

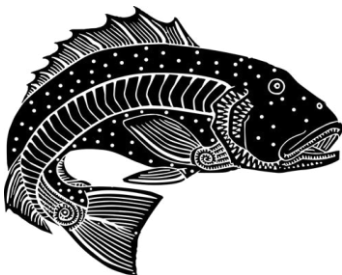
OFFICIAL

Protected Zone Joint Authority

Tropical Rock Lobster Resource Assessment Group (TRLRAG) 40

Final Meeting Record

2 October 2025, Horn Island



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Meeting participants

Name	Position	Declaration of interest
Members		
Dr Tim Ward	Chair	• Associate Professor in Fisheries Science , Institute Marine and Antarctic Studies, University of Tasmania • Chair, Tropical Rock Lobster Resource Assessment Group • Scientific member, AFMA Small Pelagic Fishery Resource Assessment Group • Scientific member, AFMA Sub-Antarctic Resource Assessment Group • Scientific member, Heard Island and McDonald Island Fishery Working Group • Independent Conservation Member, GAB Trawl Fishery Management Advisory Committee • Principal Investigator, AFMA Research Projects (Blue Mackerel DEPM, Scallop Harvest Strategy) • Scientific Advisor, Principal Investigator, Department of Natural Environment and Resources Tasmania (Sardine Fishery) • Independent Conservation Scientist, South Australian Marine Scalefish Management Advisory Committee • Principal Investigator, FRDC Research Projects (various)
Dr Simon Delestang (online)	Scientific Member	Provides research advice on numerous spiny lobster fisheries, both in Australian waters and overseas. No financial interests in any fishing operation or related industry.
Dr Laura Blamey	Scientific Member	Contributes to other Torres Strait research projects that receive research funding, including Torres Strait climate change and fisheries project. No other interests in the fishery.
Mr Isaac Ghee	Traditional Inhabitant Member – Kemer Kemer Meriam	TIB licence holder.
Mr David Baragud	Traditional Inhabitant Member - Kulkalgal	TIB licence holder
Mr Patrick Mooka	Traditional Inhabitant Member – Guda maluylgal	Traditional Inhabitant Member, Guda maluylgal. Zenadth Kes Fisheries member.
Mr Thomas Holland	Traditional Inhabitant Member - Maluylgal	TIB licence holder.
Mr Graham Hirakawa	Traditional Inhabitant Member - Kaiwalgal	TIB licence holder and employed by Torres Strait Seafoods as a TRL fish receiver/processor.

Name	Position	Declaration of interest
Mr Brett Arlidge	Industry Member	Director and CEO of MG Kailis Pty Ltd. MG Kailis Pty Ltd is a holder of 5 TVH licences. Seafood buyer from Torres Strait, QLD and PNG TRL fisheries.
Mr Trent Butcher	Industry Member	TRL TVH licence holder and TVH boat operator.
Mr Keith Brightman	TSRA Member	TSRA Fisheries Project Manager, TSRA holds multiple TVH TRL fishing license on behalf of Torres Strait Communities but does not benefit from them. No personal pecuniary interest.
Ms Jenny Keys (online)	QDAF Member	Queensland Fishery manager of East coast tropical rock lobster fishery, aquarium and coral fisheries. Nil interests.
Mr Ryan Murphy	AFMA Member	Employed by AFMA. Senior Manager for Torres Strait Fisheries. Nil interests.
Ms Georgia Bourke	Executive Officer	Employed by AFMA. Senior Management Officer for Tropical Rock Lobster Fishery. Nil interests.
Observers		
Mr Joseph Posu (arrived at 11am)	PNG National Fisheries Authority	Works in the Fisheries Management Unit responsible for managing the prawn and lobster fisheries in the Western Province. No personal pecuniary interest in the fishery.
Mr Bonny Koke (arrived at 11am)	PNG National Fisheries Authority	Works in the Fisheries Management Unit responsible for managing the prawn and lobster fisheries in the Western Province. No personal pecuniary interest in the fishery.
Dr Eva Plaganyi	CSIRO Invited Participant	Senior research scientist with CSIRO. Contributes to other Torres Strait research projects that receive research funding.
Mr Quinten Hirakawa	TSRA	TSRA employee, TIB license holder with a TRL endorsement.
Mr David Brewer	Interim TRLWG Chair	- Director – Upwelling P/L (David Brewer Consulting). - Honorary Fellow - CSIRO - Chair, Torres Strait Finfish RAG - Chair, Hand Collectables RAG - Scientific member – Torres Strait Finfish Working Group - Current consultancies with Quandamooka Yoolooburrabee Aboriginal Corporation, Ramu Joint Venture Nickel Cobalt Project. - Project member 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.
Mr Daniel Takai	Zenadth Kes Fisheries Ltd	CEO of ZKF. ZKF hold a carrier C licence.

1 Preliminaries

1. The 40th meeting of the Tropical Rock Lobster Resource Assessment Group (TRLRAG 40) was opened at 9:07am on Thursday 2nd October 2025, at the Wongai Beach Hotel, Horn Island. The Chair welcomed members and observers and provided an acknowledgement of Country. Apologies are recorded in the table above. Meeting participants were informed that the meeting would be recorded for the purpose of assisting the preparation of meeting minutes. It was also noted that the minutes from the previous meeting can be found on the [Protected Zone Joint Authority \(PZJA\) website](#).
2. The RAG adopted the agenda (**Attachment A**) as final.
3. The Chair advised members and observers, that as provided in PZJA Fisheries Management Paper No. 1 (FMP1), all members must declare all real and potential conflicts of interest at the commencement of the meeting. Declared conflicts of interest are detailed in the meeting participant's table.

2 Updates from members

4. The RAG noted verbal updates provided by traditional inhabitant and industry members and observers regarding the performance of the TRL fishery during the 2024-25 fishing season, in particular that:
 - a. The weather was an issue in some areas of the fishery, i.e. wind was impacting peoples' ability to go fishing and catch cray (which were abundant).
 - b. There is ongoing IUU fishing at Warrior Reef by PNG fishers with reports of continued use of stun guns, despite their use being banned by PNG authorities.
 - c. It was a very good season right up to the closure, with catches still high in June and July.
 - d. For TVH, despite challenges with freight, it was a good year with good catches and catch rates right across the fishery.
 - e. The abundance on the ground was very positive, which aligns well with the 1+ survey results from 2024.
 - f. There were good signs of small lobsters (0+) suggesting that next year will be good also.
 - g. *Panulirus ornatus* is still deemed a protected species by Chinese authorities which means Torres Strait TRL is not able to be sold into China.
5. The RAG noted updates from scientific members:
 - a. The Torres Strait climate change project is halfway through, with 12 months of mooring data now available as of June 2025. The data from these moorings is helping to fine tune and calibrate hydrodynamic model across the region and support ongoing ecosystem modelling work.
 - b. The National Climate Risk Assessment was released in September 2025 and the Australian Climate Service will be hosting webinars through October and November.
 - c. The next national marine climate briefing is scheduled for 24 October 2025, and there is likely to be a northern focused marine climate briefing later in the year.
 - d. Western Australian rock lobsters are now experiencing significant increases in beach prices (over \$100 per kg, up from \$32 per kg) since the species has been allowed back into China.
 - e. A few marine heat waves across WA in recent years have had a big impact on the reef habitat and macro-invertebrates, with recovery taking a very long time.
 - f. South Australian rock lobster beach prices have also returned to high prices (\$120 per kg).

6. Government agency updates were as follows:

- a. AFMA continues to support high level government discussions regarding the ban on *P. ornatus* into China.
- b. TSRA is looking to convene an inter departmental meeting to discuss illegal, unreported and unregulated fishing matters and broader border control issues in the Torres Strait region. The TRL TIB allocation review is ongoing, subject to further community consultation.
- c. QDPI advised:
 - i. Queensland Fisheries Minister has recently released the Primary Industries Prosper 2050 Paper – 50 year blueprint for Qld Primary Industries. A primary aim is to increase Primary Industries to \$50 Million by 2050 and deliver on the blueprint a Qld Fishing and Action Plan and Regional Action Plans that are being developed. [Primary Industries Prosper 2050 | Department of Primary Industries, Queensland](#) and [Taking action to deliver Primary Industries Prosper 2050](#)
 - ii. 2025 was a good season with 79% of quota taken for the 2025 season compared with 32% in 2024.
 - iii. Queensland is looking to reduce the commercial TRL closed season. Current closed season is 1 October- 31 December
 - iv. The East Coast TRL fishery has a WTO approval in place for 3 years which requires a contemporary estimate of stock by 1 Feb 2028 to inform sustainable commercial harvest levels.
 - v. The current TRL Harvest Strategy is due for a review.
- d. The PNG National Fisheries Authority noted that the PNG TRL fishery was granted Marine Stewardship Council certification. Part of this process resulted in development of a chain of custody. NFA acknowledged that the ability to achieve certification is largely due to the work of their Australian colleagues. NFA expressed their gratitude to their Australian counterparts for their support in this process.

3 Revising the empirical Harvest Control Rule (eHCR)

7. Prior to TRLRAG 40, TRLRAG 37 and TRLRAG 38 had considered a series of Management Strategy Evaluation (MSE) tested options on possible revisions to the empirical Harvest Control Rule (eHCR) under the TRL harvest strategy. This work was undertaken by the CSIRO following a recommendation by TRLRAG 32, that formal revisions to the eHCR be investigated because the average catch multiplier adopted in the eHCR was considered an unreliable indicator when actual catches have been much lower than expected due to non-stock-related reasons (COVID and closure of the Chinese market).
8. In the interim, the RAG had recommended to use the average TAC as the multiplier as an ad-hoc adjustment to the eHCR. Given that previous MSE testing of the default eHCR had assumed that the TAC was completely caught, the RAG was comfortable using this as an interim arrangement but were concerned that it was not actually the formal eHCR stipulated in the Harvest Strategy. Also, testing had revealed that it tended to result in a ratcheting-down effect on the recommended biological catch (RBC) over time. It was planned that a replacement and fully-tested eHCR, that did not involve average catch as a multiplier, could be agreed and formally adopted as part of the Harvest Strategy.
9. In December 2024, both the TRL RAG and TRL WG were unable to deliver consensus advice on a suitable revision to the eHCR. As such, the decision was passed to the PZJA Standing Committee. The Standing Committee felt it important to balance both sets of views between stakeholder groups in the short term, recommending that the PZJA agree to a global TAC of 688 tonnes for the 2024-25 fishing season. This TAC

reflected a midpoint between the TAC outputs derived from the two harvest control rules in question (“Seahorse” – 581 tonnes and “Dolphin” – 796 tonnes).

10. In response to this outcome, CSIRO undertook additional MSE testing on a variant of the Seahorse and Dolphin rules that yielded a similar PZJA-agreed TAC for the 2024-25 fishing season. This harvest control rule is known as the “Osprey”.
11. The RAG considered a presentation from Dr Eva Plaganyi (CSIRO) outlining how and why the eHCR was being revised and an overview of the different rules. The RAG acknowledged that each of the three HCRs under consideration had been scientifically tested and shown to achieve sustainability objectives for the TRL Harvest Strategy. That is, each poses a very low risk to the sustainability of the stock and aims to maintain the stock around the target reference point (i.e., 65% of unfished biomass).
12. The Seahorse rule:
 - a. Is an MSE tested and fine-tuned version of the ad-hoc adjustments that have been made to the default eHCR in recent years that uses the previous season’s TAC value instead of the actual catch multiplier.
 - b. Has low variability in RBC outputs - lower 20-year average RBCs but higher RBCs during poor years and lower RBCs during good years relative to those outputs using the Dolphin or Osprey rules.
 - c. Will track changes up or down much more slowly and with a slow turnaround
 - d. Greater certainty in RBC outputs year to year, expect to generate an RBC in the range of 485t – 644t 80 per cent of the time.
13. The Dolphin rule:
 - a. Is an MSE tested and fine-tuned rule that produces greater variability in RBC outputs – higher 20-year average RBCs, but subject to lower RBCs during poor years, and high RBCs during good years, relative to the Seahorse rule.
 - b. Is more immediately responsive to changes in stock levels and adjusts up and down more quickly, and goes to higher and lower levels on average than the Seahorse Rule.
 - c. Places more weighting on most recent pre-season 1+ lobster index, therefore adjusts the RBC more rapidly and responsively
 - d. Factors in pre-season survey precision and adjusts weighting if less precise survey
 - e. Would expect to generate an RBC in the range of 427t – 919t 80 per cent of the time.
14. The Osprey rule:
 - a. Is an MSE tested and fine-tuned rule that produces a compromise mid-point RBC between other two rules.
 - b. Moderate variability in RBC outputs – higher 20-year average RBCs than the Seahorse rule, but lower than that of the Dolphin rule.
 - c. Places more weighting on most recent pre-season 1+ lobster index that is designed to bring down the RBC more in poor years, but with small bonuses in good years, though the response is not as rapid or drastic compared to the Dolphin.
 - d. Factors in pre-season survey precision and adjusts weighting if less precise survey
 - e. Would expect to generate an RBC in the range of 440t – 791t, 80 per cent of the time.
15. The RAG noted the key trade-offs between the three rules (**Figure 1**) and considered how each rule would perform in a good year, a poor year or an average year (using hypothetical data) relative to a stock assessment RBC (**Figure 2**). In each scenario the CPUE inputs remain the same, but the survey inputs changed to hypothetical data to compare. **Figure 3** is a graphical representation of the hypothetical RBC data.



Trade-offs

	Seahorse 	Dolphin 	Osprey 
Risk below Blim	Low risk	lowest risk	Low risk
Inter-annual catch variability	Lowest variability	Highest variability	Medium variability
Average catch	Lowest catch	Highest catch	Medium catch
Risk of fishery closure	Low risk	lowest risk	Low risk
Most recent survey has more weight?	NA	Yes – large influence	Yes – medium influence
Survey precision included?	NA	Yes	Yes

Figure 1. Summary of different trade-offs between each rule.

EXAMPLE comparing RBCs under different scenarios

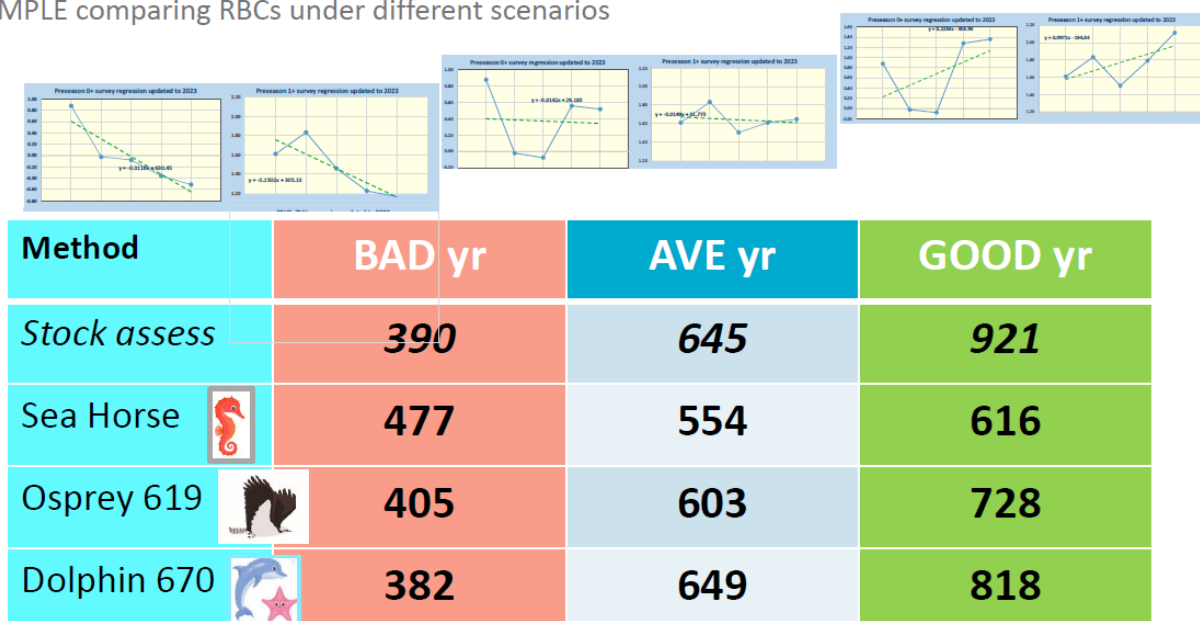


Figure 2. Comparison of hypothetical RBC outputs under different scenarios of bad, average and good years, compared with a stock-assessment.

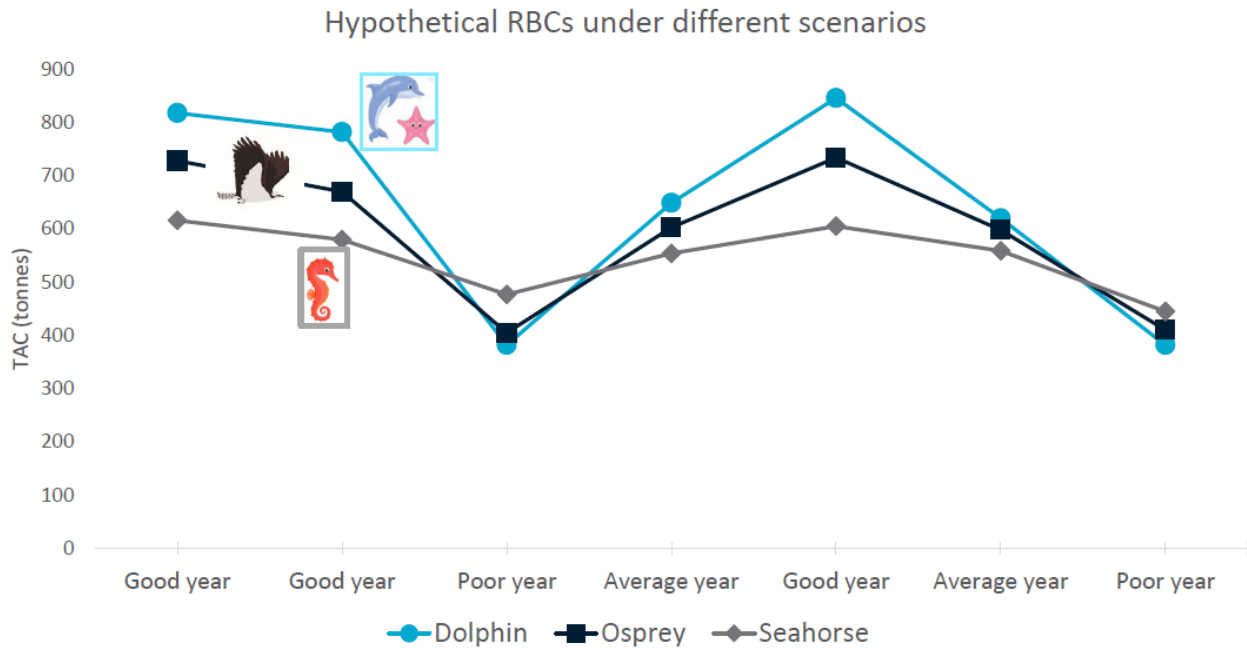


Figure 3. Graphical representation of hypothetical RBC outputs under different scenarios of bad, average and good years.

16. Having regard to the presentation from CSIRO, the **TRL RAG members were unable to reach consensus on an appropriate revision to the empirical Harvest Rule**. Noting that the different sectors of the fishery have different perspectives and cultural drivers, there were disparate views among members.
17. Most traditional inhabitant RAG members supported the Seahorse rule as it provides more stable TACs over time, which is considered 'safe'. However, the Seahorse rule was not supported by several members as it achieves that stability by allowing higher TACs in poor years and constraining the fishery in good years. This could then result in lower catch per unit effort (CPUE) in poor years. There is also a risk that the TIB and PNG sectors could reach or exceed their TAC in a good year, resulting in early fishery closure. The Seahorse rule was considered too slow in its response, locking the fishery into low TACs even when the stock is strong, holding back the TIB sector from opportunity that is deserved.
18. Other RAG members supported the Dolphin rule as it produces more conservative TACs at lower biomass levels with slightly lower risk of breaching the limit reference point. The Dolphin more closely tracks the stock assessment outputs and variation in fishable biomass year to year which provides better fishing opportunities in good years and protects the fishery in poor years. Some members (including all traditional inhabitant members) did not support the Dolphin because of the large variation in TACs year to year, and on average higher TACs compared to the other rules. Factors other than scientific rationale also influenced member's views against the Dolphin.
19. Some RAG members (including one traditional inhabitant member) supported the Osprey as it is considered a balance between two conflicting views, providing an opportunity for consensus by balancing the benefit of stability versus higher TACs. The Osprey was deemed to provide a better distribution of benefits across both good years and poor years and finds a balance between stability in catches (like the Seahorse) and stability in catch rates (like the Dolphin). There was no direct opposition against the Osprey.
20. This advice was agreed to by the RAG in preparation for the TRL WG scheduled the following day.

4 Other business

21. No other business was raised.

5 Date and venue for next meeting

22. Members noted the next meeting of the TRL RAG was scheduled for 9-10 December 2025 on Thursday Island. The meeting was closed at 3:35pm on Thursday 2 October 2025.

Attachment A – Adopted agenda

TROPICAL ROCK LOBSTER RESOURCE ASSESSMENT GROUP 40 (TRLRAG 40)

Thursday 2 October 2025 | 9am – 3pm

**Wongai Beach Hotel
2 Wees Street, Horn Island**

ADOPTED AGENDA

1 PRELIMINARIES

Welcome and apologies

The Chair will welcome members and observers to the 40th meeting of the TRL RAG.

Adoption of agenda

The RAG will be invited to adopt the draft agenda.

Declaration of interests

Members and observers will be invited to declare any real or potential conflicts of interest.

2 UPDATES FROM MEMBERS

Traditional inhabitant members, industry, scientific and government agency members and observers will be invited to provide verbal updates on matters concerning the Torres Strait TRL Fishery including updates on fishing patterns, behaviours, prices, and market trends for the 2024-25 fishing season.

Government agency members will be asked to provide updates relevant to the TRL Fishery relevant to their jurisdictions.

The RAG will also be invited to note a verbal update from the PNG National Fisheries Authority and Malu Lamar (Torres Strait Islander) Corporation RNTBC (if representatives are in attendance) on matters relevant to the TRL Fishery.

3 REVISING THE EMPIRICAL HARVEST CONTROL RULE (eHCR)

The RAG will be invited to consider different options for a revised eHCR, developed and presented by CSIRO, and asked to provide advice on a long-term solution to be applied under the TRL Harvest Strategy.

4 OTHER BUSINESS

The RAG will be invited to raise any other matters for consideration. There is no agenda paper for this item.

5 DATE AND VENUE FOR NEXT MEETING

The RAG is invited to note the dates and draft agenda for the next RAG 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 Bourke (georgia.bourke@afma.gov.au)