

# Torres Strait Tropical Rock Lobster Resource Assessment Group Meeting 31

FINAL Meeting Record

12 October 2021

Video Conference

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



Australian Government

Australian Fisheries Management Authority

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## Meeting participants

### Members

Name	Position	Declaration of interest
Ian Knuckey	Chair	Full declaration of interests provided at <b>Attachment A</b> .
Andrew Penney	Scientific member	<p>Director of Pisces Australis Pty Ltd, an Australian registered marine/coastal research and management consultancy based in Canberra - interests in any opportunities in this regard.</p> <p>Currently Principal Investigator on FRDC Projects Nos 2017-180: Design and implementation of an Australian National Bycatch Report: Phase 1 – Scoping; and 2019-036: Implementation of dynamic reference points and harvest strategies to account for environmentally-driven changes in productivity in Australian fisheries, potentially red leg banana prawns or TRL.</p> <p>Independent scientific member on the AFMA Southeast RAG, the Tropical Rock Lobster RAG and the Small Pelagic Fishery RAG. Member of the AFMA ERA Technical Working Group.</p> <p>No shareholding and hold no positions relating to any other companies, including any fishing companies or industry associations.</p>
Éva Plagányi	Scientific member	<p>Lead scientist for PZJA funded TRL research projects conducted by CSIRO.</p> <p>Contribute to other Torres Strait research projects that receive research funding, including currently Shared science and Indigenous knowledge to support fisheries capacity building in Torres Strait.</p> <p>No other interests in the fishery.</p> <p>Independent scientific member of HCRAG and NPFRAG.</p>
Les Pitt	Traditional Inhabitant member	Traditional Inhabitant Kemer Kemer Meriam and TIB licence holder.
Ray Moore	Industry member	Torres Strait Master Fisherman licence holder and East Coast TRL Fishery licence holder.
Brett Arlidge	Industry member	General Manager, MG Kailis Pty Ltd. MG Kailis Pty Ltd is a holder of 5 TVH licences. Seafood buyer from Torres Strait, Queensland and PNG TRL fisheries.
Selina Stoute	AFMA member	Nil.
Mark Anderson	TSRA member	<p>Economic Development and Fisheries Program manager. Employee of TSRA.</p> <p>TSRA holds multiple TVH TRL fishing licences on behalf of Torres Strait Communities but does not benefit from them.</p>
Georgia Langdon	AFMA Executive Officer	Nil.

## Observers

Name	Position	Declaration of interest
Judy Upston	CSIRO observer	Scientist for PZJA funded TRL research projects conducted by CSIRO.
Rob Campbell <sup>#</sup>	Scientific observer	Independent fisheries consultant with no pecuniary interest in the Torres Strait rock lobster fishery. Former employee of CSIRO and former team member of PZJA funded TRL research projects.
Leo Dutra <sup>^</sup>	CSIRO observer	No other interest in TRL fishery apart from involvement in research. Project lead for FRDC funded project: Shared science and Indigenous knowledge to support fisheries capacity building in Torres Strait. Member of TRL science survey project team.
Graham Hirakawa	Industry observer	TIB licence holder.
Quinten Hirakawa	TSRA observer	TIB licence holder with a TRL endorsement

<sup>#</sup> left the meeting 10:10am

<sup>^</sup> left the meeting at 9:30am

## 1 Preliminaries

### 1.1 Welcome and apologies

1. The meeting commenced at 9:09 am (Queensland time) on Tuesday 12 October 2021. Attendees were welcomed by the Chair, who stated an Acknowledgement of Country on behalf of each participant joining the meeting.
2. Attendees at the RAG meeting are detailed in the meeting participant tables at the start of this meeting record.
3. Apologies were received from:
  - a) Harry Nona, Traditional inhabitant member, Kaiwalagal
  - b) James Ahmat, Traditional inhabitant member, Maluylagal
  - c) James Billy, Traditional inhabitant member, Kulkalgal
  - d) Aaron Tom, Traditional inhabitant member, Gudumalulgal
  - e) Yen Loban, TSRA Observer, Fisheries Portfolio member.
4. Members and permanent observers not in attendance were:
  - a) QDAF member
  - b) Malu Lamar RNTBC representative, observer
  - c) Papua New Guinea National Fisheries Authority representative, observer
5. The RAG noted that the members present did not necessarily equate to a quorum, in accordance with *Fisheries Management Paper 1* (FMP 1), which states that a sensible size for a quorum is a sufficient number of members to conduct business with an adequate spread of responsibility, experience and representation. In the case of RAGs, the number shall be two-thirds of the members.
6. The RAG members in attendance agreed that the outcomes of the meeting would be sent out of session to the other members not present for their input before finalising the meeting record.

## 1.2 Adoption of agenda

7. The draft agenda was adopted without change (**Attachment B**).

## 1.3 Declaration of interests

8. As provided in PZJA FMP 1, all members of the RAG must declare all real or potential conflicts of interest in the Torres Strait TRL Fishery at the commencement of the meeting.
9. Where it is determined that a direct conflict of interest exists, the RAG may allow the member to continue to participate in the discussions relating to the matter but may also determine that, having made their contribution to the discussions, the member should retire from the meeting for the remainder of the discussions on that issue.
10. The Chair requested that members and observers introduce themselves and state their updated declarations of interest. These are detailed in the meeting participant tables at the start of this meeting record.
11. The RAG accepted each member and observers' declared interests and agreed that all members could participate in each agenda item discussion, including agenda item 3 as the RAG was not going to be making formal recommendations relating to the RBC value. No members objected to this process.
12. Given the focussed discussion on research priorities, the RAG also agreed that the scientific members and observers would be permitted to participate in discussions under agenda item 5 however, they could be asked to leave the meeting temporarily for the formulation of RAG recommendations relating to research priorities.

## 2 Updates from members

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13. The RAG noted verbal updates provided by industry members and observers on the performance of the TRL fishery during the 2020-21 season, in particular that:
  - a) Cray movement in the eastern islands has been slow with very little live cray activity. Issues with the community freezer coupled with unfavourable weather has had an impact on all fisheries in the Eastern communities.
  - b) An inner island fisher echoed similar sentiments stating that there has not been a lot of movement of cray and fishing this season has been slow, though not from a lack of fishing effort from his boat.
  - c) Fishers are not fishing differently compared to previous seasons, and effort is considered to be higher, but if there are no crays on the ground, there are no dinghies out fishing.
  - d) Fuel prices and high overhead costs have had an impact on fishing effort.
  - e) Between COVID-19 impacts last season, the ban on Australian lobster product into China and subsequent uncertainty of markets, there has been a considerable negative sentiment across the TRL industry, in both the Torres Strait and the East Coast.
  - f) Several TIB dinghy fishers pulled out of the fishery early on in the season and sought out alternative employment. Low fishing effort early on in the season (February in particular) is thought to be attributed to impacts on prices and partly low lobster abundance. Industry members agreed that abundance on the ground reflected the 2020 pre-season survey results.
  - g) Lack of industry enthusiasm, lower prices and COVID-19 lockdowns all contributed to the TVH sector having limited diver availability resulting in one TVH boat (*Reality III*) not working for most of the season as there was only enough crew/divers to run the *Cape Grafton*. This is largely considered to be why the TVH catches were down this season.

- h) The East Coast TRL Fishery experienced similar challenges, with prices and diver availability, though the TAC was around 74% caught which is an improvement on the previous two seasons.
- i) The start of the 2020-21 season saw very low Cairns prices (approximately \$37/kg, normally around \$80-\$85/kg). December 2020 production was reportedly half the amount of the next lowest production year in the past five years. January 2021 production did not improve much though the prices increased to around \$41/kg (normally \$40-\$50 higher). February saw more industry operators out fishing and prices increased to \$47/kg, with March prices even higher.
- j) TRL production increased from April through to August, particularly in the TIB sector, and by September prices had returned back to 'almost normal'. Initially in the season, TRL markets included Hong Kong, Taiwan and domestic. Prices in mainland China increased substantially without the usual availability of Western Australian spiny lobster and South Australian rock lobster, which had positive flow on effects for tropical rock lobsters from other tropical areas (e.g. Vietnam lobsters were \$30-\$40 higher than ever before). As a result, most Australian tropical rock lobster in the 2020-21 season was sold to south east Asian markets including Thailand, Malaysia and Vietnam.
- k) There has not been any live TRL Papua New Guinea (PNG) product available since the start of the pandemic. Only frozen tailed product is being purchased via sea freight.

### 3 TRL data considerations for setting the 2021-22 season RBC

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#### Reported catch

- 14. The RAG considered an overview of total reported catches the Australia and PNG TRL Fisheries.
- 15. Total reported catch for the Australian TRL Fishery for the 2020-21 season (1 December 2020-30 September 2021) was 234.35 tonnes (55.68 per cent of the global TAC), with 118.43 tonnes (42.72 per cent of the TIB TAC) caught by the Traditional Inhabitant Boat (TIB) sector and 115.92 tonnes (81.50 per cent of the TVH TAC) caught by the TVH sector.
- 16. Total reported catch from Papua New Guinea (January to August 2021) was 84.4 tonnes, however the RAG noted that the total catches for the PNG TRL fishery provided by the National Fisheries Authority (NFA) (refer to TRLRAG 31 – Attachment 3b) was summed incorrectly, as the total columns included the summation of tail weight, converted tail weight and whole weight. The corrected total reported catch for both inside and outside the Torres Strait Protected Zone in PNG jurisdiction is 65.45 tonnes from January to August 2021.
- 17. The RAG also noted that the matter of the PNG outside but near area remains unresolved. AFMA advised that previous advice from the PNG NFA has been that those catches have been taken in what AFMA understands to be the PNG outside but near area and is therefore included in the total PNG catch for the Torres Strait TRL Fishery. The RAG also noted that the latest advice from the PNG NFA is that they have ceased providing exemptions to prawn trawlers to land any trawl caught TRL, however an industry member raised that some trawl caught TRL had been offered to the market recently, which may indicate that some illegal, unregulated and unreported (IUU) trawler-caught lobster is occurring.

#### Implications for empirical Harvest Control Rule (eHCR)

- 18. Having considered the available catch information for both the Australian and PNG TRL fisheries, and acknowledging that the 2020-21 global TAC is substantially under-caught, the RAG discussed the implications of a reduced average total catch value (possibly due to reasons highlighted in Agenda Item 2) on the empirical Harvest Control Rule used to calculate a recommended biological catch (RBC) for the 2021-22 fishing season.

19. The formula for the eHCR includes a multiplier of the average total catch (TIB, TVH and PNG) over the last five years, and a statistic which measures the relative performance of the fishery based on:
  - a) The pre-season survey recruiting lobster (1+) standardised relative numbers (70 per cent weighting);
  - b) The pre-season survey recently-settled lobster (0+) standardised relative numbers (10 per cent weighting);
  - c) The nominal CPUE for the TIB sector (10 per cent weighting); and
  - d) The standardised CPUE for the TVH sector (10 per cent weighting).
20. The RAG acknowledged that the pre-season survey inputs (80 per cent) are unaffected by the factors that have impacted the 2020-21 season, and that the influence of some of these factors can be accounted for in the standardisation of CPUE (accounting for the other 20 per cent of the eHCR).
21. However, the RAG noted that the main concern this season is the lower than expected total catch which impacts the average catch multiplier over the past five years. A low catch year (as in 2019-20) may not be as influential on the eHCR when the total catch is averaged over a five year period, however if the negative average total catch trend was ongoing, it would start to drive the RBC calculation down.
22. While the eHCR has been extensively tested to handle a series of uncertainties and has been demonstrated to be fairly robust, the impacts of exceptional circumstances such as COVID-19 and market collapse, are not accounted for. TRLRAG 30 discussed the need to develop and formally agree some meta rules to help manage exceptional circumstances which may be outside the bounds of conditions the harvest control rule was tested for, rather than continuing to make ad-hoc adjustments.
23. The average catch multiplier is considered to be a check and balance mechanism. If for example, the pre-season survey indicated the upcoming season was going to be an average season, in the absence of any exceptional circumstances, it could be expected that the TAC would be close to, or fully caught. However, if the total catch was artificially low (due to exceptional circumstances) then the RAG may consider making some adjustments to account for the lower catches so as to not unnecessarily reduce the TAC. Alternatively, the RAG could consider applying the default eHCR which will reduce the TAC for next season though is not necessarily scientifically justified.
24. The RAG also acknowledged that neither the catch and effort data, nor the pre-season survey results had yet been analysed, but considered possible preliminary approaches for making adjustments to the 2019-20 and 2020-21 catch values that are used to calculate the average total catch multiplier in the eHCR:
  - a) using the actual average total catch value (default application of the eHCR);
  - b) using the TAC value without any scaling up of catches; or
  - c) using an average proportion of the TAC caught by the entire fishery over the 3 or 5 most recent years (pre COVID-19 impacted years) and applying this proportion to the 2019-20 and 2020-21 TACs to obtain respective catch values for use in calculating the average; it was noted that the average proportion for any year would be capped at 1.
25. The independent scientific member raised some concerns with the level of influence the average catch multiplier has on the eHCR and as an index of abundance. He expressed a preference to use the TAC value as the best estimate of total catch as an ad-hoc adjustment (without any scaling up), claiming that given the TRL fishery is an established, high value fishery with established catching and export mechanisms, it is reasonable to expect that the TAC would be close to or fully caught.
26. The CSIRO scientific member noted that, while a number of major fishery harvest strategies incorporate an average catch multiplier, part of the reason it was included for the TRL Fishery eHCR is because the fishery was undergoing significant change at the time of harvest strategy

implementation including the separation of sectoral catches and the implementation of a quota management system, meaning that an average static value of catches was not appropriate.

27. Notwithstanding that the eHCR can be reviewed in future (though not in time to set a TAC for the 2021-22 season), the CSIRO scientific member's preference was to use an average value that replaces the 2020-21 catch with an estimate based on the percentage of catch against TAC over the preceding 5 years. The RAG noted that to avoid compounding averages, the best approach would be to apply any ad-hoc adjustment that is made this year to the 2019-20 total catch value as well, and then use an average of the proportion of catch against the TAC for the years prior (being stock assessment derived TACs).
28. The RAG considered that the average proportion of catch taken against TAC should apply to the global TAC (rather than by sector i.e. TIB, TVH and PNG separately) for a number of reasons:
- a) the proportion of catch against TAC in earlier years for the Australian fishery was not split between sectors (pre-quota);
  - b) due to COVID-19 impacts, PNG have not been able to access their catch entitlements in Australian waters in both the 2019-20 and 2020-21 fishing seasons; and
  - c) in some years, the TAC was overcaught (and therefore needs to be capped at 100 per cent; to be incorporated in future harvest strategy revisions).
29. Further, there are benefits in using the proportion of catch against TAC (rather than the TAC value) particularly for the PNG sector, given that there is no CPUE data for the PNG Fishery and the only available information is the total catch.
30. **Noting that not all RAG members were present for the discussion, and that the fishery dependent data had not yet been analysed or corroborated with industry anecdotes, the RAG recommended that CSIRO present two different options (as discussed) for dealing with the under-catch in both the 2019-20 and 2020-21 fishing season's data in the eHCR at the next RAG meeting.**
- **Option 1:** replace the actual catch values and substitute them with the TAC value in outlier years (2019-20 and 2020-21); use the actual catches in the three years prior (2016-17, 2017-18 and 2018-19) and apply an average of all five years catch values.
  - **Option 2:** noting that there has been a change in the relative proportion of the TAC caught between the TIB and TVH sectors in recent years, use the combined sector (TIB, TVH and PNG) average catch proportion against the global TAC over the recent five-year period, capping any overcatch at 100 per cent of the TAC, and apply this proportion to the TAC for 2019-20 and 2020-21 to obtain an estimated catch value for those years.

## 4 Climate change impacts on Torres Strait Fisheries

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31. Due to time restraints, this agenda item was not presented or discussed.

## 5 TRL Fishery Research Priorities

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32. Due to time restraints, this agenda item was not presented or discussed.

## 6 Date and venue for next meeting

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33. Due to time restraints, and agenda item 3 being the highest priority for discussion, the RAG agreed that agenda items 4 and 5 could be addressed in a subsequent video-conference meeting, or out-of-session.
34. The 31st TRLRAG meeting was closed at 11:03am (Queensland time) on Tuesday 12 October 2021.

## Declaration of interests

### Ian Knuckey – October 2021

#### Ian Knuckey positions:

Director –	Fishwell Consulting Pty Ltd
Director –	Olrac Australia (Electronic logbooks)
Chair –	Northern Prawn Fishery Resource Assessment Group
Chair –	Tropical Rock Lobster Resource Assessment Group
Chair –	Victorian Rock Lobster and Giant Crab Assessment Group
Chair –	Victorian Central Zone Abalone Fisheries Resource Advisory Group
Chair –	Gulf of St Vincent's Prawn Fishery MAC Research Scientific Committee
Scientific Member –	Northern Prawn Management Advisory Committee
Scientific Member –	SESSF Shark Resource Assessment Group
Scientific Member –	SESSF Great Australian Bight Resource Assessment Group
Scientific Member –	Gulf of St Vincent's Prawn Fishery Management Advisory Committee
Scientific Member –	Tropical Tuna Resource Assessment Group
Scientific Member –	SESSF Resource Assessment Group
Member –	Victorian Marine and Coastal Council
Member –	The Geelong Agri Collective

#### Fishwell current projects:

DAWE Project	Multi-sector fisheries capacity building
AFMA 2020-0807	Bass Strait Scallop Fishery Survey – 2020-22
AFMA 2019-0836	Information the Bass Strait Central Zone Scallop Fishery Harvest Strategy and TAC setting process with economic data and MEY proxies
FRDC project	Principal Investigator for SA Peak Industry body project
AFMA project	Design sea cucumber fishery-independent survey for Coral Sea
FRDC 2019-027	Improving and promoting fish-trawl selectivity in the SESSF and GABTS
FRDC 2019-072	A survey to detect change in Danish Seine catch rates of Flathead and School Whiting resulting from CGG seismic exploration.
FRDC 2019-129	Potential transition of shark gillnet boats to longline fishing in Bass Strait - ecological, cross-sectoral, and economic implications
FRDC 2018-021	Development and evaluation of SESSF multi-species harvest strategies
Traffic Project	Shark Product Traceability
NT Fisheries	Design and implementation of a tropical snapper trawl survey

Sea Cucumber Ass.	Design and implementation of various sea cucumber dive surveys.
Australia Bay	Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery
Tas. Abalone PEMSEA	Scientific Advisor for Tasmanian Abalone Council Ltd Developing EAFM Plan for Red Snapper in Arafura and Timor Seas
Beach Energy	BACI study of Prion Marine Seismic Survey impacts relative biomass of scallops on beds in the immediate vicinity.
Expert Witness	Gladstone Harbour development impacts

**31<sup>st</sup> MEETING OF THE PZJA TORRES STRAIT TROPICAL  
ROCK LOBSTER RESOURCE ASSESSMENT  
GROUP (TRLRAG 31)**

**Tuesday 12 October 2021 | 9am – 11am**

**Videoconference**

**ADOPTED AGENDA**

**1 PRELIMINARIES**

**1.1 Welcome and apologies**

The Chair will welcome members and observers to the 31st meeting of the TRL RAG.

**1.2 Adoption of agenda**

The RAG 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.

**2 UPDATES FROM MEMBERS**

Industry, scientific and government agency members and observers will be invited to provide verbal updates on matters concerning the TRL Fishery.

Industry members in particular, are encouraged to provide updates on fishing patterns, behaviours, prices, and market trends this season.

Detailed updates from industry members will be important to help the RAG better understand fishing patterns this season which may be considered uncharacteristic of a standard fishing season. It will be important for the RAG to consider the potential impacts of these trends when setting a Recommended Biological Catch for the TRL fishery in the 2021-22 fishing season.

**3 TRL DATA CONSIDERATIONS FOR SETTING THE 2021-22 SEASON RBC**

The RAG will discuss and provide advice on options and implications for setting a Recommended Biological Catch for the TRL Fishery in the 2021-22 fishing season, noting that the TAC is expected to be significantly under caught.

As at 8 September 2021, 111 tonnes (39.87% of the TAC) has been caught by the TIB sector, and 107 tonnes (75.28% of the TAC) by the TVH sector.

**4 CLIMATE CHANGE IMPACTS ON TORRES STRAIT FISHERIES**

The RAG is invited to note a pre-recorded video presentation from Leo Dutra (CSIRO) on the outcomes of the project '*Scoping a future project to address impacts from climate variability and change on key Torres Strait Fisheries*'.

**5 TRL FISHERY RESEARCH PRIORITIES**

The RAG will discuss and provide advice on research priorities for the 2022/23 – 2026/27 five year period.

**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 – Georgia Langdon ([georgia.langdon@afma.gov.au](mailto:georgia.langdon@afma.gov.au))**