the appropriate proxy economic target for the fishery.	Not designed or costed	Desirable	5	1a

## Committed Torres Strait Scientific Advisory Committee (TSSAC) funds for multi-year projects 2021-22 to 2024-25

Research priority theme	Project Title	Cost per year			
		2021/22	2022/23	2023/24	2024/25
1a - Fishery stocks, biology and marine environment.	Fishery independent survey, stock assessment, Harvest Strategy and Recommended Biological Catch calculation for the Torres Strait Tropical Rock Lobster Fishery	\$291,000	yet to be scoped (estimate \$290,000)	yet to be scoped (estimate \$290,000)	yet to be scoped (estimate \$290,000)
1a - Fishery stocks, biology and marine environment.	Finfish Fishery: Coral Trout and Spanish Mackerel Biological Sampling 2021-2024	\$122,000	\$128,000	\$135,000	
1a - Fishery stocks, biology and marine environment.	Finfish Fishery Spanish mackerel stock assessment	\$57,000	\$59,000	\$61,000	
1a - Fishery stocks, biology and marine environment.	Designing a close-kin mark-recapture study for Torres Strait Spanish mackerel	\$93,000			
<b>Total cost for all projects (including yet to be scoped TRL)</b>		<b>\$563,000</b>	<b>\$477,000</b>	<b>\$486,000</b>	<b>\$290,000</b>
Available research budget (if TSRA funding continues at \$150,000 and AFMA at \$420,000 per year) <sup>1</sup>		N/A – funding round complete	\$570,000	\$570,000	\$570,000
Remaining funding available if TRL project continues funding in future		N/A	~\$93,000	~\$84,000	~\$280,000

<sup>1</sup> The TRL stock assessment and survey is ongoing work generally funded each year. This work usually costs around \$290,000 a year. Although this project proposal will be assessed against all others, its considered a high priority for Torres Strait research and is likely to be funded. This can be taken into account when looking at the likely funding available for 2022-23 and beyond.

## Torres Strait fisheries strategic research themes, strategies and research activities

Theme 1: Protecting the Torres Strait marine environment for the benefit of Traditional Inhabitants	
<b>Aim:</b> Effective management of fishery stocks based on understanding species and their biology and ecological dependencies so it can support Traditional Inhabitant social and economic needs.	
Strategy 1a - Fishery stocks, biology and marine environment	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> <li>Stock assessment and fishery harvest strategies for key commercial species.</li> <li>Ecological risk assessments and management strategies for fisheries.</li> <li>Minimising marine debris in the Torres Strait.</li> <li>Addressing the effects of climate change on Torres Strait fisheries through adaptation pathways for management, the fishing industry and communities.</li> <li>Incorporating Traditional Ecological Knowledge into fisheries management.</li> <li>Methods for estimating traditional and recreational catch to improve fisheries sustainability.</li> </ol>
Strategy 1b – Catch sharing with Papua New Guinea	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> <li>Status of commercial stocks and catches by all sectors within PNG jurisdiction of the TSPZ.</li> <li>Good cross-jurisdictional fisheries management through better monitoring and use of technology.</li> </ol>
Theme 2: Social and Economic Benefits	
<b>Aim:</b> Increase social and economic benefits to Traditional Inhabitants from Torres Strait Fisheries.	
Strategy 2a - Promoting social benefits and economic development in the Torres Strait, including employment opportunities for Traditional Inhabitants	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> <li>Models for managing/administering Traditional Inhabitant quota</li> <li>Understanding what influences participation in commercial fishing by Traditional Inhabitants.</li> <li>Understanding the role and contribution of women in fisheries.</li> <li>Capacity building for the governance of industry representative bodies</li> <li>Methods for valuing social outcomes for participation in Torres Strait fisheries.</li> <li>Identifying opportunities and take-up strategies to increase economic benefits from Torres Strait fisheries.</li> </ol>
Theme 3: Technology and Innovation	
<b>Aim:</b> To have policies and technology that promote economic, environmental and social benefits from the fishing sector.	
Strategy 3a – Develop technology to support the management of Torres Strait fisheries.	<p>Possible research activities under this theme may include:</p> <ol style="list-style-type: none"> <li>Electronic reporting and monitoring in the Torres Strait, including for small craft.</li> <li>Technologies or systems that support more efficient and effective fisheries management and fishing industry operations.</li> </ol>

<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting 25 November 2021</b>
<b>OTHER BUSINESS</b>	<b>Agenda Item No. 7 FOR NOTING</b>

**RECOMMENDATION**

1. That the Working Group **NOMINATE** any additional items of business for the meeting.



<b>PZJA Torres Strait Finfish Fishery Working Group</b>	<b>Meeting</b> <b>25 November 2021</b>
<b>Date and venue for next meeting</b>	<b>Agenda Item 8</b> <b>For discussion and advice</b>

## RECOMMENDATIONS

1. That the Working Group **DISCUSS** and **PROVIDE ADVICE** on the proposed meeting schedule for 2021.

## KEY ISSUES

2. A proposed meeting schedule, together with key items for discussions is provided in **Table 1**. Amendments to the meeting schedule may be required subject to the approval of new research projects, in particular if further work to develop the harvest strategy is approved.

**Table 1.** Proposed Torres Strait Finfish Fishery FFWG and FFRAG meetings and key items for 2022.

<b>Date</b>	<b>Group</b>	<b>Key agenda items</b>
January 2022 (TBC)	PZJA	Decision on 2022-23 season TACs.
1 July 2022 - Torres Strait Finfish Fishery 2021-22 Season Opens		
September 2022	FFRAG 11 Data Meeting	Review new data available from 2021-22 season to support 2022 stock assessments.  Review and advise on research priorities
October 2022	FFRAG 12	Stock assessment update for Spanish mackerel.  RBC advice for 2022-23
November 2022	FFWG 2022	TAC advice for 2023-23 season.