

Torres Strait Tropical Rock Lobster Working Group Meeting 12

Final Meeting Record

16 December 2021

Cairns / Video Conference

Note all meeting papers and record available on
the PZJA webpage: www.pzja.gov.au



Australian Government

Australian Fisheries Management Authority

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Meeting participants

Members

Name	Position	Declaration of interest
Dr John Glaister	Chairperson	Member of Parks North, Chair of Northern Prawn Management Advisory Committee (NORMAC), Chair of the Torres Strait Prawn Management Advisory Committee (TSPMAC).
Dr Darren Dennis	Scientific member	Former CSIRO employee involved in Torres Strait TRL research, and scientific surveys. No pecuniary interests.
Sevaly Sen	Fisheries Economist Member	Nil interest in Torres Strait fisheries. Conducts various FRDC research projects relevant to AFMA fisheries; Advisor to Sydney Fish Market; AFMA Commissioner; member on the New South Wales Rock Lobster Harvest Strategy Working Group
Aaron Tom	Traditional Inhabitant member	Traditional Inhabitant Gudamalulgal and TIB licence holder
James Ahmat	Traditional Inhabitant member	Traditional Inhabitant Maluililgal and TIB licence holder
Patrick Mills	Traditional Inhabitant member	Traditional Inhabitant Kaiwalagal, member of Torres Strait Scientific Advisory Committee. TIB licence holder with TRL, mackerel and trochus endorsements. Member of Torres Strait Fishers Association.
Mark David	Traditional Inhabitant member	Traditional inhabitant member, Kulkalgal
Les Pitt	Traditional Inhabitant member	Traditional Inhabitant Kemer Kemer Meriam, TIB licence holder and runs an independent freezer facility on Erub Island. Board member of Zenadth Kes Fisheries.
Mark Dean	Industry member	TVH operator
Jerome Kalwij	Industry member	Employee of MG Kailis, manager at Pearl Island Seafoods processing factory
Trent Butcher	Industry member	TVH licence owner
Selina Stoute	AFMA member	Nil
Keith Brightman	TSRA member	TSRA holds multiple TVH TRL fishing licences on behalf of Torres Strait Communities but does not benefit from them
Georgia Langdon	AFMA executive officer	Nil

Observers

Name	Position	Declaration of interest
Brett Arlidge	TRL RAG 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 fisheries. Exporter of TRL.
Yen Loban	TSRA	TSRA Board member and TSRA Fisheries Portfolio member. Board member of Zenadth Kes Fisheries. TIB licence holder with reef line and TRL endorsements.
Daniel Takai	Zenadth Kes Fisheries	CEO of Zenadth Kes Fisheries
Harry Nona	TRL RAG member	Traditional Inhabitant member, Kaiwalgal. TIB licence holder. Board member of Zenadth Kes Fisheries.
Maluwap Nona	Malu Lamar (Torres Strait Islander) Corporation RNTBC	Chair of Malu Lamar.
Dr Ian Knuckey	Chair, TRL Resource Assessment Group (TRLRAG)	Full declaration of interests provided at Attachment A.
Dr Éva Plagányi	TRL RAG Scientific Member	Lead scientist for PZJA funded TRL research projects conducted by CSIRO. 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. No other interests in the fishery. Independent scientific member of HCRAG and NPFRAG.
Quinten Hirakawa	TSRA	TSRA senior project officer. TIB licence holder, with a TRL entry
Tod Spencer	AFMA	Nil

1 Preliminaries

1.1 Welcome and apologies

1. The meeting was opened in prayer at 9:05am on Thursday 16 December 2021. Attendees were welcomed to the 12th meeting of the Torres Strait Tropical Rock Lobster Working Group (TRLWG 12). The Chair acknowledged the Traditional Owners of the various lands on which members were participating from and paid respect to Elders past, present and emerging.
2. Attendees at the Working Group are detailed in the meeting participant tables at the start of this meeting record. No apologies were received. AFMA Senior Manager of National Compliance Tod Spencer joined the meeting via video conference for Agenda Item 7 only.
3. Kulkalgal Traditional Inhabitant member James Billy, TSRA member Keith Brightman and Papua New Guinea National Fisheries Authority representative permanent observer were not in attendance for the duration of the meeting.

1.2 Adoption of agenda

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

1.3 Declaration of interests

5. The Chair advised members and observers, that as provided in PZJA Fisheries Management Paper No. 1 (FMP1), all members of the Working Group must declare all real or potential conflicts of interest in Torres Strait TRL Fishery at the commencement of the meeting. Where it is determined that a direct conflict of interest exists, the Working Group may allow the member to continue to participate in the discussions relating to the matter but 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.
6. The Chair requested that members update the record of declarations. These are detailed in the meeting participant tables at the start of this meeting record.
7. The Chair recommended that specific interest groups did not need to temporarily leave the room to allow their interests to be discussed. The Working Group agreed that all members and observers could be present for each of the agenda item discussions.

1.4 Action items from previous meetings

8. The Working Group noted the final meeting record for TRLWG11 held on 17 December 2020 and that there are no outstanding action items arising from previous meetings.
9. The Working Group also noted and supported the development of the TRL Management History timeline as detailed in the Attachment 1.4d of the TRLWG 12 meeting papers. Members noted that the timeline is intended to be a 'living document' and are invited to comment and contribute to its content. The Chair advised that such a resource was very useful for new people engaging with the fishery and recommended AFMA prepare history timelines for all fisheries.

1.5 Out-of-session correspondence

10. The Working Group noted the out of session correspondence on TRLWG matters since the previous meeting.

2 Updates from members

2.1 Industry members

11. The Working Group noted verbal updates provided by industry members and observers regarding the performance of the Torres Strait TRL Fishery during the 2020-21 fishing season and the very start of the 2021-22 season to date, in particular:
- a) Fishing effort has not been as high as per previous years, as seen in the under-caught TAC for the TIB sector. Industry members attribute this to the impacts of COVID-19, increased fuel prices and at times, limited fuel availability and low buying prices.
 - b) Observations in the eastern islands indicate that there has been some unusual movement of crays (around Erub), with movement heading towards the central islands (Poruma) since the start of the 2021-22 season. This type of movement (in terms of good catches from this area) has not been seen in the past few years.
 - c) There were signs of movement of crays towards the end of the last season and during the off season but concerns still remain around being able to successfully market and sell the product.
 - d) An industry observer added that the current challenges with the export market are unlikely to be resolved in the near future. China still has an 'zero COVID' policy, and that new and ongoing outbreaks are creating negative sentiment within the Chinese market, and therefore demand. As at the start of the 2021-22 season crays are still being sold but there is unlikely to be any substantial improvements.
 - e) A lack of fuel both on Thursday Island and the outer island communities has had a significant impact on industry being able to go out fishing. When one island runs out, there is increased demand on nearby islands. Fuel prices in Badu are as high as \$3 per litre. Industry members and observers agreed there should be a collective approach from affected people to local governments and Seaswift to ensure there is enough fuel capacity to support the industry in the Torres Strait.
 - f) There are a lot of small crays (roughly 80 per cent under 1kg) being caught in the eastern and central areas, with very few crays being observed in the western parts of the Torres Strait, particularly around Thursday Island. One industry member added that this is consistent with the migratory nature of the crayfish; if it is a good season in Kaiwalagal, it might be bad in the east and vice versa. Larger crays are not typically expected to be seen until January which is why most people are only seeing smaller crays early on.
 - g) Another industry member believes there is a large lobster biomass north of Buru, but due to poor visibility, and further distance to travel, that area is not fished very often.

2.2 Scientific and economic members

12. The Working Group noted a brief summary from the TRL RAG scientific member and observer to the Working Group that the pre-season survey was completed successfully despite possible COVID restrictions. The survey team found an even abundance of lobsters across the Torres Strait which was not as patchy as seen in previous years. The Thursday Island region was not looking very positive. 1+ numbers are looking better than in 2020, which means we are expecting a better than average year in 2022, provided the markets can be maintained.
13. 0+ lobster counts were the second lowest on record. The survey team are unsure whether this is due to a timing issue, or a change in distribution. More work is required to investigate this further. TIB and TVH CPUE indices both suggest reasonably high catch rates in the 2020-21 season which corroborates with industry reports of not being able to catch the TAC due to market and export factors, rather than a lack of abundance of lobsters. From a scientific perspective, the RAG can have confidence that the CPUE trends and other indices indicate the under caught TAC is a not due to poor lobster abundance.
14. The Scientific member to the Working Group highlighted that crays that are available to catch in a given year come from 0+ crays that have recruited to the fishery three years prior. As the

industry is only catching one year class, it is less important to leave crayfish in the water season to season.

15. The member further added that historically (in relation to an industry members theory on high biomass north of Buru), there have only been two survey sites north of Buru but that those sites have exhibited high numbers of lobsters and low fishing effort so it would be useful to validate this through some kind of social science approach.
 - a) On the topic of survey sites, the TSRA Fisheries Portfolio member queried whether the survey looked at lobster abundance on reefs 1, 2 and 3, and Dollar reef. He advised that over the last 15 years, fewer and fewer crayfish are being observed and caught on top of the reef and the usual crayfish holes are empty. Fishers do not bother fishing these parts of the reef anymore because the abundance is simply not there, including reefs around Muralag (Prince of Wales) and Horn Island.
 - b) The scientific member noted that in the original baseline survey included a lot more reef 'edge' sites (rather than deep sites) and out of the remaining 77 sites a number of edge sites were removed. The RAG was reminded that the survey provides an estimate of abundance across the Torres Strait Protected Zone but is not going to give a good indication of regional abundance at a high resolution scale.
 - c) The TRL RAG scientific member and observer to the Working Group added that CSIRO are looking more closely at the available habitat data to help explain some of the lobster abundance trends observed. It is challenging trying to understand the exact correlations between the habitat variables and lobster abundance. CSIRO is also starting to collect more data on water temperature in response to concerns around increasing water temperatures and the impact on lobster mortalities, causing higher discard rates. It will be important to continue monitoring the water temperatures, which in turn can affect lobster habitats and therefore lobster abundance given lobsters are very sensitive to temperature changes.
16. The economist member noted that other lobster fisheries around Australia have been facing similar issues to the Torres Strait industry in relation to grey markets through Hong Kong and Vietnam, declining prices in the domestic market for the NSW lobster fishery (which is a domestic market only).

2.3 Government agencies

17. The Working Group noted an overview of key management updates relating to the TRL Fishery with the following items highlighted by the AFMA member:
 - a) The TRL fishery was re-accredited as an approved Wildlife Trade Operation (WTO) on 4 December 2020 under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The approval was made with no new substantial conditions, and only one recommendation (detailed in the agenda paper).
 - b) The Torres Strait TRL Fishery has also been independently assessed by the Australian Bureau of Agriculture and Resource Economics (ABARES) as not subject to over-fishing and not being overfished for another year.
 - c) AFMA is progressing a suite of legislative amendments to both the *Torres Strait Fisheries Act 1984* and the *Torres Strait Fisheries Regulations 1985*. One of the key amendments is to provide the legislative power to require mandatory logbook reporting in the TIB sector. Following PZJA approval to consult on the suite of amendments (expected in February 2022), AFMA plans to discuss the proposed legislative amendments during a round of community visits planned for early 2022. It will be important for AFMA to work closely with organisations such as Zenadth Kes Fisheries to plan how and what a mandatory logbook program might look like for the TIB sector.
 - d) In recent months, AFMA has launched electronic Catch Disposal Records (eCDRs) as part of the mandatory Fish Receiver System. AFMA also hopes to talk more with industry about using eCDRs during their round of community visits planned for early 2022 and will be looking to have PZJA advisory committee members accompany AFMA on those trips.

18. The Working Group noted the following updates from the QDAF member:
- a) The east coast TRL Fishery was around 75 per cent caught of the 195 tonne TAC in the 2021 season.
 - b) A Queensland TRL Working Group meeting was held on 20 August 2021 where industry reported challenges throughout the season associated with the loss of good divers which impacted the total catch.
 - c) Fisheries Queensland have finalised harvest strategies for 13 different fisheries, including Tropical Rock Lobster which means the east coast TRL fishery will now be managed in accordance with that harvest strategy.
 - d) There is a stock assessment currently underway for the east coast TRL fishery (presented by Dr Fay Helidoniotis at TRLRAG 32), which is scheduled to be completed in early 2022.
 - e) A new e-catch platform has recently been released which allows operators in the TRL fishery to report their catches and submit notices electronically. A Working Group meeting is scheduled for early 2022 where fishers will be able to be trained up in the use of the new platform.
19. The Working Group also noted a brief update provided by the TSRA observer that the focus of the TSRA Fisheries Program has been preparing traditional inhabitant members for all PZJA advisory committee meetings and reiterated comments made by traditional inhabitant industry members that fishing effort has been down due to fuel availability, and decreased market prices.

2.4 PNG NFA

20. The Working Group noted that a PNG National Fisheries Authority officer was able to attend the RAG meeting held on 15 December 2021 however was not in attendance for this meeting. The AFMA member provided the following update from the RAG meeting:
- a) NFA are committed to further investigating the increasing use of a new fishing method – the ‘electric spike’ or ‘electrode’ that is being used by some commercial fishers in the Western Province. The electrodes are described as being an electric rod, powered by four rechargeable size D batteries and a switch at one end. Fishers reportedly poke the crayfish with the rod which stuns them from anywhere between 20 seconds up to one minute and allows the diver to retrieve the crayfish without any struggle or damage to the animal. Based on advice from PNG industry operators, the crays revive back to normal when brought back to the storage cage, though to what extent still needs to be confirmed. There are other reports that the use of electrode is also having a negative impact on coral reefs. NFA are working to verify this information and assess the impacts. The RAG noted that the effectiveness of this new fishing equipment could have a significant impact on catch rates and mortality and should be monitored closely.
21. An industry member queried where there is any illegal, unregulated and unreported (IUU) fishing outside the TSPZ (to the west, or north in PNG waters) which could be impacting the availability of lobsters within the TSPZ. AFMA acknowledged that there is a trawl fishery in both Australian and PNG waters but that both PNG and Australia have implemented a ban on the retention of crayfish from prawn trawlers. The Australian fishery maintains around 2.6 per cent of observer coverage which is an important data source that the RAG is looking at to monitor and understand the level of lobsters being caught in the TSPF.
22. The AFMA member noted that the recent footage of a trawler hauling up large catches of TRL has been shared with NFA, who have confirmed they are investigating the matter further. It is known that NFA have previously permitted some PNG trawlers to retain TRL during periods of economic downturn through a permitting system and these catches are reflected in the reported catch history.
23. The AFMA member also noted that it is important for Australia to continue to monitor and understand the interactions of TRL as bycatch in the Torres Strait Prawn Fishery. The Working

Group noted that CSIRO have undertaken a preliminary analysis on the interactions and the TRL RAG has recommended doing further analysis using the data to try and estimate the total Australian prawn catch to be included in the total TRL catch value in the empirical Harvest Control Rule (eHCR). The preliminary analyses indicated that TRL catch in the TSPF can be as little as less than 1 per cent of the total TRL catch, and up to a few percent depending on the extrapolation method used.

24. The industry member also expressed concern about the impact of fishing to the west of the TSPZ (near Deliverance Island) and whether catches of lobsters in that region could impact recruitment into the Torres Strait. CSIRO did undertake some surveys in that area in the late 80s and only found lobsters in small numbers. In terms of larval delivery, recruitment from that region is minor as the main recruitment of larvae into the Torres Strait comes through the Coral Sea gyres.
25. The Working Group noted the request from Traditional Inhabitant Industry members, for representatives of the TRL industry to attend future bilateral meetings between Australia and Papua New Guinea.

2.5 Native Title

26. As Chairperson of Malu Lamar (Torres Strait Islanders) Corporation Registered Native Title Body Corporate (RNTBC), Mr Maluwap Nona noted that on 7 August 2013 the High Court of Australia reinstated the Native Title rights, including commercial fishing in the claimed area of the Torres Strait. Malu Lamar RNTBC was named as the trustee of the 44,000km² area within the Torres Strait. Under section 203(b) of the *Native Title Act 1993* Malu Lamar has a mandated duty of care to support the aspirations of and protect the rights and interests of Torres Strait Islanders.

3 Catch and effort analyses for the 2020-21 fishing season

27. This agenda item was not explicitly discussed as a more detailed summary of catch and effort in the fishery was provided under Agenda Item 4.

4 Total Allowable Catch

28. The Working Group considered an overview of the RAG discussions on the data inputs to the empirical harvest control rule (eHCR) for the TRL Fishery undertaken by CSIRO and presented by Dr Ian Knuckey, Chair of the TRL RAG.
29. The Working Group noted that the key business for the TRLRAG in December is to provide advice on a Recommended Biological Catch (RBC) for the upcoming TRL season.
 - a) The formula of the eHCR is the multiple of the average annual catch over the last 5 years (using available catch from TIB, TVH, PNG) and a statistic which measures the relative performance of the fishery based on the following data inputs:
 - i. Pre-season survey recruiting lobster (1+) standardised relative numbers (70 per cent);
 - ii. Pre-season survey recently-settled lobster (0+) standardised relative numbers (10 per cent); and,
 - iii. nominal CPUE for TIB sector (10 per cent); and,
 - iv. standardised CPUE for TVH sector (10 per cent).

Catch and CPUE inputs

30. The TRL Fishery has experienced a decline in catches in all sectors since 2019, which has been largely attributed to the impacts of COVID-19 and market disruptions.

31. The total reported catch for the Australian TRL fishery (1 December 2020 – 30 September 2021) was 240.3 tonnes, with 123.2 tonnes caught by the Traditional Inhabitant Boat (TIB) sector and 116.3 tonnes caught by the Transferable Vessel Holder (TVH) sector.
32. Total reported catch from Papua New Guinea was 68.17 tonnes (January – the first half of 2021) however, the RAG noted that this number is incomplete for the PNG TRL season. Using the same methodology applied last year (at TRLRAG 30), and assuming an average monthly catch is also caught in the missing months (December 2020 and a completed November 2021), the total extrapolated PNG catch is increased to 81.24 tonnes (1 December 2020 – 30 November 2021).
33. This extrapolated PNG catch results in a total Torres Strait TRL catch of 320.7 tonnes, under a 623.5 tonne global TRL TAC, equating to 51.3 per cent of the TAC. 2021 catches were the lowest recorded since 2009.
34. The most recent point estimates of both the TVH and TIB CPUE indices (standardised and nominal) experienced a decrease since 2020 but still contribute to a slightly positive five-year trend in the empirical Harvest Control Rule (eHCR), each with a 10 per cent weighting.

Pre-season survey inputs

35. The Working Group noted that the pre-season survey provides indices of abundance for recruiting age lobsters (age 1+) and recently-settled lobsters (age 0+), abundance indices by stratum (region) and length-frequency and sex ratios. At the time of the survey, most older lobsters (age 2+) have migrated and those that remain are mostly remnant males.
36. Dive transects were conducted at 77 repeat pre-season sites (with four partial transects) with a total of 356 lobsters were counted and 172 lobsters were measured. The sex ratio of lobsters was 55 per cent males and 45 per cent females.
37. 1+ lobster counts were higher in 2021 than in 2020, however counts of 0+ lobsters were down from last year. The 2021 1+ lobster survey index is well above the long term average and higher than 2020 (more similar to 2018 and 2019 point estimates). Lobster counts were higher in the north western side compared to 2020, and similar to 2019.
38. The 2021 0+ abundance index was the second lowest point estimate abundance recorded since 2017 and well below the long-term pre-season survey average index (2005-2020). The 2021 survey indicated a typical lobster settlement pattern, with most 0+ lobsters counted on the western side of the survey area, though there were very different observations/counts of 0+ lobsters in 2021 (45) compared to 2020 (101). Historically 0+ counts are highly variable between east and west, however contrary to previous years, 0+ lobsters were observed more consistently across the western and eastern sizes. This demonstrates highly variable spatial distribution of lobster settlement year to year.

Application of the eHCR

39. Although the most recent 0+ pre-season survey value, the TIB CPUE and the TVH CPUE values in 2021 (each with a 10 per cent weighting in the eHCR) had come down since 2020, the overall average five-year trend remained positive for all three indices. The 1+ pre-season survey index saw an increase in the 2021 value which maintains a positive slope. This index carries a 70 per cent weighting and is used to best predict how many lobsters are available to be sustainably caught next season.
40. The TRL RAG has been concerned that despite having reasonably good catch rates in the fishery, total catch has been lower-than-expected due to external factors (i.e., market disruptions, and COVID-19 impacts, rather than stock related) in both the 2019-20 and 2020-21 fishing seasons. This can then unjustifiably penalise the TRL industry by driving RBC down.
41. To address this, TRLRAG 31 discussed the implications of a lower-than-expected average catch multiplier on the eHCR and recommended that CSIRO present two different options as an ad-hoc approach for dealing with the anomalous under-catch in both the 2019-20 and 2020-21 fishing season in eHCR.

- **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.

42. The RAG considered a comparison of eHCR RBC outputs (**Table 1**) using the different average catch values with ad-hoc adjustments from Options 1 and 2, as well as the default application of the eHCR using non-adjusted catch values (Option 3) and alternative CPUE indices inputs (Options 4 and 5) as sensitivities.

Table 1. Comparison of eHCR RBC outputs under different options.

eHCR Inputs	Option 1	Option 2	Option 3	Option 4	Option 5
	Index_MY0; Seller; Int1 - using avg catch option 1	Index_MY0; Seller; Int2 - using avg catch option 2	Default - using actual 2021 catch	Alternative CPUE (Mod3) for TIB & TVH - using avg catch option 1	Alternative CPUE (Mod3) for TIB & TVH - using avg catch option 2
Pre-season 1+	1.215	1.215	1.215	0.850	1.215
Pre-season 0+	1.242	1.242	1.242	0.124	1.242
CPUE_TIB	1.058	1.058	1.058	0.108	1.081
CPUE_TVH	1.057	1.057	1.057	0.109	1.086
Ave Catch (t)	518.4	492.44	431.7	518.4	492.44
RBC (t)	614.8	584.0	512.0	617.5	586.6

43. Acknowledging that the eHCR is robust to the TAC being fully caught and was Management-Strategy-Evaluation (MSE) tested under that assumption, the RAG considered that Option 1 would allow the eHCR to continue to be applied without the impacts of external factors hindering the total catch value. By contrast, the RAG noted that whilst it is likely to be more reflective of what actual catches may have been in the absence of COVID-19 and market impacts, Option 2 provides a level of precaution on top of what is already a precautionary harvest strategy. In the event that low catches continue due to external factors (and not low stock abundance), the average catch multiplier will continue to trend downwards and reduce the RBC output.
44. The RAG also noted that the total catch value used in the average catch multiplier should include all lobsters that have died, including those that are sold, those that might die in cages, and those that might be discarded. Given the catches in the 2020-21 season were so low, any substantial mortality of discards would not be very influential in the eHCR calculation for 2021-22.
45. Considering the above, the RAG recommended applying Option 1 as an ad-hoc adjustment to the eHCR which resulted in an RBC value of 615 tonnes (rounded) for the 2021-22 season.
46. Having regard to the advice of the RAG, the Working Group was asked to consider other sources of mortality and catches outside the fishery.
- The Working Group noted that there are no formal estimates of TRL catch available for catches outside the fishery including recreational and traditional catch. Historically, the RAG and Working Group have assumed that the recreational and traditional take of TRL is low and consistent over time. If this was to rapidly change, then the catch inputs in to the eHCR would need to be adjusted. The AFMA member advised that unlike in the Finfish fishery, recreational and traditional catch is not deducted from the TRL TAC.
 - One traditional inhabitant member added that the level of mortality (post-capture) is considered higher than the level of traditional catches.

- c) Acknowledging the importance of recording the total take of TRL in the fishery including lobsters that are taken from commercial catch, mortalities and discards as well as trawl caught TRL, Traditional inhabitant members were supportive of ensuring all discards and mortality is included in the total catch against the TAC.
 - d) The Chair applauded the TIB sector for their initiative to improve the reporting and estimates of discards in the fishery.
47. **Having considered advice from the TRLRAG and any other sources of mortality, the Working Group recommended a global TAC for the Torres Strait Protected Zone (TSPZ) TRL Fishery of 615 tonnes (rounded) for the 2021-22 season.**
48. The Working Group also noted a summary of other items as discussed by the RAG and presented by the RAG Chair including:
- a) an overview of a preliminary stock assessment for the Queensland east coast TRL Fishery.
 - b) a preliminary analyses of Torres Strait Prawn trawl catches of TRL, to be considered further with the aim of obtaining an annual assessment of likely TRL catch to be included in the eHCR.
 - c) A TIB sector initiative to improve the reporting of discards and mortality in the fishery.
49. Further details on these agenda items can be found in the TRLRAG 32 meeting record.

5 Review of management controls

50. The Working Group noted the status of the input control review for the Fishery and the next steps for progressing the assessment of the five proposals:
- a) at its last meeting (TRLWG 11, 17 December 2020) industry members recommended five proposals for changes to management controls in the TRL Fishery for consideration and further input at a broader TRL stakeholder workshop;
 - b) the recommended workshop was convened by AFMA on 26-27 July 2021 with 27 industry members from both the TIB and TVH sectors in attendance. Participants discussed and provided their views on the five proposals identified by industry members from TRLWG 11. A summary of the industry workshop was provided to the Working Group out of session and as Attachment 5a of the TRLWG 12 meeting papers; and
 - c) the next step towards providing advice to the PZJA on input control reforms, is for AFMA to consult with all communities of Zenadth Kes. AFMA is working towards a full round of community visits in March-April and invites industry members to join and assist in those meetings.
51. The Working Group noted advice from the TSRA Fisheries Portfolio member that some communities had requested support from TSRA to convene their own meetings ahead of meeting with AFMA. The AFMA member welcomed this initiative and encouraged the observer to let AFMA know their meeting schedule. AFMA would then aim to organise the community round to accommodate their needs.

6 Research Priorities

52. The Working Group noted an overview of the most recent recommended on research priorities as previously identified by the TRL RAG (detailed Table 1 of the agenda paper for this item) and discussed the following:
- a) The highest 'essential' priority for the fishery remains the need to undertake **fishery independent surveys, stock assessment, harvest control and Recommended Biological Catch (RBC)** work.

- i. A research scope was endorsed by the Torres Strait Scientific Advisory Committee (TSSAC) at their most recent meeting 31 Nov - 1 Dec) and was included in the 2022-23 public call for research proposals.
- a) Undertaking an update to the **2007 Ecological Risk Assessment (ERA)** for the TRL Fishery remains an essential priority.
 - i. The AFMA member advised that CSIRO have confirmed their availability to undertake an updated ERA which will be funded through the AFMA TRL Fishery budget (~\$20,400).
- b) **Improvement of data collection** (to be pursued by the TRL RAG data sub-group) remains an essential priority. The RAG data sub-group is scheduled to meet again in mid-2022.
- c) **Understanding fisher behaviour** and capturing information on the impacts of COVID-19 on the fishery remain essential priorities.
 - i. The economist member noted that the Fisheries Development and Research Council (FRDC) is currently funding a project that is looking at the impact of COVID-19 across a range of Australian fisheries, including lobster fisheries. She offered to connect the principal investigator of the project with AFMA to help better understand the methodology of the project and whether there is any opportunity for collaboration during AFMA's community visits in early 2022.
- d) **Understanding connectivity, environmental drivers and adaptation strategies** also remain an essential priority, noting that a recently funded climate project led by CSIRO (Leo Dutra) that will provide greater insights into available environmental information and advice on what should be collected to develop downscaled climate effects models for Torres Strait Fisheries. More specifically, the RAG supported further work on understanding connectivity, highlighting that a discrete tagging project of 0+ and 1+ lobsters could help better understand any potential disparities between pre-season survey data, and fishery dependent data.
 - i. The Working Group discussed options for citizen science/social science study where industry operators could participate in the sampling/survey of 0+ lobsters. The TRL RAG Scientific member and observer to the Working Group noted that although the 0+ index has a low weighting in the eHCR it can be used to illustrate the relationship between 0+ and 1+ observations in subsequent years. While the 0+ index is still considered an important piece of information, the amount of resourcing required to undertake a dedicated sampling program versus the return on improving the index should be considered. She added that there is lots of value in industry providing anecdotal evidence to help inform and alert the science to any significant changes observed by industry e.g., changes in migration, habitat, timing and distribution. Industry members were encouraged to continue to provide this information during their updates to the RAG and Working Group.
 - ii. Traditional inhabitant members raised concerns with the impact of climate change on Torres Strait fisheries and whether there are any predictions on what might happen to the crayfish under the impact of climate change. The Working Group noted that the scoping study recently undertaken by CSIRO will help us to better understand what information is needed to create downscaled climate change models for the Torres Strait region to try and predict these impacts.
 - iii. The Working Group also noted that as a future research project, it may be necessary to revisit some of the fishery's fundamental research and benchmark surveys to ensure they are still representative in the face of a changing climate.

53. No additional research priorities were tabled by the Working Group.

ACTION ITEM – The economics member to connect the principal investigator of the FRDC project looking at the impacts of COVID-19 on Australian fisheries in touch with AFMA to help better understand the methodology of the project and whether there is any opportunity for collaboration during AFMA’s community visits in early 2022.

7 Overview of AFMA Compliance Risk Assessment Process

54. The Working Group noted a presentation on an overview of the AFMA Compliance Risk Assessment Process that AFMA undertakes every two years to inform AFMA’s compliance activities in both Torres Strait and Commonwealth Fisheries. The presentation was provided by Tod Spencer, AFMA Senior Manager of the National Compliance Strategy.
55. Members sought specific advice on the key risks AFMA currently focused on across Torres Strait fisheries. AFMA advised that its compliance program was still heavily focused on education generally but specifically in relation to the mandatory Fish Receiver System. Industry members recommended that AFMA increase its effort to raise awareness about its compliance program so that industry know what is going on. Industry also wanted more opportunities to give input into the compliance program.
56. The Working Group noted that AFMA intends to build engagement across all Working Groups with AFMA’s compliance risk assessment process to ensure AFMA’s compliance program is properly informed and shaped by industry advice. As recommended by industry members at the meeting AFMA further advised that it would be looking at ways to raise awareness of AFMA compliance program more effectively across industry and communities.

8 Other Business

57. A Permanent observer advised the Working Group that they had received a request during the meeting from fishers on Thursday Island seeking Working Group consideration of implementing two moon tide hookah closure a month rather than the current single monthly closure.
58. The Working Group noted that AFMA’s planned round of community meetings in 2021 would provide an opportunity for fishers to raise this proposal. The Working Group agreed that it is important for the proponents of the recommendation to explain why they would like this management option implemented (what would be the benefit?).
59. Initial views of industry some industry members were mixed. One member did not support the proposal for the TVH section as it would further constrain their operations (add costs from requiring extra steaming and lost fishing days) when they are now constrained in how much they can catch under the quota. An industry member commented that it was a tricky option to assess fully as there may be some benefit to letting the cray have time to aggregate during a closure. Once aggregated they are easier to catch resulting in higher catch rates.
60. The Permanent observer who raised the industry request confirmed that they would provide an update back to the industry and in particular let them know to provide information on why they would like the measure implemented.

9 Date and venue for next meeting

61. The Working Group noted and agreed to the proposed meeting schedule for 2022 as outlined in the agenda paper. The Working Group further noted advice from AFMA that the Working Group meeting proposed for 17 December 2022 may be convened by video conference and focus primarily on TAC advice.
62. In closing some industry members sought advice on how the industry might advocate for more reliable fuel servicing in the Torres Strait. Members reiterated how fishers are being directly impacted from constant fuel shortages. Aside from prices, which are very high in the outer

communities, fishers can't get fuel so can't work the industry. Industry asked whether AFMA or TSRA could make assist by making representations.

63. AFMA advised that although AFMA understood fuel access and price was a significant issue for the industry, it was beyond AFMA's remit. Rather it was a matter for industry to pursue. As an observer, Daniel Takai, CEO of Zenadth Kes Fisheries (ZK Fisheries), advised the Working Group that fuel servicing was a high priority for ZK Fisheries and that they would be making representations on behalf of industry. Other Industry observers confirmed having a similar priority and approach.
64. The 12th TRL Working Group meeting was closed in prayer at 12.30pm on Thursday 16 December 2021.

Declaration of interests
Dr 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	Scientific Advisor for Tasmanian Abalone Council Ltd
PEMSEA	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 impact

**TROPICAL ROCK LOBSTER WORKING GROUP 12
(TRLWG 12)**

**Thursday 16 December 2021 9am – 5pm
The Sebel, Cairns / Video Conference**

ADOPTED AGENDA

1 PRELIMINARIES

1.1 Welcome and apologies

The Chair will welcome members and observers to the 12th meeting of the TRL Working Group.

1.2 Adoption of agenda

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

1.5 Out of session correspondence

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

2 UPDATES FROM MEMBERS

2.1 Industry members

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

2.2 Scientific and Economist members

Scientific and economic members and observers will be invited to provide an update on matters concerning the Torres Strait TRL Fishery.

2.3 Government agencies

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

2.4 Papua New Guinea National Fisheries Authority

The Working Group will be invited to note a verbal update from the PNG National Fisheries Authority.

2.5 Native Title

The Working Group will be invited to note a verbal update from Malu Lamar (Torres Strait Island) Corporation RNTBC.

3 CATCH AND EFFORT ANALYSES FOR THE 2020-21 FISHING SEASON

The WG will be invited to note TRL Fishery catch and effort data for the 2020-21 fishing season, including trends on participation.

4 TOTAL ALLOWABLE CATCH

The WG will be invited to consider advice from the TRL Resource Assessment Group (RAG) on the recommended biological catch (RBC) for the TRL Fishery for the 2021-22 fishing season based on estimates derived through the application of the empirical harvest control rule (eHCR). The WG will then be invited to provide advice on a total allowable catch (TAC) for the TRL Fishery for the 2021-22 fishing season.

5 REVIEW OF MANAGEMENT CONTROLS

The WG will be invited to note the outcomes of the TRL Industry Workshop on reviewing management controls held 26-27 July 2021, including the next steps for progressing the review.

6 RESEARCH PRIORITIES

The WG is invited to discuss and provide advice on future research priorities for the TRL Fishery.

7 OVERVIEW OF AFMA COMPLIANCE RISK ASSESSMENT PROCESS

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

8 OTHER BUSINESS

The WG will be invited to raise any other matters for consideration.

9 DATE AND VENUE FOR NEXT MEETING

The WG will be invited to discuss a suitable date for the next Working Group meeting.

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)