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Minutes

Meeting	Northern Prawn Fishery Resource Assessment Group (NPRAG)		
Meeting Number	OOS March 2026	Date	19 March 2026
Location	Online	Time	10am-2pm (AEST)
Members	Dr Ian Knuckey (Chair) Dr Rik Buckworth (Scientific Member) Dr Éva Plagányi (Scientific Member) Dr Denham Parker (Scientific Member) Dr Tom Kompas (Economic Member) Mr Bryan van Wyk (Industry Member) Mr Phil Robson (Industry Member) Ms Darci Wallis (AFMA Member)		
Executive Officer	Ms Lauren Crowley (AFMA)		
Apologies	Mr Ian Boot (Industry Member) Mr Ben Liddell (AFMA) Dr Sean Pascoe (CSIRO)		
Invited Participants	Ms Annie Jarrett (NPFI)		
Observers/Presenters	Mr Brodie Macdonald (AFMA) Mr Brandon Meteyard (NPFI) Mr Roy Deng (CSIRO) Mr Rob Kenyon (CSIRO)	Dr Gary Fry (CSIRO) Ms Margaret Miller (CSIRO) Dr Ian Butler (ABARES)	

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Welcome

The Chair, Dr Ian Knuckey, opened the meeting and welcomed participants, noted in **Attachment A**. The Chair also noted this meeting is a continuation of the 4th of March RAG meeting, held in Brisbane. The draft agenda for this meeting is available at **Attachment B**. The Chair noted apologies, which is 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.

Agenda item 5. Stock Assessment Inputs

The Chair summarised discussions from the meeting on the 4th of March 2026, including the following key tiger prawn stock assessment inputs still to be decided:

- Inclusion of the brown tiger prawn regime shift into the base case or as a sensitivity.
 - While there was broad agreement that there was sufficient evidence a productivity shift for brown tiger prawns had occurred, and it was noted that factoring it in improved the model fit, this is a significant change to the model, and as such, is usually initially introduced as a sensitivity.
- Revised fleet size, noting the structural adjustment following the gear SFR value reduction and that Raptis had gone into voluntary administration.
 - Previous input was 52, with 46 boats fishing in 2025 and further reductions expected from the 2026 season.
 - It was agreed to delay the decision on the fleet size input to consider further information on the fleet restructure and have the final number be as accurate as possible.

NPRAG noted the offline discussions on the undetermined stock assessment inputs between the Chair, CSIRO, NPFI and AFMA. It was proposed that CSIRO undertake two base cases for the 2026 assessment, one with the regime shift and one without, noting:

- NPRAG recognised at the previous meeting that a productivity shift had occurred for brown tiger prawns.
- The inclusion of the regime shift would result in the model more accurately reflecting the reality for the stock and the fishery.
- Conducting two base cases would provide more certainty for RAG consideration of the model outputs, keeping the process of recommending the preferred model inputs and the final total allowable effort (TAE) recommendation as separate as possible (avoiding 'TAE shopping').

Members supported adopting two base cases, consistent with other fisheries when uncertainty is high, noting:

- While NPRAG previously agreed to six sensitivities being run in the 2026 assessment, it was agreed it wasn't necessary or feasible to run all previously proposed sensitivities with two base cases being undertaken.
- Further sensitivity testing could potentially be conducted later if there is a need and CSIRO has capacity to undertake.
- CSIRO advice on higher priority sensitivities noting the current climate:
 - Retaining one more pessimistic and one more optimistic sensitivity, balancing uncertainties being testing, specifically:
 - 'Mid-high fishing power', as it assumes slightly higher average fishing power of a vessel than the base case (i.e. assumes higher fishing mortality).



- ‘Delay difference’ model, as it is a more optimistic model.
- Need to retain ‘Red endeavour prawn’ sensitivity as it is used in MSC assessment.
- ‘No effort threshold’ will be run in the background to understand model behaviour, however, won’t be presented to NPRAG unless it returns abnormal results.
- ‘No constraining effort change’ and ‘estimate season’ were a lower priority to run.

NPRAG considered the CSIRO advice, in particular the proposal to remove the ‘estimate season’ approach. Key discussion points included:

- ‘Estimate season’ uses the model estimate of optimal fishing patterns, instead of the average of the last two, noting changes to the fleet in the last two years may be more representative than a longer time period.
 - Although it was agreed that 2025 fishing season is not representative of the normal fleet operation in a regular fishing year.
 - Given the good recruitment survey results, there is an expectation that fishing pattern could change in the 2026 tiger prawn fishery.
- It was agreed to keep the ‘estimate season’ sensitivity instead of ‘delay difference’ model, due to:
 - Given anomalous 2025 effort, there is greater uncertainty with using the average of the last two fishing seasons.
 - The estimated fishing pattern should be used in the base case instead.
 - CSIRO cautioned that estimating the fishing pattern is computationally intensive, and when applied in the past has on occasion resulted in convergence issues. Hence, it has remained a sensitivity test to date. CSIRO requested flexibility to defer to an average fishing pattern within the base case if convergence issues arose.
 - If estimated fishing pattern model estimation performs poorly, CSIRO will use the average fishing pattern derived from a longer time series (2018–2024) excluding 2025.
- Sensitivity tests for the 2026 stock assessments are agreed, as outlined in **Table 1** below.

Table 1: 2026 Tiger Prawn Stock Assessment sensitivity tests

Scenario name	Models	Fishing power	Weekly pattern	Max. effort change	Combined low effort threshold	No. of species
Mid-High Fishing Power	SSB	Mid-High	Estimated OR long-term av.	100%	4,004	3
Estimate season	SSB	Low	Estimated	100%	4,004	3
Base case plus red endeavour prawn	SSBB	Low	Estimated OR long-term av.	100%	4,004	4

NPRAG considered the fleet size, Minimum Effort Threshold (MET) and fuel prices, discussing the following key points:

Fleet Size

- Noting advice from industry on the practical upper limit (with some uncertainty remaining on the vessel numbers for 2026 season), it was agreed a fleet size input of 36 vessels should be used.
 - Inclusion of fleet size sensitivities was considered, but it was ultimately determined this was unnecessary due to the minimal impact this has on the model outputs.



Minimum Effort Threshold (MET)

- Members considered the need for revisiting the MET at this time, noting remaining uncertainty with ongoing fleet size and industry concerns on operational viability with a reduced minimum effort levels.
- Undertaking a reduced MET as a sensitivity was considered (i.e. ~20% less than the current 4,004 days, around 3,200 days).
- NPFI advised that a MET less than 77-day season would result in economic strain (including potential business closures), noting that an MEY trigger is in place to close the season early if catch rates are low.
- It was agreed that the MEY catch trigger should be reviewed, potentially moving the review period a week or two earlier, noting there is no current risk to stock.
- AFMA noted that a significant factor in the Commission decision to implement a gear SFR value reduction in the NPF was the potential for industry to have longer fishing seasons.
- NPFI advised they would like to keep the full-length season of 122 days, with December 1st as the standard closing date.
- It was agreed the current MET (4,004 days) will be retained for the 2026 base case model, with no sensitivity proposed, noting CSIRO may explore model behaviour around the MET – reporting to the RAG only if issues arise.
- The NPRAG agreed that the MET should be revised when there is more certainty on the fleet structure (i.e., following the 2026 Tiger prawn assessment).

Fuel Price

- NPRAG noted its previous recommendation on fuel price input, with projected AI model figure from Tom Kompas and NPFI fuel price to be provided to CSIRO in mid-April. Due to the recent impacts from the US/Iranian war, spiking fuel prices, the following key points were discussed:
 - It was suggested that the updated model figures not be used, as it would include the spike in fuel prices, with other economic modelling indicating that the spike is temporary and long-term trends remain stable.
- RAG agreed to use the fuel price assumptions presented by Tom Kompas at the March RAG meeting, ignoring short-term volatility caused by the beginning of the US/Iranian war.
- The base cases for the 2026 stock assessment (**Table 1**) were agreed, as presented in **Table 2**.

Table 2: 2026 Tiger Prawn Stock Assessment Models

Regime shift	Models	Weekly pattern	Max. effort change [#]	Combined low effort threshold	Fleet Size
With Regime Shift	SSB	Estimated OR long-term av.	100%	4,004	36
Without Regime Shift	SSB	Estimated OR long-term av.	100%	4,004	36



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Recommendations:

1. NPRAG agreed that two base cases are run (with / without the regime shift), for the 2026 Tiger Prawn Stock Assessment, along with the following base case inputs:
 - a. A fleet size input of 36 vessels.
 - b. No adjustment to the current MET of 4,004 days.
 - c. Using the model estimated fishing pattern instead of 2-year average. If this results in any issues, a long-term average, excluding 2025, will be used (2018-2024).
 - d. Tom Kompas' fuel price presented to the RAG on 4 March 2026 will be the first projection, with a constant price projected forward.
2. NPRAG agreed three sensitivities to be undertaken on the two base cases (**Table 1**), 'mid-high fishing power', 'estimate season' and 'red endeavour prawn'
 - a. Delay difference model, no constraining effort change and no effort threshold may be tested internally by CSIRO to understand the model behaviour but won't be presented unless they result in notable outputs.

Agenda item 6. Sawfish Mitigation Strategy

NPRAG discussed the outcomes of the November 2025 NPFI and FRDC's Sawfish Workshop, noting the following key points:

Gear Mitigation

- Voluntary trials of small bar spacing turtle excluder devices (SBS-TEDs) and thicker throat mesh will continue in the 2026 banana prawn season. These trials remain important to strengthen the evidence base for each gear option.
- Since the workshop, the recommendation proposing mandatory installation of SBS-TEDs in 50% of nets from the 2026 tiger prawn season has been re-considered.
 - It was acknowledged that this timeline is unrealistic because operators require more time to source, manufacture, and adapt TEDs, particularly considering the current uncertainty within industry (i.e. impact of restructure).
- Considering this advice, NPRAG agreed to a revised implementation schedule is more operationally feasible for industry during a time of high uncertainty, while not significantly delaying the roll-out of mitigation measures:
 - The use of the SBS-TEDs would remain voluntary for the 2026 tiger prawn season, rather than mandating 50% uptake.
 - The ongoing implementation timelines are retained, with mandatory installation in 50% of nets from the 2027 banana prawn season and mandatory implementation in all nets from the 2027 tiger prawn season.

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Table 4: Outcomes and timeline of the Sawfish Workshop.

Year	Season	Approach
2026	Banana Prawn	Voluntary trials of SBS TEDs, thicker throat mesh and/or a combination of the two
2026	Tiger Prawn	Voluntary implementation of SBS-TED-70s in 50% of nets
2027	Banana Prawn	Continued mandatory implementation of SBS-TED-70s in 50% of nets
2027	Tiger Prawn	Mandatory full fleet adoption of SBS-TED-70's

Recommendations:

3. Mandatory implementation of gear modification be pushed back to 2027 banana prawn season, maintaining current full fleet adoption timeline.
4. Sawfish handling and release protocols be developed.

Data and Monitoring

- Industry vessels participating in voluntary trials will continue recording sawfish interactions, including TED type and location of interactions in nets. This will support direct comparison and help validate gear performance across a larger sample of vessels.
 - Standardised field sheets are provided by NPFI for recording sawfish interactions.
- That Crew Member Observers (CMOs) and AFMA Scientific Observers (SOs) remain essential for improving species identification, understanding interactions, and supporting long-term mitigation planning.
- Ongoing research, including the Close-Kin-Mark-Recapture project (currently funded to mid-2026) and satellite tagging (funded to late 2026) provide improve information on post-release survival and movement, with potential future required to improve age and growth information.
- Further development of operational guidelines for sawfish handling and release remains a priority to improve crew safety and reduce impacts on captured sawfish.
- The workshop report is currently being finalised by NPFI, with the final copy to be provided to workshop participants and NPRAG as soon as possible.
- The draft sawfish mitigation strategy will be developed by AFMA, in consultation with NPFI, and provided to NPRAG for endorsement in May, with NORMAC approval to then be sought.

Agenda item 7. 2027/2028 Research Priorities

NPRAG noted the following update from AFMA on the annual research process:

- Advice is sought on any research priorities for the 2027/28 funding round, which will be developed into research scopes for consideration at the May meeting.
 - Identification of any priorities should be considered alongside the five-year Strategic Research Plan ([NPF Strategic Research Plan 2024-28](#)).
- Approved research scopes will be incorporated into the NPF annual research statement, to be considered by the AFMA Research Committee (ARC) meeting in August. ARC-approved research scopes are included in the annual call for research proposals in September/October for potential AFMA funding or Fisheries Research and Development Corporation (FRDC) funding.
 - Project proposals for NPF scopes will be considered at the November RAG meeting.
 - The current timeframes allows time for refining scopes prior to the August ARC meeting.



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- The current projects for the three key NPF research work conclude in 2027, with these projects therefore needing to be included in the 2027/28 research priorities:
 - Advancing Sustainability in the Northern Prawn Fishery (Stock assessments) – PI: Denham Parker (Concluding end of 2027).
 - Integrated fishery-independent data for the NPF (IMP/ vessel charter) – PI: Rob Kenyon (Concluding mid-2027).
 - Monitoring interactions with bycatch species using crew member, scientific observer, and integrated monitoring program data collected in the NPF (Bycatch monitoring program) – PI: Gary Fry (Concluding end of 2026).
- Preliminary discussions have occurred regarding cost saving avenues, noting the reduced fleet size (potentially posing less risk) and number of levy payers.
 - Recruitment and spawning surveys are major cost drivers (approx. \$500k–1m annually).
 - Potentially adjusting the recruitment surveys to biennially.
 - Spawning surveys are not aligned with assessment cycles.
 - Considering options to reduce costs of external observer data collection without impacting bycatch monitoring project outcomes.
- While the significant cost of undertaking the surveys was acknowledged, the stock recruit relationship is critical model input (based on the recruitment survey).
 - CSIRO advising that further analysis would be required to understand the implications of reduced survey frequency before and survey redesign to ensure the output isn't compromised.
 - The other benefits of the survey (outside of the tiger prawn assessments) were also noted, such as for banana prawn recruitment indices.
- It was also agreed that the potential MSC implications should be understood before adjusting the survey frequency.
- AFMA confirmed that an AI/EM research scope will be provided for consideration at the May meeting.
- EM will be included as a standing agenda item for RAG meetings, with the EM team members to attend the May meeting to provide a comprehensive update.
- The data collected by AFMA SO's is used by Gary Fry (CSIRO) to verify the CMO data, and the small bycatch data is used in MSC certification.
 - If observers are already onboard collecting data, it would not save money to remove any element from their data collection program.
 - NPF suggested only having observers out every second banana season to save costs with minimal impact on data.
- It was suggested that EM data (once rolled out across the fleet) is compared with observer data from the same trawl to identify any elements missed through EM review.
- NPRAG agreed that any changes to the current data collection and monitoring should not result in the any sustainability or MSC recertification risk to the fishery.
- AFMA advised that the research scopes will be drafted, in line with the RAG recommendations, with input sought from individual members as required and provided with the papers for the May meeting.

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Action 1: CSIRO, in consultation with NPFI and AFMA, to explore redesigning the current annual surveys.

Action 2: AFMA to draft research scopes for endorsement at the May NPRAG.

Action 3: EM Team to provide an update at the May meeting.

Recommendations:

5. Consider a formal appraisal of management changes.
6. Use more engaging wording in project scopes to attract external funding.

Agenda item 8. Other Business/Next Meeting.

Rob Kenyon (CSIRO) provided a verbal update on the recruitment survey indices:

- Overall, there was an increase in the recruitment indices compared with the 2025 survey.
- Brown tiger prawns: Mornington indices increased by 400%, with Vanderlins up by 200%.
- Grooved tiger prawns: Mornington indices doubled, with Vanderlins up by 400% and Groote Eylandt remaining steady.
- Blue Endeavour prawns: Both the Mornington and Vanderlins indices increased, with Groote Eylandt similar to 2025.
- Banana prawns: The gulf-wide indices were ~90% of 2025, with Karumba and Weipa ~50% (although catches still strong) and Mornington up tenfold.
- NPRAG noted that the 5-year review of the Joseph Bonaparte Gulf closure is due in 2026, AFMA to include on the next RAG agenda.

Action 4: AFMA to include the Joseph Bonaparte Gulf closure on the May 2026 RAG agenda.

Next meeting

- Noting members availability was sought at the November 2025 meeting, NPRAG noted the next meeting is scheduled for 5-6 May 2026 to be held in Brisbane.
 - Éva Plagányi is scheduled to be at a conference over that period but intends to attend online on the 5th if possible. Other CSIRO staff will attend in person to present the Tiger MICE work.
 - Some industry members noted they couldn't confirm availability until closer to the date, pending operational requirements.

The Chair closed meeting at 1:10pm (AEST).

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Attachment A – Member, invited participant and observer declarations of interest

Participants	Declared Interest
Chair	
Ian Knuckey	<p>Positions:</p> <p>Director – Fishwell Consulting Pty Ltd</p> <p>Director – Olrac Australia (Electronic logbooks)</p> <p>Chair – Northern Prawn Fishery Resource Assessment Group</p> <p>Chair – Victorian Rock Lobster and Giant Crab Assessment Group</p> <p>Chair – Gulf of St Vincent’s Prawn Fishery MAC Research Scientific Committee</p> <p>Chair – Spencer Gulf King Prawn Fishery Economic Sub-committee</p> <p>Chair – Impacts of algal bloom on SA fisheries</p> <p>Scientific Member – Northern Prawn Management Advisory Committee</p> <p>Scientific Member – Gulf of St Vincent’s Prawn Fishery Management Advisory Committee</p> <p>Scientific Member – Tropical Tuna Resource Assessment Group</p> <p>Scientific Member – SESSF Resource Assessment Group</p> <p>Member – The Geelong Agri Collective</p> <p>Involved in Fish for All Campaign Western Australia</p>
Members	
Rik Buckworth	<p>Director - Sea Sense Australia Pty Ltd</p> <p>Scientific Member – NPRAG</p> <p>Chair - SharkRAG</p> <p>Member – Data Working Group for the GABTF</p> <p>Adjunct Professor – Charles Darwin University</p> <p>Current or anticipated projects with government agencies, CDU and fishing industry for projects in the NT, Torres Strait and Qld.</p> <p>Researcher involved particularly in stock assessment research in NPF. Has in the past and may in future seek and receive funding for research in the fishery.</p>
Tom Kompas	<p>Economic member – NPRAG</p> <p>Employed by University of Melbourne. Research provider. Has in the past and may in future seek and receive funding for research in the fishery.</p>
Éva Plagányi	<p>Scientific member – NPRAG</p> <p>Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery</p> <p>Research provider involved particularly in stock assessment research in NPF</p> <p>Also currently receiving FRDC funding related to development of a GoC ecosystem model.</p> <p>Scientific member of TRLRAG and TS HCRAG</p>
Denham Parker	<p>Scientific member – NPRAG & NORMAC</p> <p>Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery</p> <p>Research provider involved particularly in stock assessment research in NPF</p>
Phil Robson	<p>Industry member – NPRAG</p> <p>Employee of A Raptis and Sons, responsible for managing NPF vessels & an NT demersal fish trawler.</p>

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	Has provided charter for scientific surveys in NPF in the past and may in future. GABIA – Member
Bryan van Wyk	Industry member – NPRAG Employed by Austral Fisheries, a company with SFR holdings in the fishery.
Ian Boot (Apology)	Industry member – NPRAG & NORMAC Managing Director of Austfish, a company that operates NPF vessels. Has a commercial interest in the fishery. NPF broodstock permit holder. Participates in scampi fishing.
Darci Wallis	AFMA member – NPRAG Employed by AFMA, Manager of Northern Prawn Fishery. No interest, pecuniary or otherwise.
Invited participants	
Annie Jarrett	CEO – NPFI Commonwealth Fisheries Association Director Chair – Australian Council of Prawn Fisheries (ACPF) Member of the FRDC selection panel. Invited participant - NORMAC No pecuniary interests Represents the interests of industry
AFMA	
Lauren Crowley	Employed by AFMA No interest, pecuniary or otherwise
Brodie MacDonald	Employed by AFMA No interest, pecuniary or otherwise
Observers / Presenters	
Brandon Meteyard	Employed by NPFI. No pecuniary interests. Represents the interests of industry.
Roy Deng	Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery
Rob Kenyon	Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery
Gary Fry	Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery
Margaret Miller	Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery
Ian Butler	Employed by ABARES. No pecuniary interests, personal or otherwise in the fishery.

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Attachment B – Draft Agenda

NPRAG OOS Online March 2026 meeting

DRAFT AGENDA – Day 1: 19 March 2026 / Time: TBC 1000 – 1400 AEST

Time	Item	Purpose	Presenter
1000	5. Tiger Prawn Stock Assessment 2026 Stock Assessment Inputs	For advice	CSIRO / AFMA
1200	6. Sawfish Mitigation Strategy	For discussion	AFMA
1300	7. 2027/2028 Research Priorities	For discussion	AFMA
1345	8. Other Business / Next Meeting	For information	AFMA
1400	<i>End of Meeting</i>		

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Attachment C – Summary of Actions and Recommendations Out-Of-Session March 2026

Agenda no.	Action item.	Action	Responsible party
7	1	CSIRO, in consultation with NPFI and AFMA, to explore redesigning the current annual surveys.	CSIRO, AFMA, NPFI
7	2	AFMA to draft research scopes for endorsement at the May NPRAG.	AFMA
7	3	EM Team to provide an update at the May meeting.	AFMA EM Team
8	4	AFMA to include the Joseph Bonaparte Gulf closure on the May 2026 RAG agenda.	AFMA
Agenda no.	Rec item.	Recommendation	Responsible party
5	1	<p>NPRAG agreed that two base cases are run (with / without the regime shift), for the 2026 Tiger Prawn Stock Assessment, along with the following base case inputs:</p> <ul style="list-style-type: none"> a. A fleet size input of 36 vessels. b. No adjustment to the current MET of 4,004 days. c. Using the model estimated fishing pattern instead of 2-year average. If this results in any issues, a long-term average, excluding 2025, will be used (2018-2024). d. Tom Kompas’ fuel price presented to the RAG on 4 March 2026 will be the first projection, with a constant price projected forward. 	CSIRO
5	2	NPRAG agreed three sensitivities to be undertaken on the two base cases (Table 1), ‘mid-high fishing power’, ‘estimate season’ and ‘red endeavour prawn’	CSIRO



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		a. Delay difference model, no constraining effort change and no effort threshold may be tested internally by CSIRO to understand the model behaviour but won't be presented unless they result in notable outputs.	
6	3	Mandatory implementation of gear modification be pushed back to 2027 banana prawn season, maintaining current full fleet adoption timeline.	AFMA
6	4	Sawfish handling and release protocols be developed.	AFMA/NPFI
7	5	Consider a formal appraisal of management changes.	AFMA/CSIRO
7	6	Use more engaging wording in project scopes to attract external funding.	AFMA/CSIRO

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