

**MEETING OF THE TORRES STRAIT
FINFISH FISHERY WORKING GROUP**

5-6 DECEMBER 2023

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

Tuesday 5th December – Wednesday 6th December 2022

8:30am – 5:00pm (6th 8:30am - 12:30pm)

Novotel Oasis Hotel - Cairns

DRAFT AGENDA

1 PRELIMINARIES

1.1 Acknowledgement of Traditional Owners, Welcome and Apologies

The Chair will welcome members and observers to the meeting.

1.2 Adoption of Agenda

The FFWG will be invited to adopt the draft agenda.

1.3 Declaration of Interests

Members and observers will be invited to declare any real or potential conflicts of interest and determine whether a member may or may not be present during discussion of or decisions made on the matter which is the subject of the conflict.

1.4 Action Items from Previous Meetings

The FFWG will be invited to note the status of action items arising from previous meetings.

1.5 Out-of-Session Correspondence

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

2 UPDATES FROM MEMBERS

2.1 Industry & Scientific Members

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

2.2 Government Agencies

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

This item will include an update provided by TSRA regarding a proposed crown of thorns starfish (COTS) control program.

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.

2.5 Climate and Ecosystem Update

The FFRAG is invited to note an update on climate and ecosystem changes and discuss their impacts on Torres Strait finfish fisheries.

3 TOTAL ALLOWABLE CATCH ADVICE

3.1 Spanish Mackerel Total Allowable Catch Advice for the 2024-25 Season

Having considered advice from FFRAG 15 (29-30 Nov 2023) on a Recommended Biological Catch and best estimates of non-commercial catches, the FFWG will discuss and provide advice on a Total Allowable Catch for the 2024-25 fishing season for Spanish mackerel.

3.2 Coral Trout Total Allowable Catch Advice for the 2024-25 Season

Having considered advice from FFRAG 15 on a Recommended Biological Catch and best estimates of non-commercial catches, FFWG will discuss and provide advice on a Total Allowable Catch for the 2024-25 fishing season for coral trout.

4 MANAGEMENT

4.1 Update to the TSF01 Daily Fishing Logbook

The FFRAG will be invited to review the draft amendments to the TSF01 logbook. Subject to endorsement from the FFRAG, these amendments will be finalised before the commencement of the 2024-25 fishing season.

4.2 Torres Strait Finfish Fishery Management Priorities

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

5 RESEARCH

5.1 Research Priorities

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

6 OTHER BUSINESS

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

7 DATE AND VENUE FOR NEXT MEETING

The FFWG will note arrangements for the next FFRAG meetings and confirm arrangements for FFWG in 2024. The FFWG will also be advised of and PZJA meeting to decide next season's TACs.

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

Torres Strait Finfish Working Group	5-6 December 2023
PRELIMINARIES Welcome and Apologies	Agenda Item 1.1 For Noting

RECOMMENDATIONS

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

2. As of 1 December 2023, no formal apologies have been received.

Torres Strait Finfish Fishery Working Group	5-6 December 2023
PRELIMINARIES Adoption of Agenda	Agenda Item 1.2 For Decision

RECOMMENDATION

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

BACKGROUND

2. A first draft annotated agenda was circulated to members and observers on 1 December 2023 noting the conclusion of FFRAAG 15 (29-30 November 2023).

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
PRELIMINARIES Declarations of interests	Agenda Item No. 1.3 FOR ACTION

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 7-8 December 2022.

Name	Position	Declaration of interest
Nicholas McClean	Independent Chair	<ul style="list-style-type: none"> • Fisheries social science researcher working at University of Technology Sydney • Currently undertaking FRDC funded research to develop an Indigenous engagement strategy for Commonwealth fisheries • As a fisheries consultant, may apply for funds for Torres Strait fishery research projects in the future where consistent with his role as Chair.
Rocky Stephen	Traditional Inhabitant Industry Member	<ul style="list-style-type: none"> • Traditional Owner (Kemer Kemer Meriam), Ugar. • Councillor for Ugar. • Chairperson of Kos and Abob Fisheries Ugar. • Works with brother in a commercial fishing business on Ugar (Brother Bear Fisheries). • Eastern cluster representative on the PZJA Finfish RAG & Working Group. • Traditional inhabitant member - Torres Strait Prawn Management Advisory Committee. • TSRA Board member for Ugar • TSRA Finfish Quota Management Committee. • TSRA Board Fisheries Advisory Committee member. • Member of Zenadth Kes Fisheries company.
Gavin Mosby	Traditional Inhabitant Industry member	<ul style="list-style-type: none"> • Traditional Owner (Kulkalgal), Masigal. • TIB licence holder • Member of the TS Prawn MAC • ZK fisheries board member • Member of local fishing association
Harry Nona	Traditional inhabitant Industry member	<ul style="list-style-type: none"> • Traditional Owner (Kaureg). • Fulltime fishermen • TIB licence holder

Terrence Whap	Traditional inhabitant Industry member	<ul style="list-style-type: none"> • Traditional Owner (Maluialgal), Mabuiag. • Member of the PZJA TRL working group • President of the local fisherman's association in Maluialgal • PBC Director • TSRA Board Member and Ranger
Michael O'Neill	Scientific Member	<ul style="list-style-type: none"> • Principal fisheries scientist working with the Queensland Government (Department of Agriculture and Fisheries, Fisheries Queensland) in the stock assessment program. • Principal scientist for TSSAC three-year project for Spanish mackerel stock assessment work. • Coinvestigator on the TSSAC finfish age-length monitoring project. • Member of PZJA Finfish RAG and Working Group.
David Brewer	Scientific Member	<ul style="list-style-type: none"> • Director – Upwelling P/L (David Brewer Consulting). • Chair - Torres Strait Finfish RAG • Scientific member – Torres Strait Finfish Working Group • Scientific member – Northern Prawn Fishery RAG • Current consultancies with Quandamooka Yoolooburrabee Aboriginal Corporation, Newcrest Mining Ltd. • Co-investigator on the current Torres Strait 'Non- commercial catch' project. • As a fisheries consultant, may apply for funds for Torres Strait fishery research projects in the future where consistent with his role as Chair.
Chad Lunow	QDAF member	<ul style="list-style-type: none"> • TBC
Chris Boon	Executive Officer (AFMA)	<ul style="list-style-type: none"> • Employed by AFMA, no pecuniary interests or otherwise.
Rosemary Millward	AFMA Member	<ul style="list-style-type: none"> • TBC
Damian Miley	TSRA Member	<ul style="list-style-type: none"> • TBC

Permanent Observers		
Trevor Hutton	Scientific Permanent Observer (CSIRO)	<ul style="list-style-type: none"> • Employed by CSIRO. • Principle investigator for past FF harvest strategy project. • Could have interests relating to future research projects within the Finfish Fishery.
Casual Observers		
Brooke D'Alberto	ABARES	<ul style="list-style-type: none"> • Employed by ABARES, no pecuniary interests or otherwise.
Quinten Hirakawa	TSRA Senior Project Officer	<ul style="list-style-type: none"> • TIB licence holder with Spanish mackerel, Reef line, Tropical Rock Lobster and Beche-de-mer endorsements • Has a background as a commercial Tropical Rock Lobster fisher. • 25 years working with Queensland Boating and Fisheries Patrol (QDAF). • Recent employment with TSRA Ranger Program and now with the TSRA Fisheries Team. • Co-investigator on behalf of TSRA for the current Spanish mackerel and coral trout biological sampling project.
Yen Loban	TSRA Fisheries Portfolio member	<ul style="list-style-type: none"> • TIB licence holder. • Board director of the Zenadth Kes Fisheries Company. • Chair of the TSRA Board Fisheries Advisory Committee.

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
PRELIMINARIES Action items and record from previous meetings	Agenda Item No. 1.4 FOR NOTING

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 7-8 December 2022.

KEY ISSUES

Action arising

2. There are a number of ongoing action items. **Table 1** below outlines progress against these items.

Meeting record

3. The draft meeting record from FFWG 7-8 December 2022 was circulated for member comments on 06 February 2023.
4. Minor comments were received, and the record was amended accordingly on 20 February 2023.
5. The meeting record 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 December 2022).

Meeting	Action	Status update
Dec 2022, Action 1	<p>TSRA member to liaise with Stanley Lui of the TSRA Ranger program to organise a presentation on invasive species monitoring for a future meeting.</p> <p>This item replaced a proposed action from Nov 2018 meeting 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.</p>	Update to be provided.
Dec 2022, Action 2	AFMA to contact the RAG out-of-session to seek RAG advice on how to proceed with a review of the 2019 stock assessment.	Actioned: Technical workshop was added to FFRAG 15. Update to be provided at the current meeting.
Dec 2022, Action 3	TIB members to liaise with AFMA to identify and invite essential participants to harvest strategy workshop proposed for March 2023 (to support MSE project in 2023-24).	Deferred: Due to availabilities of members, the March 2023 workshop was cancelled. Deferred for at least 12 months, subject to endorsement of Spanish mackerel MSE project in future years. MSE not endorsed for 2024-25. RAG/WG to monitor the progress of this priority.
Dec 2022, Action 4	The AFMA member agreed to distribute the final report for phase 1 of the non-commercial catch project to the WG out of session.	Actioned: David Brewer distributed the report after the last meeting.
Dec 2022, Action 5	The AMFA member agreed to provide information on the international compliance risk assessment process, with priorities compiled and presented to the WG out-of-session	Update to be provided.
Dec 2022, Action 6	AFMA Senior Manager of National Compliance to attend FAC meeting in February 2023 to progress the process of identifying, prioritising and addressing risks as part of the 2023-25 compliance plan. TSRA agreed to support the review of this risk assessment process.	Update to be provided.
Dec 2022, Action 7	The AFMA member agreed to investigate the removal of drop-lining as a permitted method, noting that such a change would require an amendment to the Torres Strait Fisheries Management Instrument No. 14. The WG noted that further advice would be sought before such an amendment could be progressed to the PZJA for decision.	Update to be provided.
Dec 2022, Action 8	AFMA to investigate the legal barriers to such an activity (retention of bycatch from prawn trawling	Update to be provided.

	vessels to be sold for the use of bait), noting that the TS Prawn Fishery regulates the take of bait species. To report back to the WG at its next meeting.	
Dec 2022, Action 9	QDAF to distribute information of bycatch bait species research to the WG OOS.	Actioned: Jeff Ikin distributed the information after the last meeting.
Dec 2022, Action 10	Mr Brewer to share bycatch bait fishery viability study with the WG OOS.	Actioned: David Brewer distributed the report after the last meeting.

Torres Strait Finfish Fishery Working Group	5 – 6 December 2023
PRELIMINARIES Out of session correspondence	Agenda Item 1.5 For Noting

RECOMMENDATIONS

1. That the WG **NOTE** the correspondence sent out-of-session since 10 November 2022.

BACKGROUND

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

Date	Item
23/11/2023	FFWG Meeting - 7 - 8 December 2022 - Meeting Papers
30/11/2023	RE: FFWG Meeting - 7 - 8 December 2022 - Teams Link
18/01/2023	For action: Finfish Harvest Strategy Workshop - Proposed dates. Please indicate your availability
06/02/2023	For member comment: Meeting Record - FFWG 7-8 December 2023
06/02/2023	RE: For action: Finfish Harvest Strategy Workshop - Proposed dates. Please indicate your availability
09/03/2023	Finfish Harvest Strategy Workshop
27/06/2023	FW: Public comment notice for the Torres Strait Finfish Fishery (WTO)
31/08/2023	Upcoming Finfish Fishery Working Group meeting - Cairns
31/08/2023	RE: Upcoming Finfish Fishery Working Group meeting - Cairns
21/09/2023	5-6 December - Finfish Fishery Working Group meeting - Cairns
28/09/2023	RE: 5-6 December - Finfish Fishery Working Group meeting - Cairns

PZJA Torres Strait Finfish Working Group	5 – 6 December 2023
WORKING GROUP UPDATES Industry and scientific member updates	Agenda Item No. 2.1 FOR DISCUSSION

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 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.

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
WORKING GROUP UPDATES Government member updates	Agenda Item No. 2.2 FOR NOTING

RECOMMENDATIONS

1. That the Working Group (WG):
 - a) **NOTE** the update provided by the Australian Fisheries Management Authority (AFMA) below;
 - b) **NOTE** the Wildlife Trade Operation (WTO) conditions for the Finfish Fishery as summarised in **Table 3/Table 4**;
 - c) **NOTE** the verbal update provided by the Queensland Department of Agriculture and Fisheries (QDAF); and
 - d) **NOTE** the verbal update provided by the Torres Strait Regional Authority (TSRA).

AFMA UPDATE

TAC, Leasing, Licencing, & Catch Data

2. At its 28 February 2023 meeting the Protected Zone Joint Authority (PZJA) decided that the Total Allowable Catches (TAC) for the Torres Strait Finfish Fishery 2023-24 season will be 75 tonnes for Spanish mackerel and 135 tonnes for coral trout. The PZJA decision was in line with advice from the Torres Strait Finfish Resource Assessment Group and Torres Strait Finfish Working Group.
3. In line with advice from the TSRA Finfish Quota Management Committee (FQMC) and the TSRA Board, the following catch amounts were allocated to the Sunset sector (**Table 1**). These allocations were applied to sunset licence conditions by AFMA as the licencing Delegate.

Table 1: 2023-24 fishing season TACs and catch allowance by sector.

Species	Agreed TAC	Sunset Sector Catch Share	TIB Sector Catch Share
Spanish Mackerel	75	62	13
Coral Trout	135	12.5	122.5
Other reef line species	n/a	1.7	No Limit

4. As of 16 October 2023, the following number of licences were registered:

Table 2: Number of licenses issued for the 2021/22, 2022/23 and 2023/24 Torres Strait Finfish Fishery seasons.

Fishing season	Number of TIB licences			Receiver licences	Number of Sunset licences
	SM	Reef line	Dual endorsed		SM/Reef line combined
2021/22	56	22	166	83	3
2022/23	34	20	107	66	3
2023/24	31	33	41	69	3

5. A Catch Watch Report for the 2022/23 season can be reviewed at **Attachment 2.2a**
6. A Catch Watch Report for the 2023/24 season can be reviewed at **Attachment 2.2b**

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

7. 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.
8. In June 2023 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 by the Delegate for the Minister of the Environment and Water, as an approved wildlife trade operation under Part 13A of the EPBC Act until 1 November 2026 (**Attachment 2.2c**). More information can be accessed at the following link:
<https://www.dcceew.gov.au/environment/marine/fisheries/commonwealth/torres-strait-finish>
9. Live coral trout were exported for the first time in 2017¹. Maintaining a WTO approval for the fishery allows for the continued opportunity for live and frozen product to be exported, as well providing a sound basis for responsible fisheries management.
10. This approval was based on the 'Assessment of the Torres Strait Finfish Fishery October 2023', which was undertaken by the Department of Climate Change, Energy, the Environment and Water. This assessment contained 7 approval conditions under Part 13 & 13a of the EPBC Act to ensure ecological risks continue to be managed.
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, **Tables 3 & 4** provides a summary of each condition.

¹ Fishery Status Reports 2021, Chapter 16 – ABARES

Table 3. Current Wildlife Trade Operation (WTO) conditions for the Finfish fishery (Part 13A).

Part 13A Conditions on the approved wildlife trade operation declaration for the Torres Strait Finfish Fishery – November 2023

Condition 1:

Operation of the Torres Strait Finfish Fishery must be carried out in accordance with Torres Strait Finfish Fishery Management Plan 2013 in force under the Torres Strait Fisheries Act 1984 and the Torres Strait Fisheries Regulations 1985.

Condition 2:

The Australian Fisheries Management Authority must inform the Department of Climate Change, Energy, the Environment and Water 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* (Cth) decisions are made.

Condition 3:

The Australian Fisheries Management Authority must inform the Department of Climate Change, Energy, the Environment and Water of any intended changes to fisheries legislation that may affect the legislative instruments relevant to this approval.

Condition 4:

The Australian Fisheries Management Authority must produce and present reports on the Torres Strait Finfish Fishery to the Department of Climate Change, Energy, the Environment and Water by September annually, as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*.

Condition 5:

- A) By 30 June 2024, the Australian Fisheries Management Authority must implement mandatory bycatch reporting for the sunset sector of the Torres Strait Finfish Fishery. This must include the mandatory reporting of all non-retained species, undersized target or byproduct species, and any shark depredation incidents.
- B) By 30 June 2026, the Australian Fisheries Management Authority must review reporting measures in the Torres Strait Finfish Fishery to ensure the accuracy of bycatch, discard and protected species interaction data. This review must incorporate evidence taken from independent data validation methods.

A final report detailing the review's findings and any management responses must be provided to the Department of Climate Change, Energy, the Environment and Water by this date.

Condition 6:

By 30 June 2026, the Australian Fisheries Management Authority must implement species-specific coral trout reporting in the Torres Strait Finfish Fishery and ensure this data is considered in any future stock assessments and the determination of total allowable catches in the fishery.

Table 4. Current Wildlife Trade Operation (WTO) conditions for the Finfish fishery (Part 13).

Part 13 Conditions on the approved wildlife trade operation declaration for the Torres Strait Finfish Fishery – November 2023

Condition A:

By 30 June 2026, the Australian Fisheries Management Authority must review reporting measures in the Torres Strait Finfish Fishery to ensure the accuracy of bycatch, discard and protected species interaction data. This review must incorporate evidence taken from independent data validation methods.

A final report detailing the review's findings and any management responses must be provided to the Department of Climate Change, Energy, the Environment and Water by this date.

ABARES Fishery Status Reports

12. 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 2023 and summarises the performance of the finfish fishery in 2021 and 2022, against the requirements of fisheries legislation and policy.
13. In the 2023 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 4. Extract from Chapter 15 of the 2023 Torres Strait Finfish Fishery ABARES Fishery Status Report.

Biological status					
Stock	2021		2022		Comments
	Fishing mortality	Biomass	Fishing mortality	Biomass	
Coral trout (<i>Plectropomus</i> spp.)					Recent catches are below levels that are likely to drive biomass below B_{LIM} .
Spanish mackerel (<i>Scomberomorus commerson</i>)					Current catch is below recommended biological catch. Most recent estimate of biomass is above $0.2B_o$.
Economic status					

The key objectives of the fishery are based on socio-economic outcomes. Catch has been relatively stable in the last decade and leasing revenue for the Traditional Inhabitant Boat Sector has increased recently.

Notes: $0.2B_o$ 20% of unfished biomass. B_{LIM} Biomass limit reference point.

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

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

TSRA UPDATE

15. The RAG will be invited to note a verbal update from TSRA.
16. This item will include an update provided by TSRA regarding a proposed crown of thorns starfish (COTS) control program.

QDAF UPDATE

17. The RAG will be invited to note a verbal update from QDAF.

AFMA CATCHWATCH

A REPORT FROM THE AUSTRALIAN FISHERIES MANAGEMENT AUTHORITY

Notice Issued on 17 November 2023

Torres Strait Finfish Fishery - Data Period 1 July 2022 to 30 June 2023 (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		18,000	3626.1	14,373.9	20.14%
Coral Trout		100,000	4283.3	95,716.7	4.28 %
Basket species	Barramundi cod	No catch limit	566.4	n/a	n/a
	Cobia		-		
	Emperor		-		
	Spangled Emperor		-		
	Red emperor		-		
	Rockcod		-		
	School mackerel		82.5		
	Shark mackerel		-		
	Trevallies and scads		-		
	Tripletail maori wrasse		10		
	Tropical snappers (mixed)		-		
	Basket species TOTAL		658.9		
Sunset Licence (Sunset) sector					
Spanish mackerel		57,000	49,016.3	7,983.7	85.99%
Coral Trout		35,000	23,485.7	11,515	67.1%
Basket species	Barramundi cod	3,500	-	1379.8	60.5%
	Cobia		16		
	Emperor		508		
	Mixed fish		-		
	Red emperor		106		
	Rockcod		178.5		
	School mackerel		-		
	Shark mackerel		389		
	Trevallies and scads		787.5		
	Tripletail maori wrasse		-		
	Tropical snappers (mixed)		135.2		
	Basket species TOTAL		2,120.2		

Notes:

[^] 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

Conversion ratios used to convert back to whole weight are:

	Spanish mackerel	Coral trout	Other reef-line species
Filleted	1.608 : 1	2 : 1	2.5 : 1
Gilled & Gutted	1.048 : 1	1.1 : 1	1.1 : 1

Season date is financial year 1 July to 30 June

AFMA CATCHWATCH

A REPORT FROM THE AUSTRALIAN FISHERIES MANAGEMENT AUTHORITY

Notice Issued on 17 November 2023

Torres Strait Finfish Fishery - Data Period 1 July 2023 to 17 November 2023

Species Name		Agreed Total Allowable Catch (TAC) (kg)	Reported catch^ (kg)	Available TAC (kg)	% TAC Caught
Traditional Inhabitant Boat Licence (TIB) sector					
Spanish mackerel		13,000	3185.6	9814.4	24.5%
Coral Trout		122,500	14.2	122,485.8	0.02 %
Basket species	Barramundi cod	No catch limit		n/a	n/a
	Cobia		-		
	Emperor		-		
	Spangled Emperor		-		
	Red emperor		-		
	Rockcod		-		
	School mackerel				
	Shark mackerel		-		
	Trevallies and scads		-		
	Tripletail maori wrasse				
	Tropical snappers (mixed)		-		
	Basket species TOTAL				
Sunset Licence (Sunset) sector					
Spanish mackerel		62,000	33,067.7	28,932.3	53.3%
Coral Trout		12,500			
Basket species	Barramundi cod	1,700	11.25	1688.75	0.66%
	Cobia				
	Emperor				
	Mixed fish				
	Red emperor				
	Rockcod				
	School mackerel				
	Shark mackerel				
	Trevallies and scads				
	Tripletail maori wrasse				
	Tropical snappers (mixed)				
	Basket species TOTAL		11.25		

Notes:

[^] 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

Conversion ratios used to convert back to whole weight are:

	Spanish mackerel	Coral trout	Other reef-line species
Filleted	1.608 : 1	2 : 1	2.5 : 1
Gilled & Gutted	1.048 : 1	1.1 : 1	1.1 : 1

Season date is financial year 1 July to 30 June



Australian Government

Department of Climate Change, Energy,
the Environment and Water

OFFICIAL

Attachment 2.2c 21

Mr Wez Norris
Chief Executive Officer
Australian Fisheries Management Authority
Box 7051
Canberra BC
Canberra ACT 2610

Dear Mr Norris

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

In June 2023, the Australian Fisheries Management Authority (AFMA) applied for assessment and approval for the fishery under the Part 13 (protected species) and Part 13A (export) provisions of the EPBC Act.

The application has now been assessed and I have declared the fishery an approved Wildlife Trade Operation (WTO) under Part 13A of the EPBC Act until 1 November 2026. This approval is contingent on six conditions being met by AFMA during the period of the WTO regarding the notification of any management and legislative changes, regular annual reporting, changes to the logbook to require bycatch reporting, a review of interactions with protected species through some form of independent data validation and species level reporting of coral trout caught in the fishery (**Attachment A**).

I have also accredited the fishery's management regime under Part 13 of the EPBC Act, contingent on one condition being met by AFMA regarding independent data validation of protected species interaction data (**Attachment B**).

Please note a 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 it reviewed. I have enclosed information on these processes at **Attachment C**.

I look forward to assessing AFMA's progress against the conditions in the annual reports for this fishery.

Yours sincerely

Belinda Jago
Branch Head
Ocean and Wildlife Branch
Delegate of the Minister for the Environment and Water
27 October 2023

DCCEEW.gov.au

John Gorton Building - King Edward Terrace, Parkes ACT 2600 Australia
GPO Box 3090 Canberra ACT 2601 ABN: 63 573 932 849

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Attachment A

Part 13A Conditions on the approved wildlife trade operation declaration for the Torres Strait Finfish Fishery – November 2023**Condition 1**

Operation of the Torres Strait Finfish Fishery must be carried out in accordance with Torres Strait Finfish Fishery Management Plan 2013 in force under the *Torres Strait Fisheries Act 1984* and the Torres Strait Fisheries Regulations 1985.

Condition 2

The Australian Fisheries Management Authority must inform the Department of Climate Change, Energy, the Environment and Water 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* (Cth) decisions are made.

Condition 3

The Australian Fisheries Management Authority must inform the Department of Climate Change, Energy, the Environment and Water of any intended changes to fisheries legislation that may affect the legislative instruments relevant to this approval.

Condition 4

The Australian Fisheries Management Authority must produce and present reports on the Torres Strait Finfish Fishery to the Department of Climate Change, Energy, the Environment and Water by September annually, as per Appendix B of the *Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition*.

Condition 5

- A) By 30 June 2024, the Australian Fisheries Management Authority must implement mandatory bycatch reporting for the sunset sector of the Torres Strait Finfish Fishery. This must include the mandatory reporting of all non-retained species, undersized target or byproduct species, and any shark depredation incidents.
- B) By 30 June 2026, the Australian Fisheries Management Authority must review reporting measures in the Torres Strait Finfish Fishery to ensure the accuracy of bycatch, discard and protected species interaction data. This review must incorporate evidence taken from independent data validation methods.

A final report detailing the review's findings and any management responses must be provided to the Department of Climate Change, Energy, the Environment and Water by this date.

Condition 6

By 30 June 2026, the Australian Fisheries Management Authority must implement species-specific coral trout reporting in the Torres Strait Finfish Fishery and ensure this data is considered in any future stock assessments and the determination of total allowable catches in the fishery.

Attachment B**Part 13 Conditions on the approved wildlife trade operation declaration for the Torres Strait Finfish Fishery – November 2023****Condition A**

By 30 June 2026, the Australian Fisheries Management Authority must review reporting measures in the Torres Strait Finfish Fishery to ensure the accuracy of bycatch, discard and protected species interaction data. This review must incorporate evidence taken from independent data validation methods.

A final report detailing the review's findings and any management responses must be provided to the Department of Climate Change, Energy, the Environment and Water by this date.

Attachment C

Notification of Reviewable Decisions and Rights of Review¹

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:

1. 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.
2. 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 being lodged. The time frame for review of certain decisions can be expedited in some circumstances.

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

The cost of lodging an application for review is \$962 (as of 16 December 2021) (GST inclusive). You may be eligible to pay a reduced fee of \$100.00 if

1. you are receiving legal aid for your application;
2. 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;
3. you are in prison or lawfully detained in a public institution;
4. you are under 18 years of age; or
5. 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 \$962, you get back \$862. 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
Sustainable Fisheries Section
Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601
Email: sustainablefisheries@dcceew.gov.au

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

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

Freedom of Information Request

You may make an application under the *Freedom of Information Act 1982* (FOI Act) to access documents. Further information can be found at

<https://www.dcceew.gov.au/about/reporting/freedom-of-information>.

Please contact the Freedom of Information Contact Officer at foi@dcceew.gov.au for more information.

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
UPDATES FROM MEMBERS Papua New Guinea National Fisheries Authority	Agenda Item 2.3 For NOTING

RECOMMENDATIONS

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

BACKGROUND

2. A verbal report will be provided under this item if a PNG NFA representative is available.

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
UPDATES FROM MEMBERS Native Title	Agenda Item 2.4 For NOTING

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 RAG keep informed on any relevant Native Title issues arising.

Torres Strait Finfish Working Group	5-6 December 2023
UPDATES FROM MEMBERS	Agenda Item 2.5
Climate and Ecosystem Update	For Noting

RECOMMENDATIONS

1. That the Finfish Fishery Working Group (WG):
 - a. **NOTE** that at its meeting on 19 July 2023, the Protected Zone Joint Authority (PZJA) agreed that a standing agenda item “Climate and ecosystem update” be introduced to all RAG and Working Group agendas where total allowable catch (TAC) and/or effort limits are to be considered;
 - b. **NOTE** the PZJA also directed PZJA agencies, RAGs and Working Groups to further develop mechanisms to collate and incorporate Traditional Ecological Knowledge into fisheries monitoring and assessment;
 - c. **NOTE** work being undertaken to incorporate climate change information into fisheries management advice and decisions in other Commonwealth managed fisheries, with a view to implementing a similar process for Torres Strait fisheries;
 - d. **DISCUSS** the draft Climate and Ecosystem Status report for the Torres Strait Finfish Fishery (**Attachment 2.5a**);
 - e. **NOTE** an overview of recent work undertaken in Torres Strait fisheries related to climate change.

KEY ISSUES

Building climate change information into fisheries management processes

2. In other Commonwealth managed fisheries (fisheries managed elsewhere in Australia by AFMA), a program of work is being undertaken to ensure that climate impacts are more strategically incorporated into the management of these fisheries to ensure that AFMA continues to meet legislative objectives relating to ecological sustainability. This work is a follow up action from the *Adaption of Commonwealth fisheries management framework to climate change project (FRDC project 2016-059)* (the climate adaptation project) that looked at the readiness of Commonwealth fisheries management arrangements to the potential impacts of climate change and provided a range of resources to assist with adaptation.
3. As a foundational element of the Climate Adaptation Program, the AFMA Commission endorsed a suite of actions to build explicit and structured consideration of climate change impacts into decision-making processes. These actions include adding a standing agenda item on climate change to advisory body meetings and preparing Climate and Ecosystem Status reports for key fisheries. Recognising the priority that the Torres Strait community places upon management of climate change impacts and the vulnerability of Torres Strait fisheries to climate change, AFMA is rolling out similar for Torres Strait fisheries through the PZJA’s advisory committees.









Draft Climate and Ecosystem Status Report

4. To inform management decision-making processes, including advisory body discussions, annual Climate and Ecosystem Status reports are being developed for key Commonwealth fisheries. These reports are intended to provide a short, accessible update on key indicators of climatic or ecosystem status and trends relevant to the fishery, utilising readily available information.

5. Noting the interest in climate impacts on Torres Strait fisheries, and the body of work to better understand the effect of climate change on these fisheries, AFMA has prepared a draft Climate and Ecosystem Status report for consideration by the WG (see **Attachment 2.5a**). This report utilises currently available information, noting that limited climate and ecosystem/oceanographic observations are available in the Torres Strait.
6. The intent is that this report will be refined over time based on FFRAAG, Finfish Working Group (FFWG) and expert feedback. Feedback in particular is encouraged on the following:
 - a. What key indicators would the WG like included in the report?
 - b. Is it useful and appropriate to capture fishers observations in the report?
 - c. What would be the preferred timing for production of this report?
7. Consideration of climate and ecosystem impacts in the context of fisheries management is complementary to a range of other work being undertaken by researchers to understand and model climate impacts on Torres Strait and related fisheries in northern Australia (see further information below).

Climate related changes expected in Northern Australia

8. FRDC project 2016-059 produced a series of regional projections of climate impacts for Australian fisheries. While this did not include projections specific to the Torres Strait, the regional projection for northern Australia predicted climate-related changes as summarised in the table below.

	Observed change (vs 1950)	Future change (vs today)
OCEAN TEMPERATURE 	0.6 - 0.8°C increase	0.6 - 1.0°C increase
MARINE HEATWAVE 	15 - 20 day increase	>200 day increase
STORMS 	Conflicting information	Stronger & more variable
DROUGHTS 	Shorter, more intense	Longer, twice as frequent
RAINFALL 	Roughly steady	Roughly steady
SEALEVEL RISE 	20cm increase	20 - 40cm increase
OXYGEN 	Approx 2% decrease	5% decrease
ACIDIFICATION 	30% increase	20 - 120% increase

(Excerpt from: [Regional Projection for Northern Australia](#). FRDC 2016-059: Guidance on Adaptation of Commonwealth Fisheries management to climate change)

9. The draft Climate and Ecosystem Status Report (provided at **Attachment 2.5a**) provides an insight into recent trends in the Torres Strait, including valuable knowledge on changes being seen by fishers. Feedback will be sought at the meeting on the contents and any additional information that would be valuable to inform WG advice.

BACKGROUND

Outcomes of the Torres Strait climate change scoping project

10. The need to better understand the species-specific effects of climate change and variability on Torres Strait Fisheries was initially identified as a research priority by TSSAC in December 2018 (TSSAC 71). TSSAC agreed a scoping study should be undertaken on the possible methods and resources needed to build an information framework that can evaluate the implications of future climate variability and change scenarios on fisheries to better allow fisheries managers and industry to respond and adapt to any changes.
11. The project delivered an evaluation of the over-arching data requirements and framework that are needed to support a climate change model that will evaluate the implications of future climate variability and change scenarios on key fisheries. The study considered previous reviews of climate implications for Torres Strait, consulted extensively with relevant fishery researchers, managers and key stakeholders and convened a workshop, with relevant fishery modelling expert end-users and stakeholders.
12. The TSSAC considered the project's outcomes and recommendations at their 79th meeting on 9-10 June 2021 and agreed that if the project was to progress beyond this scoping phase, it would provide a range of information that is of value to fisheries management, including improved understanding of the interactions between fisheries and ecosystems, and the impact of different climate change scenarios.
13. The full project report is available from the PZJA website:
<https://www.pzja.gov.au/research/climate-variability-and-change-relevant-key-fisheries-resources-torres-strait-scoping>
14. More information on this project will be provided under Agenda Item 5.3.

Climate change modelling project update

15. Following on from the TSSAC's recommendations on the climate change scoping project, a follow up call for research proposals was made in February 2022 with one proposal received from CSIRO. Having regard to feedback from all PZJA advisory committee RAGs and Working Groups out of session, the TSSAC considered this research proposal at their meeting on 6-7 April 2022 (TSSAC 81).
16. The project is intended to:
 - a. enable fisheries managers and communities to better prepare for climate change mitigation and adaptation, where possible;
 - b. integrate new and existing fisheries and environmental data within an over-arching data framework;
 - c. provide estimates of the impacts that different climate change scenarios could have on the marine ecosystem and associated fisheries/species;
 - d. provide estimates of the economic, social and other fisheries-related livelihood impacts of climate change on communities in the short (2 yrs), medium (5 yrs) and longer term (10+ yrs), and suggest some possible actions for adaptation; and
 - e. help differentiate between the relative effects of fishing and climate change on marine resources.
 - f. provide results in formats (e.g. graphical, video, written) which can be communicated to stakeholders (Torres Strait Island Communities, Fishers, Fisheries Managers and local and regional organisations).
17. TSRA will fund this project in full, with the project commencing shortly.

18. The first stage of the project will involve (1) setting up a Project Steering Committee and (2) deploying two moorings in Torres Strait, to collect oceanographic data for use in the climate modelling system. These moorings will provide additional data, to the AIMS data collection devices already present in Torres Strait, which are also planned to be used by this project.

Other relevant research to date on climate change impacts on Torres Strait Fisheries

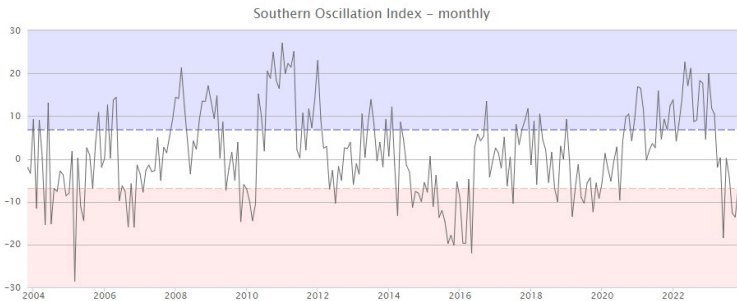
19. In terms of assessing the likely impacts of climate change on Torres Strait Fisheries the following has been undertaken:
 - a. Qualitative Sensitivity Analysis: Assessing the vulnerability of Torres Strait fisheries and supporting habitats to climate change (Welch and Johnson 2013);
 - b. Management Strategy Evaluation to integrate climate changes into the TRL Stock Assessment: An Integrated Management Strategy Evaluation (MSE) for the Torres Strait Rock Lobster *Panulirus ornatus* fishery (Plaganyi *et al* 2012);
 - c. System Modelling: Models of Intermediate Complexity of Ecosystems (MICE) – applied to TRL in the Torres Strait. Used in the following projects:
 - i. AFMA project 2017/0816 – Environmental drivers of variability and climate projections for the Torres Strait tropical lobster *Panulirus ornatus*. (Plaganyi *et al* 2018).
 - ii. Decadal-Scale Forecasting of Australian Fish and Fisheries (Fulton *et al* 2018).
 - d. TRL stock assessment model sensitivity analyses when explicitly incorporating climate change influences on survival and growth – presented in TRLRAG meetings, milestone reports (Plagányi *et al.* 2020¹) and published paper (Plagányi *et al.* 2019²).

¹ Plagányi, É., Tonks, M., Murphy, N., Campbell, R., Deng, R., Edgar, S., Salee, K., Upston, J. (2020) Torres Strait Tropical Rock Lobster (TRL) Milestone Report 2020 on fishery surveys, CPUE, stock assessment and harvest strategy: AFMA Project R2019/0825. May 2020 Draft Final Report. 183 pp

² Plagányi, É.E., Haywood, M., Gorton, R., Siple, M. & Deng, R. 2019. Management implications of modelling fisheries recruitment. *Fisheries Research* 217: 169-184

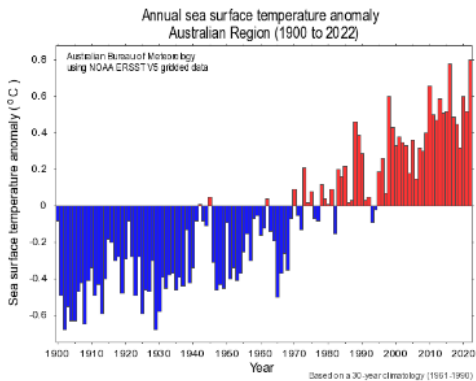
Hindcast

Attachment 2.5a



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Sustained negative values of below -7 typically indicate El Niño, while sustained positive values above +7 typically indicate La Niña



Sea surface temperature anomalies around Australia have been generally trending upwards over the past 30 years.

What is happening on the water and what are fishers seeing?

- Insert industry observations here

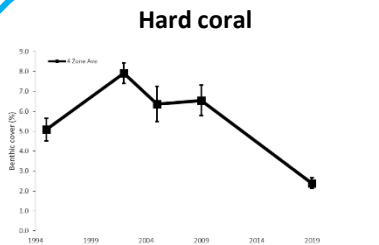


Figure 4-9. Zones (A) and East Torres Strait (4 zone) (B) average (stratified) benthic cover (%) for live coral (hard) from five surveys (does not include deep-reef strata) (error bars = 1 s.e.).

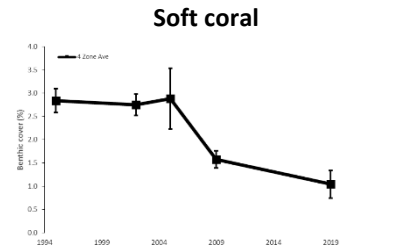


Figure 4-10. Zones (A) and East Torres Strait (4 zone) (B) average (stratified) benthic cover (%) for soft coral from five surveys (does not include deep-reef strata) (error bars = 1 s.e.).

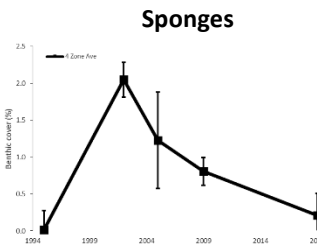


Figure 4-11. Zones (A) and East Torres Strait (4 zone) (B) average (stratified) benthic cover (%) for sponge from five surveys (does not include deep-reef strata) (error bars = 1 s.e.).

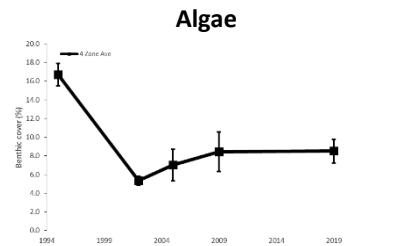


Figure 4-13. Zones (A) and East Torres Strait (4 zone) (B) average (stratified) benthic cover (%) for algae from five surveys (does not include deep-reef strata) (error bars = 1 s.e.).

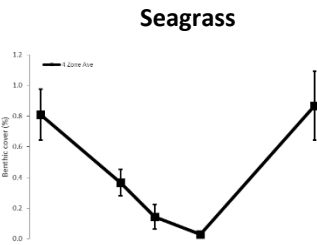


Figure 4-12. Zones (A) and East Torres Strait (4 zone) (B) average (stratified) benthic cover (%) for seagrass from five surveys (does not include deep-reef strata) (error bars = 1 s.e.).

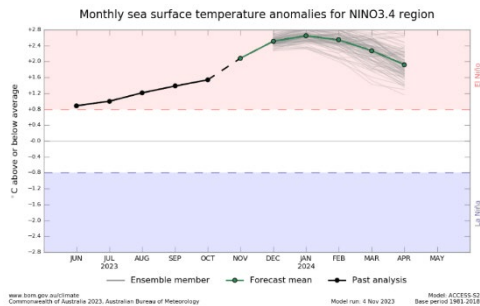
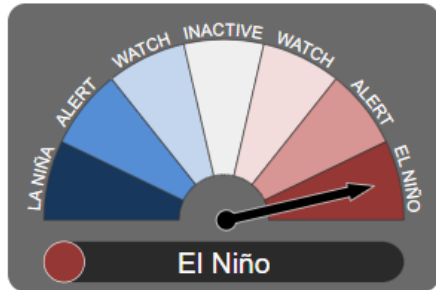
In eastern Torres Strait:

- Cover of hard coral, soft coral and sponges has declined since 2002 – concern as perform key ecosystem functions
- Seagrass cover has increased since 2009

Other indicators and trends e.g. turbidity, sea level, pH?

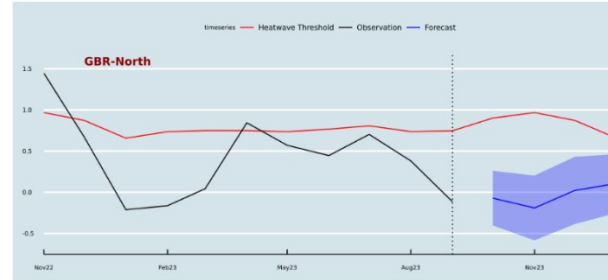
Forecast

ENSO outlook



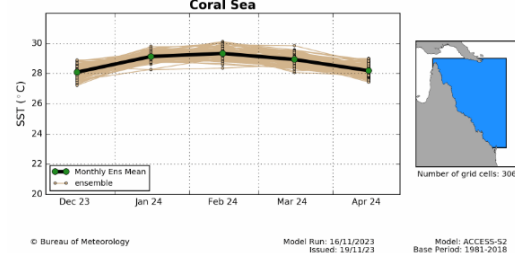
An El Niño has been declared and is underway. Climate model outlooks suggest this El Niño is likely to continue into the early southern hemisphere autumn 2024. An El Niño phase typically produces drier years

Marine heatwave forecast



Water temperatures up to January 2024 are not predicted to exceed the seasonal marine heatwave threshold (red line)

Sea Surface Temperature Outlook December to April

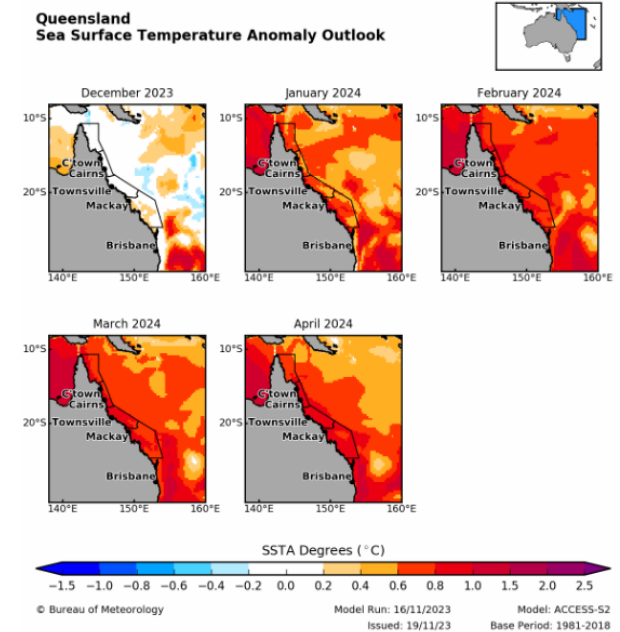


Water temperatures for the Coral Sea (closest to Torres Strait) are forecast to be 28°C in December 2023, increasing to 29°C by January 2024

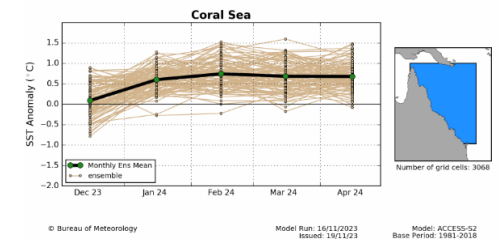
Other indicator forecasts?

SST anomaly outlook

Queensland Sea Surface Temperature Anomaly Outlook



Sea Surface Temperature Anomaly Outlook December to April



Between December 2023 and April 2024, water temperatures are predicted to be between 0.1-0.7°C above the long-term average water temperature

Torres Strait Finfish Fishery Working Group	5-6 December 2023
TOTAL ALLOWABLE CATCH ADVICE Spanish mackerel – 2024/25 season	Agenda Item No. 3.1 For Discussion and Advice

RECOMMENDATIONS

That the Working Group (FFWG):

1. **NOTE** the Finfish Fishery Resource Assessment Group (RAG) considered the outcomes of the 2023 Spanish mackerel stock assessment (stock synthesis) and provided advice on a Recommended Biological Catch for Spanish mackerel (2024-25 fishing season) at its meeting on 29-30 November 2023 (FFRAG 15).
2. **CONSIDER** advice from the RAG that the best estimate of non-commercial catch remain unchanged from the 2022-23 fishing season (**Table 2**):
 - 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 2024-25 fishing season (**97 tonnes**); and
4. **DISCUSS** and **PROVIDE ADVICE** on a Total Allowable Catch (TAC) for Spanish mackerel for the 2024-25 fishing season.

KEY ISSUES

1. At FFRAG 14 meeting on 30 August 2023, the RAG reviewed the new catch rate and biological data available from the 2022-23 fishing season. In preparation for the 2023 stock assessment, the RAG provided advice on the following items:
 - a) treatments to be applied to data inputs;
 - b) specific model analyses and ‘sensitivity analyses’ to be undertaken; and
 - c) the RBC calculation method.
2. At FFRAG 15 meeting on 29-30 November 2023, the RAG reviewed the results of the 2023 Spanish mackerel stock assessment, presented by Dr Michael O’Neill and Dr Rik Buckworth under the current project *Torres Strait Spanish mackerel stock assessment* (project number 200815).
3. The 2023 stock assessment estimated the biomass in 2023 to be 40% of the unfished spawning biomass. This follows an upward trend since an estimated biomass of 23% in 2019.
4. Since 2019, the RAG has been guided by the principles of a draft harvest strategy, developed through RAG and stakeholder advice to date. The draft harvest strategy identified a long-term target reference point of ‘B60’ (60% of the unfished spawning biomass), and an interim target reference point of ‘B48’ (48% of the unfished spawning biomass).

5. The *Commonwealth Fisheries Harvest Strategy Policy* requires that harvest strategies maintain the biomass of all commercial stocks above the Biomass Limit Reference Point (BLIM)¹ at least 90% of the time. The BLIM for the Torres Strait Spanish mackerel fishery is 20% (B20) of the unfished spawning biomass.
6. The correct interpretation of this criterion is that the stock should stay above the limit biomass level at least 90% of the time (that is, a 1-in-10-year risk that stocks will fall below BLIM), under the application of a harvest strategy. The 90% probability forms a key performance criterion when evaluating candidate harvest strategies through Management Strategy Evaluation (MSE).
7. In providing advice on a Recommended Biological Catch (RBC) for the 2023/24 season the RAG considered the calculated risk-levels of a range of RBC options. Presented as a 'matrix of scenarios', the potential RBC figures are based on different target reference points (**Table 1**).
8. Noting the '90% risk criterion', the RAG ruled out the RBC options which were assessed to exceed the acceptable risk level. This left the RAG with three options: 97 tonnes (B60), 133 tonnes (B50), or 141 (B48). The RAG noted that the B48 value did not rebuild the stock to 48% biomass in all simulations.
9. **The RAG recommended an RBC of 97 tonnes for the 2023/24 season.**
10. This RBC falls within the acceptable risk-level and considers the objectives of the *Torres Strait Fisheries Act 1984*. The RBC also fulfills the requirements of the long-term target reference point.

Table 1: Summary of potential RBC's for the 2024/25 fishing season presented to the FFRA on 29-30 November 2023. These figures are based on the mean values derived from the 12 core analyses from the 2023 stock assessment.

No.	Name of RBC approach 1941-2023 SS model	Forecast % of biomass below S_{20} over 12 years and 12 analyses (upper 95% confidence interval in parenthesis) Assuming average recruitment and constant RBC	Median RBC tonnes Over analyses 1 to 12 Gridded analyses bracketed	Do forecasts achieve S_{48} within 12 years? Over analyses 1 to 12
1	Constant F_{40}	7.7% (11.5%)	162 (149)	No
2	Constant F_{48}	4.0% (5.3%)	141 (132)	Mostly
3	Constant F_{50}	3.1% (5.0%)	133 (124)	Yes
4	Constant F_{60}	1.6% (5.0%)	97 (91)	Yes

Estimate of non-commercial catches

11. 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

¹ Biomass limit reference point (BLIM): The point beyond which the risk to the stock is regarded as unacceptably high. The harvest strategy policy for Commonwealth fisheries sets the default biomass limit reference point (BLIM) at 20% (B20) of the unfished spawning biomass

expected non-commercial catch (for example recreational and traditional catches). This is consistent with the principles of the *Commonwealth Harvest Strategy Policy*.

12. 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.
13. 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).
14. At FFRAG 9 (14-15 October 2021), FFRAG 12 (3-4 November 2022), and FFRAG 15 (29-30 November 2023) the RAG provided the same estimates for the 2022-23, 2023-24, and 2024-25 fishing seasons; noting that there was no new information available to guide a different approach. A summary of advice to date is provided in **Table 1**.

Table 2. 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	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. 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.
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.

Torres Strait Finfish Fishery Working Group	5-6 December 2023
TOTAL ALLOWABLE CATCH ADVICE Coral trout – 2024/25 season	Agenda Item No. 3.2 For Discussion and Advice

RECOMMENDATIONS

That the Working Group:

1. **NOTE** the advice from the Finfish Fishery Resource Assessment Group (FFRAG) from its meeting 29-30 November 2023 on a Recommended Biological Catch (RBC) of 135 tonnes and a non-commercial catch estimate for coral trout for the 2024-25 season; and
2. **DISCUSS** and **PROVIDE ADVICE** on a Total Allowable Commercial Catch for coral trout for the 2024-25 fishing season.

KEY ISSUES

1. A notional TAC for coral trout 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.
2. 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) in 2019 under the funded project “*Harvest strategies for the Torres Strait Finfish Fishery*”.
3. At its 31 October-1 November 2019 meeting (FFRAG 5) the RAG 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.
4. Biological sampling for coral trout commenced in the 2020-21 fishing season for the first time.
5. At FFRAG 09 (14-15 October 2021), the RAG recommended to update the standardised coral trout catch-per-unit-effort (CPUE) timeseries as an immediate research priority. This previously identified research item would refine the catch rate standardisation and provide a current index of abundance for the fishery. This project work would also be an essential input into a future coral

trout stock assessment. A research scope for this project was endorsed by the RAG out-of-session and subsequently approved for funding in 2022/23.

6. At FFrag 10 meeting (18-19 November 2021) Dr Trevor Hutton presented a summary of coral trout data from the 1995-1996 CSIRO dive survey. The RAG considered this summary along with an updated *unstandardized* CPUE timeseries when formulating an RBC for the 2022/23 season. The RAG did not consider the substantive annual RBC of 135 tonnes to be a risk to sustainability based on the available information.
7. At FFrag 12 meeting on 3-4 November 2022, Dr Michael O'Neill presented a preliminary updated standardised CPUE timeseries. This provided an additional four years of standardised catch rates (**Figure 1**). The RAG noted that catch rates have increased since 2017/18 when the previous timeseries had been updated.
8. At their meeting on 7-8 December 2022, the FFWG noted a presentation by scientific member Dr Michael O'Neill on the updated catch-per-unit-effort (CPUE) time series for coral trout. The WG noted that the current iteration of the timeseries contains all available data, including catch data from QDAF (pre-2004). This was incorporated into the CPUE analysis as an action from FFrag 12 meeting (3-4 November 2022).
9. The WG noted that with the inclusion of the QDAF data that catch rates remain above 130 kg per boat day. Therefore, the 'trigger level' of 90.6kg per boat-day, considered under the harvest strategy work completed to date for the fishery, has not been reached. The WG recalled that should catch rates decline to 90.6kg per boat day, then this was trigger an immediate priority to conduct a formal stock assessment.
10. The WG agreed that the finalised CPUE time series did not suggest a decline in the coral trout population, noting that the addition of historical QLD data suggest that catch rates remain consistent with the long-term average.
11. The WG noted that the FFrag provided the following advice at their meeting on 3-4 November 2022:
 - Having considered recent catch data, previous assessments, and the updated CPUE time series, the RAG concluded that there is no evidence to suggest amending the substantive RBC of 135 tonnes; the available data does not suggest a decline in the coral trout population, and there were no justifications identified to increase the RBC.
 - The FFrag agreed that, based on all lines of evidence, it is highly unlikely that the stock is at risk from fishing:
 1. Fishing levels remain low in the Fishery. The total reported catch for 2021-22 fishing season is 42 t;
 2. Outcomes of the 2006 Management Strategy Evaluation (MSE) analysis and the 2019 preliminary stock assessment both predict the current biomass to be high relative to virgin biomass:
 3. MSE: Four constant catch scenarios of 80, 110, 140 and 170 tonnes were tested which all achieved a biomass for the fishery of at least 60 per cent of virgin total biomass by 2025 (B60). The biomass in 2004 was estimated to be more than 60 per cent of unfished levels (Williams et al. 2011, 2007). Commercial catch in recent years has been below historical catch

levels and well below the lowest catch level simulated in the MSE (80 t per year).

4. Preliminary stock assessment: This assessment found the coral trout stock to be around 80 per cent of virgin biomass (B80). All of the model estimates of current spawning biomass were above 65 per cent estimated virgin biomass (B65).
 5. Although there is some uncertainty with the 1995/96 CSIRO dive survey (reviewed at FFrag 10), the density estimates provide a level of validation of the density estimates derived from the preliminary stock assessment; and
 6. The RAG recommended an RBC for coral trout of 135 tonnes for the 2023/24 season.
12. The FFWG supported the FFrag's advice and recommended that the coral trout TAC remain at 135t for the 2023-24 fishing season.
 13. In providing its advice, the WG considered that TAC for coral trout has not been calculated with an explicit deduction to account for likely catches taken outside the fishery (eg traditional, recreational or charter fishing). This is because it has not been a high priority to undertake work to determine catch estimates whilst catches remain very low compared with the TAC.
 14. The WG noted advice from TIB members that it is desirable to reassess the priority of providing an estimate of non-commercial catch when recommending a TAC for the 2024/25 season.
 15. Advice from TIB members at FFrag 14 meeting affirmed the intention to consider an estimate of non-commercial catch when providing RBC advice at FFrag 15.
 16. The FFrag at FFrag 15 (29-30 November 2023) recommended that the coral trout TAC remain at 135t for the 2024-25 fishing season. This was noting a further review of the 2019 assessment, which included a presentation from Trevor Hutton that confirmed that the application of proxy density/habitat data for coral trout from the GBR was a reasonable input into the assessment.
 17. The RAG agreed that while not officially endorsed for management decisions, the 2019 assessment does provide evidence to support the current TAC of 135 tonnes. Further information on discussions held during a coral trout technical workshop (28 November 2023) and FFrag 15 will be provided in the FFrag 15 record.

Non-commercial catch estimate

18. At FFrag 15, the RAG provided a preliminary estimate of non-commercial catch of coral trout: 5 tonnes* for traditional catch (subsistence/kai kai), and 5 tonnes for recreational.

*This figure does not include an estimate for Kemer Kemer Meriam waters, as a representative was not available on day two of FFrag 15 to provide advice for this area.

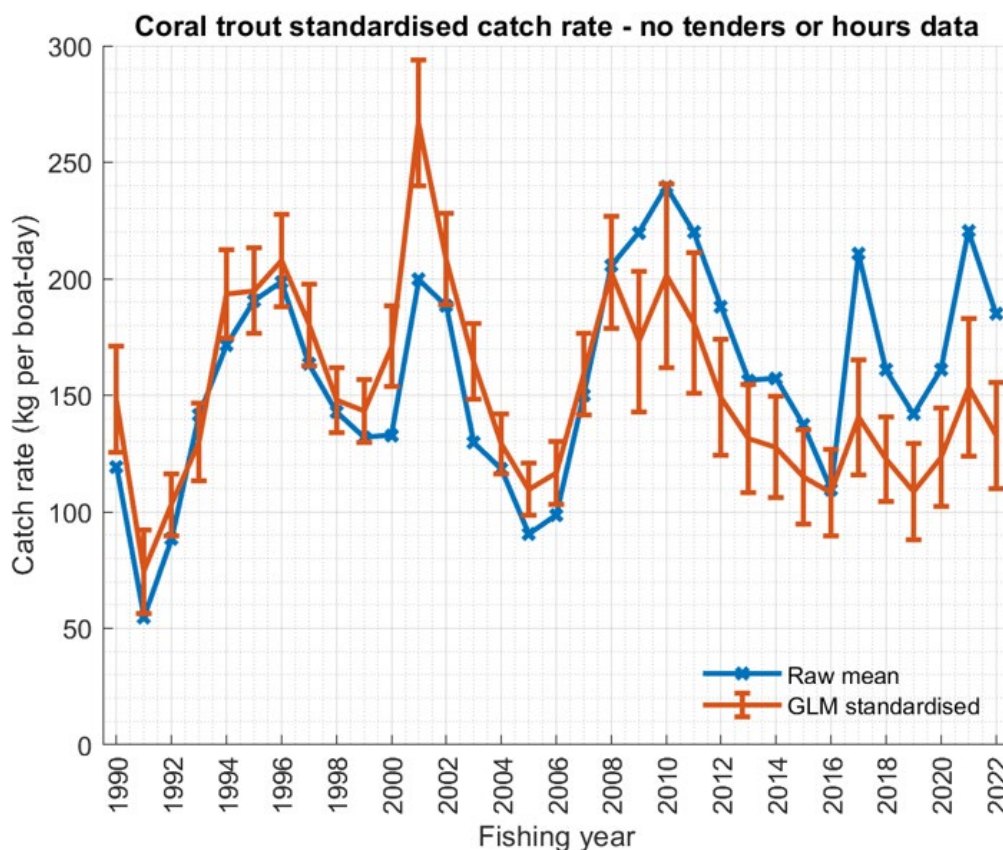


Figure 1: Standardised CPUE timeseries for the coral trout in the TSFF (sunset sector) - data to 30 June 2022.

BACKGROUND

19. At the RAG's meeting on 31 October – 1 November 2019 (meeting 5) the RAG identified, two triggers that may indicate changes in the risk profile for the stock:
 - a) Catches from TIB + Sunset sector exceeding 90 t (being two thirds of the constant catch TAC of 134.9 t); and
 - b) If the standardised catch rate per day drops below 90.6 kg per primary vessel day¹.
20. The RAG advised that either of these two triggers being met would flag a change in the stock status and will mean a stock assessment is to be carried out to investigate. FFRAG considered that further work would be required to develop decision rules based on the outcomes of this assessment if triggered; i.e. how are the outputs of the assessment used to then move the stock relative to the reference points.
21. Relevantly the RAG also recommended that an alternative, robust indicator of stock status, other than CPUE from the small number of sunset boats targeting coral trout, needs to be developed to track the stock status over time.
22. At FFRAG 9 meeting on 14-15th October 2021, the RAG 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

¹ The catch rate associated with B80 was determined to be 120 kg per day based on an average from 2012-2017 advice is that if it falls below 90 kg per day (as a proxy for B60) it would trigger an assessment.

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.

23. The RAG noted 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.

24. Recent commercial catches of Coral trout in the Fishery are summarised below:

- | | |
|---------------------------|--------------------------|
| • 21 tonnes in 2014-15 | • 32.5 tonnes in 2019-20 |
| • 38.4 tonnes in 2015-16. | • 18.9 tonnes in 2020-21 |
| • 25.7 tonnes in 2016-17 | • 41.9 tonnes in 2021-22 |
| • 27.3 tonnes in 2017-18 | • 27.8 tonnes in 2022-23 |
| • 17.3 tonnes in 2018-19 | |

18. 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.

19. 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).

20. 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 RAG noted that all of the model estimates of current spawning biomass were above 65 per cent estimated virgin biomass.

Non-Commercial Catch

21. To date, the TAC has not been 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.

22. At its meeting on 27-28 November (meeting 6), the RAG recommended that AFMA undertake a work plan to support RAG consideration of likely catches ahead of the following fishing season. To date, this work has not been actioned due to the underutilised nature of the fishery (catches far below the available TAC).

23. The RAG agreed to retain this action item, noting however, that progressing this action needs to be assessed against other RAG priorities and in light of any future research investment to develop an approach for measuring non-commercial fishing for the region.
24. At its meeting on 14-15th October 2021 the RAG 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.
25. in 2023, 'Phase 2' of the non-commercial catch project (*Measuring non-commercial fishing catches (traditional subsistence fishing) in the Torres Strait in order to improve fisheries management and promote sustainable livelihoods*) was approved for funding in 2023-24 & 2024-25.
26. This project will seek to quantify the levels of non-commercial take of a wide range of fisheries resources, including finfish.

Torres Strait Finfish Fishery Working Group	5-6 December 2023
MANAGEMENT Update to the TSF01 Logbook	Agenda Item No. 4.1 For Discussion and Advice

RECOMMENDATIONS

That the Working Group (WG):

1. **REVIEW, DISCUSS** and **PROVIDE ADVICE** regarding work to date on draft amendments to the TSF01 logbook
2. **NOTE** that subject to endorsement from the FFRAAG, these amendments will be finalised before the commencement of the 2024-25 fishing season.

KEY ISSUES

3. AFMA has prepared a range of draft TSF01 logbooks for the RAG to review (to be presented during the meeting).
4. Key advice required by AFMA to progress the publishing of the updated logbook includes a consideration of the removal of dory-specific catch data for non-target mackerel species, and an appraisal of the efficacy of new data inputs.
5. As well as actioning the advice of the RAG, the proposed amendments to the TSF01 logbook will action several conditions of the recently approved WTO assessment of the fishery (refer to Agenda Item 2.2).

BACKGROUND

6. AFMA has catalogued FFRAAG advice to date regarding proposed amendments to the TSF01 logbook. Extracts are provided below.

FFRAG1- 9-10 NOV 2017

- It was noted that the current logbook does not have the capacity to record catch and effort per tender for the reef-line sector (mackerel sector is able to report per tender) and instead lumped all the catch per day under the primary vessel. This misses recording valuable effort data which may vary per dory.
- It was also noted that the logbook had no capacity to record where each tender was fishing, noting that they may travel some distance from the primary vessel.

FFRAG3- 19-20 NOV 2018

- Consideration should be given to improving catch reporting on Coral trout, including:
 - reviewing or splitting the *Torres Strait Finfish Fishery Daily Fishing Logbook (TSF01)* into two separate logbooks tailored to either reef-line fishing targeting trout or Spanish mackerel. It was noted that this was the arrangement in the fishery prior to 2003 when fishers used either the old specific *SM02 logbook* for mackerel and the *“Queensland East Coast Line Fin Fish Fisheries Logbook”* (LF series of logbooks LF01

and LF02) for recording reef-line fishing. Information is required from fishers on operation by tender (better understanding the effort portion of CPUE).

- Improving awareness of spatial patterns in Coral trout fishing (use of onboard monitoring, working with fishers on characterising historic patterns of behaviour, logbook changes and vessel monitoring systems on dories were suggested).

FFRAG4- 13-14 MARCH 2019

The RAG considered that a data need for the fishery was understanding other factors driving the abundance of Spanish mackerel. These might include consideration of other data streams such as the Integrated Marine Observing System remote sensing data, measuring shark depredation of catch (amending daily fishing logbooks) and broader climate change impacts and monitoring across Torres Strait / northern Australia. The RAG noted that the mackerel stock assessment pre-proposal received in answer to the TSSAC call for research, if funded, would begin investigating this issue.

FFRAG5- 31 OCT- 1 NOV 2019

RAG strongly supported the push for legislation to be changed to support mandatory logbooks to maximise accurate data provision from TIB sector of the fishery. RAG considered that amendments to the daily fishing logbook may be necessary to streamline data collection with TIB fishers (e.g. simplified separate data sheets for Spanish mackerel and reef-line fishing, the FFRAG considered the *Northern Territory Government Spanish Mackerel Fishery Daily Log Sheet* as an example of a simple log-sheet) and that training on recording GPS co-ordinates may be required.

FFRAG6- 27-28 November 2019

FFRAG advised that these benefits would be realised only if VMS and catch data was recorded from both the primary vessel and dories; i.e. daily fishing logbooks would need to capture catch per dory with the effort component alone potentially collected by VMS.

FFRAG7- 8 October 2020

N/A

FFRAG8- 4-5 November 2020

Agenda item 4.1 Logbook review TSF01

The RAG noted an update from the AFMA EO on the data presently collected through the AFMA *TSF01 Torres Strait Finfish Fishery Daily Fishing Logbook*. AFMA outlined a number of issues identified by the RAG over time to improve the quality of catch and effort data coming from Sunset fishers. The RAG noted that this agenda item was to get general advice from the RAG ahead of some succinct project work with industry members in 2021 with a view to implementing a new logbook for the 2021-22 season.

It was noted that advice was sought on tactical changes to TSF01 to improve data from the Sunset sector as well as broader changes that might facilitate adoption by TIB sector fishers, noting that it is not mandatory for these fishers to complete a daily fishing logbook at this time.

The RAG agreed with the general principle that both Sunset and TIB sectors should be completing the same daily fishing logbook.

Logbooks changes recommended to improve Sunset sector catch and effort data:

Dory driver name

The RAG supported the AFMA suggestion to modify TSF01 to have a clear “*first name and surname*” field for dory driver name noting advice from the Spanish mackerel project team that analysing older historic dory driver data has been unsuccessful due to unclear data; e.g. dory driver name can be recorded as ‘James’, ‘Jim’, ‘Jimmy’ and cause confusion.

Shark depredation

The RAG supported modifying TSF01 to quantify the impact on catch rates over time from shark taking catch from lines (shark depredation). The RAG noted that industry have raised shark depredation as an issue that could be affecting the interpretation of catch rates. It was noted that Western Australian Fisheries have changed their logbook to ask fishers to record “*how many fish did you lose to sharks in this fishing operation?*” RAG members suggested that this part of the logbook should be a simple box where fishers should write the number of fish lost to shark depredation. The instructions should make it clear for fishers to write a zero when no interaction occurred and to not leave this field blank.

Tender data including location for both Spanish mackerel and coral trout

The RAG supported modifying TSF01 to better collect finer scale information about where fishing occurred for both Spanish mackerel and trout operations. It was noted that, for coral trout, it is important to know the number of reefs visited per fishing session.

The RAG noted that TSF01 records the location for where a primary boat is operating per fishing day and records catch taken per dory for Spanish mackerel. The RAG noted that Spanish mackerel dories generally operate nearby to the primary vessel meaning that the location of fishing operation is generally well recorded. However, for coral trout, the RAG noted advice that tenders in this fishery may travel over a wider range and visit a number of coral reefs in a fishing session meaning the location of fishing effort was poorly captured in TSF01.

Industry members advised of a concern that Sunset fishing tenders may be fishing inside the 10nm radial closures (while the primary is anchored outside) around eastern communities and collecting finer scale fishing effort data may help address this risk.

Michael O’Neill advised that, in the Queensland East Coast Spanish mackerel fishery, the data needs include the hours fished per day and the number of sites fished within a zone. It was advised that QDAF is investigating whether Vessel Monitoring Systems (VMS) fitted to dories can be used to meet this data need rather than changing their logbooks. Research is being done on how VMS data can be integrated into the stock assessment model to get information about fishing operations and where they occurred.

Fish weights: logbooks vs. CDRs

The RAG support AFMA working to update their systems to automatically link the Finfish logbook and Catch Disposal Record (CDR) data through a ‘Trip ID’ or fishing event. This would make it more time efficient to link the CDRs with verified weights with the numbers fish caught per trip.

The RAG noted that a data need for the fishery is to be able to link each fishing event in the daily fishing logbook to the corresponding CDR to best determine the average weight per fish landed. The RAG noted that generally, weights recorded in Daily Fishing Logbooks are back-deck estimates with CDRs completed in port on accurate scales are being used to verify these logbook weights. The RAG noted that CDRs are used by AFMA to deduct catches from catch holdings, not daily fishing logbooks.

The RAG noted that the reef-line portion of the logbook had data fields for ‘number’ and ‘weight’ of fish. It was noted that the mackerel section only requires fishers to record the numbers of fish and average weight/number of cartons. The RAG suggested working with industry to understand their practices for estimating or weighing fish at sea and how this varies between reef-line and mackerel fishers.

Species splits for trout

The RAG supported amending TSF01 to remove the percentage species splits estimates for coral trout and have fishers record each species individually line by line including number and kilogram.

RAG members reiterated concerns that a challenge for science and management in the reef-line fishery was the fishery catching a basket of four coral trout species and not recording them at species level. The RAG noted that fishers at present could report a basket of trout (e.g. 100 kg) and provide a percentage split to estimate the number of common, bar-cheek, blue-spot and passionfruit (e.g. 85 % common, 15 % bar-cheek).

Spatial reporting – including TIB fishers

The RAG supported redesigning the logbook, if appropriate, to help make it more user friendly for both Sunset and TIB sector fishers to fill out. The suggestion was made that have one page represent a single fishing day might make the logbook less cluttered and easier for new fishers to fill out.

RAG science members supported the extra effort fishers are going to through the FRS Catch Disposal Records (TDB02) to volunteer the broad area fished, noting the reporting zones are very large in the CDR book. However, it was advised that, to best support stock assessments, a finer scale measure of where fishing effort occurred would be needed from TIB fishers, particularly for trout, which are known to be generally found in only a small area of reef.

The RAG noted concerns from TIB industry members that reporting an exact location fished is not traditional practice within communities and was a part of Traditional Knowledge and needed to be respected. Industry members advised that this would be a challenging issue as fishers want to volunteer data to help their fishery science and management but do not want their Traditional Knowledge released to outsiders.

RAG members advised that the key to help adoption will be education, awareness and engagement with industry around the firm confidentiality requirements of the daily fishing logbook program. It was noted that, while a CDR is filled out by both a fisher and fish receiver, the daily fishing logbook is confidential and is sent straight to AFMA where it is housed securely. AFMA advised that strict information disclosure rules are in place to protect the commercially sensitive nature of these data; where data from a single fisher should never be able to be discerned from looking at any data publication.

The RAG noted advice from TIB fishers to AFMA that recording latitude and longitude co-ordinates would be another challenge in adopting daily fishing logbooks. The RAG considered the AFMA suggestion that fishers (TIB and Sunset) could be given the simpler option to report location fished as an 11 x 11km square 'hill-grid' with a grid and then a site recorded within this grid (noting the logic of these were that a hill-grid was 1/10th of a degree of longitude and equated to 6 x 6 nm). RAG members noted that the hill-grid system would be well suited to Spanish mackerel and might be suitable for coral trout based on reef site fidelity, noting sub-populations tend to stay on a single reef with some reefs spanning more than one hill-grids. It was noted that this could be further explored with industry during project work and consultation.

Non-commercial fishing data needs for the fishery

RAG industry member Kenny Bedford provide the RAG with an update on the AFMA funded project *Developing an approach for measuring non-commercial fishing in Torres Strait*. The RAG noted that RAG Chairperson David Brewer was a co-investigator on the project alongside their colleague Dr Tim Skewes.

Mr Bedford advised that a clear shift within industry was apparent over recent years with communities embracing the need for data collection and stewardship including the need for data to support their fisheries. This includes a growing sense of responsibility for all natural resources including non-commercial species such as rabbitfish.

The project is reflecting on past strategies to collect non-commercial catch data that have not been successful, as well as focusing on the stakeholder needs for such data. It was advised that there is a need for a 'critical mass' within a community to support a system given it is a shared responsibility. The project is focused on recommending a straightforward method to collect these important data with a draft report near completion.

The project is likely to recommend an education campaign to help communities understand why the collection of these data is important especially as part of an ecosystem based management system rather than considering a single species at a time.

Recognising that collecting data on non-commercial catches is a key issue for the fishery, the RAG recommended that 2021 rounds of community visits and any consultation by AFMA/TSRA should add communicating the outcomes of the non-commercial catch project to the agenda to help communities' understanding.

FFRAG9- 14-15 OCTOBER 2021

N/A

FFRAG10- 18 NOVEMBER 2021

N/A

FFRAG11- 12 OCTOBER 2022

N/A

FFRAG12- 3-4 NOVEMBER 2022

Update to the TSF01 logbook

31. The AFMA member reported that this work is on track to be actioned for the 2023/24 season, in line with a scheduled update to the Torres Strait Fisheries (Furnishing of Logbooks) Instrument 2020. The updated logbook will be shared with the RAG for their consideration out-of-session before it is implemented.
32. A scientific member suggested to review the TSF01 logbook in-step with any updates to the TRL04 logbook. This will ensure any shared data-issues between the two fisheries can be addressed efficiently. Such issues include refining the collection of effort data for calculating catch-per-unit-effort (CPUE).
33. It was suggested by TIB members to also review the 'Catch Disposal Record' (CDR) TDB02 form to investigate whether it could be developed into an 'all in one' catch/effort reporting form, in place of a daily logbook for the TIB sector. It was suggested that effort data should be mandatory for the TIB sector, as it has been noted that the volunteer 'part b' section of the CDR form was not fully utilised in the most recent season. If the CDR form were to be amended to include the collection of robust effort data, then this would be an efficient mandatory reporting system for the TIB sector. AFMA agreed to investigate this consideration as an action item, including consulting with communities. **(Action Item 1)**
101. The AFMA member informed the RAG of the intention to include species-specific coral trout reporting columns in the updated TSF01 logbook, rather than the estimate of species-spilt option which is currently provided. This would then be a logbook condition to report coral trout by species. The RAG agreed that this would be desirable.

Torres Strait Finfish Fishery Working Group	5-6 December 2023
MANAGEMENT Management priorities	Agenda Item 4.2 For discussion and advice

RECOMMENDATIONS

1. That the Working Group **DISCUSS** and **PROVIDE ADVICE** on progressing current management priorities for the Finfish Fishery, and on future management priorities for 2024-25.

KEY ISSUES

1. The WG is asked to review the management priorities as discussed at the WG meeting on 7-8 December 2022. Noting these priorities, the WG is to provide advice on how these items should be progressed and introduce any new management priorities for consideration.
2. FFWG advice is being sought on recommended management priorities for the 2024-25 financial year. AFMA seeks advice from each Working Group (WG) on priorities to ensure management resources are effectively focused.
3. At its meeting on 7-8 December 2022, the Working Group reviewed the management priorities discussed at the WG meeting on 25 November 2021. Having regard for the management issues discussed at the current meeting, the Working Group recommended the following priorities for 2023-24:
 - **HIGH: Progress the development of a harvest strategy.**
This remains a high priority, to be progressed further at the proposed harvest strategy workshop scheduled for March 2023.
 - **HIGH: Potential application of Vessel Monitoring Systems (VMS) on tenders.**
The WG recommended to increase this from low priority to high priority.
The WG agreed that the application of VMS on tenders in the sunset sector would introduce several benefits to the fishery, including the collection of fishing-effort data to reduce uncertainty in standardised catch rates. It would also serve as a compliance tool to monitor specific spatial and temporal closures which apply to this sector. The WG agreed that these closures were implemented for significant cultural and environmental reasons.
The WG noted that VMS data is being utilised in adjacent jurisdictions to refine the stock assessments of several fisheries. The member for QDAF agreed to distribute to members a copy of the *Vessel Tracking Post Implementation Review* which is currently out for public consultation. This review contains a cost/benefit summary of the application of VMS.
The WG noted advice from TIB members that the Traditional Inhabitant sector may wish to pursue the use of VMS on TIB vessels <6 metres in the future, noting the perceived benefits of high-quality data collection. It was discussed whether there are mechanisms for dual-licenced fishers to operate in separate fisheries with the

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

- **MEDIUM: Formalising total allowable catches for the Finfish fishery.**

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

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

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

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

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

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

The WG acknowledged the aspirations of several community members in Maluligal and Kaiwalagal Kaureg clusters to extend the recently amended 'western line' area to provide an additional fishing opportunity to these communities. The WG supports future consultation on this subject, agreeing that this remains an important matter. The WG agreed to list this as a low priority, noting that immediate consultation is not required. The priority to progress with formal community consultation will be guided by further advice from TIB members.

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

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

BACKGROUND

5. 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.
6. At its meeting on 25 November 2021, the Working Group reviewed the management priorities discussed at the previous meeting. Having considered member's views and management issues discussed at the meeting, the Working Group recommended the following priorities for 2022-23:
 - HIGH: Supporting recommended changes to the Western Line Closure. Traditional Inhabitant members recommend this priority be moved to the highest priority for the fishery (Actioned in 2022 – refer to agenda item 2.2);
 - HIGH: Progress the development of a harvest strategy;
 - HIGH: Review current measures applied to the management of the take of sharks in the Fishery to ensure that they are in line with Commonwealth best practice (condition 6 of the Wildlife Trade Approval for the fishery). AFMA is aiming for an Ecological Risk Assessment to be undertaken for the Fishery in 2022 which may also inform management needs as it relates to the take of sharks.
 - MEDIUM: Formalising total allowable catches for the Finfish fishery.
 - LOW: Potential application of VMS of tenders
 7. The Working Group recommended that the priority to support the PZJA's consideration of quota unit allocation options be removed from the Working Group's priorities at this time noting that further work on this priority is pending a PZJA decision.

Torres Strait Finfish Fishery Working Group	5-6 December 2023
RESEARCH Finfish Fishery Research Priorities	Agenda Item 5.1 For DISCUSSION & ADVICE

RECOMMENDATIONS

1. That the Working Group (WG):

- a) **NOTE** the Torres Strait Scientific Advisory Committee (TSACC) met in August 2023 to discuss research priorities for Torres Strait fisheries. Research scopes for Biological sampling for Spanish mackerel and coral trout, Close-Kin Mark-Recapture (CKMR) for Spanish mackerel, and a stock assessment (stock synthesis) for Spanish mackerel were endorsed by TSACC and submitted through a limited tender process.
- b) **NOTE** that one research proposal has been received for a Close-Kin Mark-Recapture (CKMR) project for Spanish mackerel.
- c) **NOTE** that one research proposal has been received for biological sampling for Spanish mackerel and coral trout.
- d) **NOTE** that as of 20 November 2023, no research proposals have been received for a stock assessment for Spanish mackerel.
- e) **NOTE** the Rolling 5-Year Research Plan for the finfish fishery, including updates provided at FFRAG 13.
- f) **DISCUSS AND PROVIDE ADVICE** on research priorities to the FFWG and TSSAC for research priorities for funding in 2025-26.

Key Issues

2. At FFRAG 13 meeting (8 June 2023), the RAG reviewed the current 5-Year Rolling Research Plan (the Plan), noting that this document was previously updated at FFRAG 12. The RAG amended the plan, taking into consideration the outcomes of previous projects against various research priorities. The updated Plan can be reviewed at **Attachment 5.1a**. Advice from FFRAG 13 was considered by TSSAC when providing advice on research funding for the 2024-25 financial year.
3. The RAG categorised research priorities as follows:
 - Biological sampling remained the number one priority, noting the importance of collecting an unbroken dataset of biological data for use in current and future stock assessments.
 - A yearly stock assessment for Spanish mackerel was maintained as the number two priority, noting its utility in the RAG's current harvest strategy framework for providing yearly RBC advice. Noting the RAG's endorsement of the preliminary SS model, the RAG clarified that future assessments should formally adopt the stock synthesis approach.
 - The implementation of a full-scale Close-Kin Mark-Recapture (CKMR) study for Spanish mackerel was elevated from number five to number three priority, noting the success of the recently completed CKMR scoping/design study, the completion of the coral trout CPUE standardisation project (previous number three priority), and the RAG's advice to

defer the MSE for Spanish mackerel fishery (previous number four priority which was approved for funding by TSSAC in 2023/24 however no proposals were received).

- Coral Trout Catch Per Unit Effort Standardisation was downgraded from 3rd to 4th position, noting that this priority has been preliminarily actioned (analysis presented at FRRAG 12) however requires ongoing development via the production of an official report (due in early 2023/24).
 - Harvest strategy development for Spanish Mackerel, addressed through a Management Strategy Evaluation remains a high priority at number five, noting that ongoing work is required to develop specific harvest control rules (HCRs) to be evaluated through a future MSE. The RAG agreed that these HCRs could be developed through future stakeholder workshops, either preceding a future MSE project or as part of the project itself.
 - The remaining priorities (classified as either '6 - essential', or '7 - desirable') were left unchanged, with the exception of a stock assessment for coral trout, which was upgraded to an essential priority. The RAG clarified that this research is now essential, given the current interest in increasing the quantum of effort in the fishery, and the fact that this would be a logical step in providing a key input into a future harvest strategy.
4. The RAG will be asked to confirm the order of research priorities in the *Rolling 5-Year Research Plan*.
 5. The RAG will also be asked to discuss and provide advice on the following questions raised by TSSAC at their meeting on 22-23 August 2023.
 - a) Is it reasonable to expect the stock assessment budget step down through the years, given it should become easier to run?
 - b) Should the stock assessment be run less frequently, noting there are only a few data points added each iteration, and we have a very limited budget to fund all Torres Strait research?
 - c) Provide information on how the three projects, finfish biologicals, close kin mark recapture, and the stock synthesis stock assessment fit together as long term projects. For example, will every project be required very year? Should the biological sampling project merge with the CKMR project, particularly if epigenetic aging replaces otolith aging? What does the FFRAG see as the timeline for these collaborations/ changes to each project to ensure we are maximising cost benefits of projects and not duplicating work.
 6. Further information on the above questions can be referred to in the background section below.

Background

TSSAC 82 Meeting Record Extract

Biological sampling

58. The committee noted that samples are welcome from all areas in Torres Strait, including top western, however the trips that occur with the project team focus on the main finish communities to maximise samples.
59. The committee agreed it would be useful to arrange a tour of the Queensland Fisheries facility when a number of stakeholders will be in Cairns for a meeting in a few weeks time.

ACTION: TSRA to speak to the Finfish Biologicals project team to arrange a tour of the Queensland Fisheries facility to learn more about the project alongside the upcoming meeting in Cairns.

Spanish Mackerel Stock Assessment

60. The TSSAC discussed the frequency of the Finfish Stock Assessments.
61. The noted that annual Stock Assessment updates in this fishery are proposed by the RAG as they are following the recommendations of the fishery harvest strategy. Further a conservative approach has been recommended due to there being a lot of uncertainty as it is a data poor fishery, and there are also unknown influences (likely environmental) affecting the stock as well. The annual assessment allows more responsiveness when there is an issue.
62. The TSSAC acknowledged this information, however agreed that the FFAG should provide responses to the following questions for TSSAC to consider alongside the application in February:
- Is it reasonable to expect the stock assessment budget step down through the years, given it should become easier to run?
 - Should the stock assessment be run less frequently, noting there are only a few data points added each iteration, and we have a very limited budget to fund all Torres Strait research?

RECOMMENDATION: TSSAC Executive Officer to request further information from the RAG regarding the recommendations of an annual stock assessment, and answers to the questions under paragraph 62 of the meeting record.

Close Kin Mark Recapture

63. The committee noted the uncertainty in the stock assessment, as a result of it being a data poor fishery. The CKMR work aims to improve data in the fishery.
64. The proposed work would be to focus on contamination analysis in the first year of the project, then analyse the data in the preceding years of the project. If the contamination analysis indicates the data cannot be used, more samples may need to be collected before proceeding.
65. The TSSAC noted some confusion around the CKMR project scope, which isn't clear around the contamination analysis work occurring in the first year. The scope needs to be updated to reflect this.

ACTION: TSSAC Executive Officer to seek an update to the close kin mark recapture scope to properly reflect the contamination analysis work in the first year of the project.

66. The TSSAC noted the links between the three finish projects, CKMR, finish biologicals and stock assessment projects. They noted future considerations the RAG needs to make about aging work, and whether this should occur through the biological sample project or CMKR project, or how these could be combined in the future, how and when. They also noted the links to these projects and the frequency of the stock assessment. The FFAG need to advise the TSSAC on this.

RECOMMENDATION: TSSAC Executive officer to request the FFAG to provide information on how the three projects, finfish biologicals, close kin mark recapture, and the stock synthesis stock assessment fit together as long term projects. For example, will every project be required every year? Should the biological sampling project merge with the CKMR project, particularly if epigenetic aging replaces otolith aging? What does the FFAG see as the timeline for these collaborations/

changes to each project to ensure we are maximising cost benefits of projects and not duplicating work.

67. The TSSAC discussed the prioritisation of projects, and which should be released in a call for research, seeking proposals.
68. The committee discussed the possibility of moving the Management Strategy Evaluation to a future year, to free up more funding.
69. AFMA suggested there is little risk to seeking a proposal for this project this year as well, noting if the TSSAC decided to postpone the project to a future year, so as to incorporate the sandfish survey data, or due to budget constraints, the proposal could be easily updated for a future year. However if we do not seek a proposal, and other projects don't receive applications, it will then be too late to seek a proposal for this one.
70. The TSSAC noted the project scopes haven't been gone through in detail, however reflect the presentations on each scope by the AFMA fishery managers. They agreed AFMA and the scientific members can finalise these out of session, to tweak any minor wording changes.
71. The TSSAC discussed the sandfish survey project scope in particular, noting TSRA have commenced a process to understand community support for this project. Initial engagement has shown that the lama community, with conversations led by Charles David, are seeking buy in, economic benefits and involvement in the project. Economic benefits could include employment or selling product.
72. The TSSAC acknowledged that this project is a biomass survey, rather than an exploratory fishing project, so will not be taking product from the sea, only surveying animals and leaving them there, so there will be no product to sell. In 2010, a survey was completed in this same method, which employed an lama community member to be a part of the research team. In 2012, CSIRO led an experimental fishing project which had a 4t quota which was able to be sold, which is a different type of project, and not what we are seeking to do through this proposed project.

RECOMMENDATION: The TSSAC Agreed that AFMA should finalise the project scopes with the scientific members outside of the meeting, for use in the call for research. The Sandfish Survey scope will need to consider any wording required to encourage applicants to seek employment of Torres Strait Islanders in the survey work.



Rolling Five Year Research Plan 2023/24 - 2027/28

Torres Strait Finfish Fishery



Compiled by AFMA with FFRAG advice

June 2023

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 2023/24 to 2027/28. 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 2023/24 to 2027/28.

Proposed Project	Objectives and component tasks		Year project to be carried out and indicative cost*						Evaluation	
		2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	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 and coral trout to support stock assessment.	\$128,000 (currently funded)	\$135,000 (currently funded)	\$162,000 Funding required *Includes 20k for genetic sampling	\$169,000 Funding required *Includes 20k for genetic sampling	\$176,000 Funding required *Includes 20k for genetic sampling	\$183,000 Funding Required *Includes 20k for genetic sampling	Essential	1	1a
Spanish mackerel stock assessment - Stock Synthesis	Need for ongoing assessment of key commercial species.	\$59,000 (currently funded)	\$61,000 (currently funded)	>\$20k <\$60k TBC Funding required	>\$20k <\$60k TBC Funding required	>\$20k <\$60k TBC Funding required	>\$20k <\$60k TBC Funding required	Essential	2	1a
Implement a full-scale Close-Kin Mark-Recapture for Spanish mackerel	<p>Fishery-independent estimate of abundance of the Torres Strait Spanish Mackerel Fishery.</p> <p>The RAG endorsed this project as essential, as an alternate index of abundance will provide greater certainty on the stock status.</p> <p>Project would deliver the most accurate results with at least 5 years-worth of samples.</p> <p>As of 2022/23, 2 years of samples have been collected (of which, one year of samples have been processed).</p>	0	<p>In lieu of a commencing a full-scale study, there is a need to fund the collection and processing of genetic tissue samples of 1000 fish for continuity of dataset.</p> <p>Samples collected in 2022/23 also require processing. (\$17k Currently funded).</p>	<p>Funding required</p> <p>Year 1 of <4+</p> <p>\$10k For contamination analysis (2021/22 – 2024/25 samples).</p>	<p>Funding required</p> <p>Year 2 of <4+</p> <p>\$200k? TBC</p>	<p>Funding required</p> <p>Year 3 of <4+</p> <p>\$200k? TBC</p>	<p>Funding required</p> <p>Year 4 of <4+</p> <p>\$200k? TBC</p>	Essential	3	1a

Torres Strait Finfish Fishery Coral Trout Catch Per Unit Effort Standardisation	<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> <p>The CPUE series is to be based on:</p> <ul style="list-style-type: none"> 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 all available catch and effort data. 	<p>Approved for funding in 2022/23.</p> <p>Analysis has been actioned by QDAF. Endorsed by FFRAG/WG. Report publishing due early 2023/24 FY.</p>	0	0	0	0	0	Essential	4	1a
Harvest strategy development – Spanish Mackerel Addressed through <i>Management Strategy Evaluation of Spanish mackerel for the Torres Strait Finfish Fishery.</i>	<p>The project team will use Management Strategy Evaluation to quantitatively evaluate the performance of candidate Harvest Control Rules (HCR) to complete the elements of a fisheries harvest strategy. This includes using current HS objectives as guidance (developed during project <i>Harvest Strategies for the Torres Strait Finfish Fishery</i>, and engaging with the FFRAG to refine the form of the HCRs.</p> <p>Requirement of Cwth HS Policy and Guidelines to undertake MSE prior to implementation.</p> <p>To be conducted at an appropriate later date.</p>		0	0	0	0	0	Essential	5	1a
Harvest strategy development – Coral Trout	<p>Component projects to progress Harvest Strategy development for the TSFF are being addressed through research priority 3. (CT CPUE Standardisation).</p> <p>Next steps to be progressed after the CPUE project work is completed.</p>		0	0	0	0	0	Essential	6	
Estimating catches outside the commercial fishery.	Acquiring data of catch taken from non-commercial fishers.	Phase 2 currently funded for 2023/24 – 2024/25						Essential	6	1a, 3b

Coral trout stock assessment	Need for ongoing assessment of key commercial species.	The RAG clarified that this research is now essential, given the current interest in increasing the quantum of effort in the fishery. The RAG also noted the ongoing concern of the status of the stock becoming 'uncertain'.	Essential	6	1a
Harvest Strategy and Management Strategy Evaluation (MSE) for coral trout	Requirement of Cwth HS Policy and Guidelines to undertake MSE prior to implementation.	Two separate projects. MSE work requires funding and HS development to be completed first.	Desirable	7	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. Gulf, Qld, Coral Sea connectivity addressed SNPs in CKMR scoping study. The priority is to collect samples from the Gulf of Papua, to further refine the spatial scale of the Torres Strait stock.	Not funded, but listed as a priority for funding for samples to be collected.	Desirable	7	1a, 1b
Regular report on the status of climate change impact on Torres Strait Fisheries	<ul style="list-style-type: none"> - Species specific - Region specific Will consider the yet to be funded CC project.		Desirable	7	2
Shark depredation	Study to investigate increased shark interaction with fishery operations and depredation impact on Finfish Fishery catch rates (how to capture and track over time or investigate potential mitigation options).	<p>Not designed or costed.</p> <p>The RAG recommended that this priority be reassessed as relevant research is completed in other fisheries (jurisdictions).</p>	Desirable	7	1a

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
OTHER BUSINESS	Agenda Item No. 6 FOR NOTING

RECOMMENDATION

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

PZJA Torres Strait Finfish Fishery Working Group	5-6 December 2023
Date and venue for next meeting	Agenda Item 7 For discussion and advice

RECOMMENDATIONS

1. That the Working Group **DISCUSS** and **PROVIDE ADVICE** on the proposed meeting schedule for 2024.

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 2023.

Date	Group	Key agenda items
Jan/Feb 2024 (TBC)	PZJA	Decision on 2024-25 season TACs.
1 July 2024 - Torres Strait Finfish Fishery 2024-25 season opens		
June – July 2024	FFRAG 16 Research Meeting	Review 5-Year Rolling Research Plan. Advise on research priorities for 2025-26.
September 2024	FFRAG 17 Data Meeting*	Review new data available from 2023-24 season to support 2024 SM stock assessment. *Subject to stock assessment being actioned in 2024
November 2024	FFRAG 17/18	Stock assessment update for Spanish mackerel. RBC advice for 2025-26 season.
November 2024	FFWG 2024	TAC advice for 2025-26 season.