



# Australian Government

## Australian Fisheries Management Authority

### Minutes

<b>Meeting</b>	Northern Prawn Fishery Resource Assessment Group (NPRAG)		
<b>Meeting Number</b>	November 2025	<b>Date</b>	12 November 2025
<b>Location</b>	The View Hotel, Brisbane	<b>Time</b>	8:30am
<b>Members</b>	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 Phil Robson (Industry Member) Mr Bryan van Wyk (Industry Member) Mr Ian Boot (Industry Member) Ms Darci Wallis (AFMA Member)		
<b>Executive Officer</b>	Ms Lauren Crowley (AFMA)		
<b>Apologies</b>	Nil		
<b>Invited Participants</b>	Ms Annie Jarrett (NPFI)		
<b>Observers/Presenters</b>	Mr Roy Deng (CSIRO) Mr Rob Kenyon (CSIRO) Mr Gary Fry (CSIRO) Dr Sean Pascoe (CSIRO) Mr Brandon Meteyard (NPFI)	Dr Ian Butler (ABARES) Dr Richard Cottrell (ABARES) Mr Brodie Macdonald (AFMA) Mr Ben Liddell (AFMA) Mr Geoff Richardson (NORMAC)	

## Agenda item 1. Preliminaries

### a. Welcome and apologies

The Chair, Dr Ian Knuckey, opened the meeting with an Acknowledgement of Country and welcomed participants. The Chair also facilitated the introduction of meeting participants and 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.

### b. Declarations of interests

NPRAG noted, in line with Section 4.14 of [Fisheries Administration Paper 12 – Resource Assessment Groups](#) (FAP12), the requirement for all meeting participants to declare relevant interests, not limited to pecuniary gain, regarding all agenda items proposed for the May NPRAG Meeting. Meeting participants discussed and agreed how declared interests would be managed. Declared interests and how they were managed at the November NPRAG Meeting are recorded in the register at **Attachment A**.

There were no agenda items that necessitated the exclusion of any meeting attendees based on the grounds of actual or perceived conflicts of interest.

### c. Adoption of agenda

The agenda was adopted as final with no changes (**Attachment B**).

### d. Minutes of previous meetings

AFMA noted that the minutes from NPRAG meetings held on February and May were distributed to NPRAG members for feedback prior to finalisation. Members supported the acceptance of the minutes as a true and accurate record of the meeting, which are available on the [AFMA Website](#).

### e. Correspondence

NPRAG noted the recent RAG correspondence as provided by the Executive Officer.

## Agenda item 2. Actions arising from previous meetings

The NPRAG noted the status of action items from previous meetings provided by the Executive Officer, detailed at **Attachment C**, with verbal updates provided on the following actions:

1. The development of the NPF Harvest Strategy remains an ongoing process, with further discussions to occur during 2026, pending outcomes of the Commonwealth Harvest Strategy Policy (CHSP) review.
2. AFMA advised that the ability to make changes to generic fields in the e-Observer app such as weather and gear details is limited, but these inputs do not significantly impact observer workload.
3. The Data Monitoring Working Group (DMWG) discussed changes as part of the broader data strategy development, to be addressed under **Agenda Item 6**.
4. The Climate Risk Framework update to be provided by AFMA under **Agenda item 4b**.
5. An update will be provided by Dr Ian Knuckey on the Ships of Opportunity (FishSOOP) project under **Agenda Item 7**.

### Agenda item 3. Outcomes of out-of-session Items

NPRAG noted a brief update from AFMA on the outcomes of out-of-session items since the May 2025 NPRAG meeting, specifically that the AFMA Commission:

1. Supported advice to retain a total allowable effort (TAE) of 4,014 boat days for the 2025 tiger prawn season.
2. Decided on the implementation of electronic monitoring (EM) in the NPF from 1 April 2027.
  - a. The Chair noted that NPRAG wrote to the AFMA Commission on 18 June 2025, outlining concerns with the EM process.
3. The Chair noted that the AFMA Commission was meeting concurrently to the NPRAG and would discuss the outcomes of the out-of-session NORMAC meeting regarding gear reduction in the NPF.

### Agenda item 4. Update Reports

NPRAG noted updates from industry members, NPFI, AFMA, CSIRO, and ABARES regarding current management arrangements and activities in the NPF, with key points noted below.

#### 4a. Industry member update

- A poor tiger season followed from the poor banana season, with lower tiger prawn catches. This was attributed to cold weather conditions in early August causing an undesirable start to the season, with Gulf temperatures consistently 22-23° Celsius (normally averaging around 24-25°). Weather improved later in the season and catches became more stable.
- While it was noted that it was not the worst tiger prawn season on record, 2008, 2011 and 2017 recorded lower tiger prawn catches, the ongoing poor economic conditions in the fishery have resulted in a greater overall financial impact on the industry than the previous low catch seasons (i.e. there was a \$30 million net economic return [NER] difference between 2017 and 2025).
  - It was suggested that the recruitment indices / other indicators from the poor catch years should be reviewed, including comparing this with the Tiger MICE model for any correlations.
- Some size composition changes were seen, with larger prawns scarce overall (i.e. U6 catches around half compared with 2024).
- While there have been increased prawn prices of 10-15% across the industry, this was insufficient to offset lower catches. Economic pressures and lower catches resulted in most vessels ceasing fishing by early November.
- Getting and retaining good crew remains challenging across the fishery, partially due to the lower catches (meaning lower crew payments), with some operators continuing to top up crew payments to meet minimum wage requirements.

#### 4a. NPFI update

- 46 vessels fished in the 2025 Tiger Prawn season, with the maximum economic yield (MEY) trigger for weeks 12 and 13 not met, resulting in a closing date at the end of week 16 of the season (20 November).
- The 2025 Crew Member Observer (CMO) program had 11 participants in the tiger prawn season and 2 participants in the banana prawn season, with CMO data now starting to come in.
- Preliminary analysis showed lower monthly CPUE in 2025 compared to 2024, although JBG catches were improved from 2024.

- Gear trials have continued, with positive results seen with the 70mm bar spacing (known as a Sawfish/Turtle Excluder Device or STED) and alternative net mesh showing potential for reduced sawfish interactions, particularly the much larger individuals. The outcomes of this work, along with other research, will be considered at the Sawfish Workshop on 13 November.
- Industry is aiming to provide financial data by calendar year, rather than financial year, for input into the economic analysis undertaken by Tom Kompas – increasing accuracy and reducing analysis time.
- Industry recently provided a presentation to the Southeast Arnhem Land Indigenous Protected Area (IPA) committee, with productive discussions and potential further collaboration opportunities in the future.
- Three boats are still fishing, with the timing of the November full moon (6<sup>th</sup>) resulting in many boats finishing up earlier than normal.

#### 4b. AFMA update

- The Climate Risk Framework was endorsed at the September Commission meeting, with a staged implementation across fisheries. The NPF is in Stage 2, with an expert working group review scheduled for mid-2026, including key NPF stakeholders to provide fishery specific input. NPRAG and NORMAC consideration scheduled for November 2026. Fishery-specific data, including outputs from the Tiger MICE project, will be incorporated into assessments to ensure tailored risk evaluations.
- The Ecological Risk Assessment and Ecological Risk Management (ERA/ERM) review is ongoing, with AFMA/CSIRO workshops held in September and November 2025. The NPF Management Team has provided specific feedback based on the recent NPF ERA process. The workshop outcomes will be considered at the next by ERA Steering Group meeting, dates still to be confirmed.
- The progress on the NPF Wildlife Trade Operation (WTO) conditions:
  - Condition 5 (development of an NPF Data Strategy by June 2026) will be discussed under **Agenda Item 6**.
  - Condition 6 (to undertake an EM trial) has been completed.
  - Conditions 7 and 8 (development of a Sawfish Mitigation Strategy and improved Sawfish and Seasnake reporting) will be discussed under **Agenda Item 8**.
- The MAC and RAG review process has been completed, with some short-term actions progressed, including trialling of updated paper / minute templates. Feedback from this trial has been considered, with updates made as appropriate.
- Per a May 2025 NPRAG action, CSIRO conducted a retrospective analysis of climate anomalies during the 2024/2025 summer, noting:
  - Prior to 2024-25 summer, the El Niño–Southern Oscillation (ENSO) forecast was neutral (some models indicating potential La Niña). Neutral conditions were observed, although the new relative ENSO index (accounting for long-term warming) classified 2024 as La Niña.
  - While ENSO can influence the monsoon onset in northern Australia, Bureau of Meteorology (BoM) indicated that the ENSO atmospheric component had limited influence on the 24/25 northern wet season.
  - There is not a forecast for monsoon onset, only rainfall, with the 2024/25 rainfall onset forecast to be later in the west and earlier in the east, although opposite observed.
  - Madden-Julian Oscillation (MJO) modulates northern rainfall, with low 2024/25 activity suggested to be the cause of the late monsoon. There was a pulse in November – December 2024, but this was not enough to trigger the monsoon onset.

- BoM provides fortnightly MJO forecasts, but such forecasts are not used to predict monsoon onset.
  - SST anomaly forecasts predicted to be warmer than average, which was observed.
- The Data Transformation Project was completed in September 2025, with two key focuses:
  - Digitising AFMA data collection platforms,
  - Modernising and simplifying AFMA's back-end data infrastructure.
    - Improvements such as the rollout of the e-observer platform, full implementation of electronic logbooks and catch disposal records, and migration of databases to cloud infrastructure were delivered.
- AFMA and NPFI engaged with Laynhapuy IPA in mid-2025 and continue to engage with Southeast Arnhem Land IPA.

#### 4c. CSIRO update

- The Bycatch Monitoring Project is progressing, with 2024 data processing underway and is expected to be completed in early December.
- The Integrated Fishery-Independent Data/Monitoring Program continues with the Marine Park permit process commenced for 2026.
- Following recent difficulty in obtaining the current netting material used in the surveys, bulk amounts have been purchased, sufficient for the next few years. However, to ensure stock assessment requirements are future-proofed, NPRAG considered options to transition to a more readily available net material.
  - There are currently 8 nets in Karumba for alternate usage, with 4 nets to run for 2 years each before switching.
  - NPRAG suggested an alternative new net material with similar physical structure is identified, with the transition to commence from the 2027 surveys.
- CSIRO highlighted recent publications, including a comparison of fishing power and productivity-based economic models and an analysis of dynamic reference points for redleg banana prawns under climate scenarios.
- The Tiger MICE modelling will be used to inform revisions to the Queensland Gulf Water Plan, with outputs due by mid-2026. This work will assess impacts of water resource development on banana prawns, sawfish, barramundi, and mud crabs.
- CSIRO noted its participation in recent conferences, including the Australian Society for Fish Biology meeting and the Australian Prawn Trawl Gear Forum, which facilitated engagement with NGOs and showcased gear innovation and bycatch reduction efforts.
- A new FRDC-funded Community of Practice has been established to support stock assessment capability, with a focus on collaboration and knowledge sharing among scientists and managers.

#### 4d. ABARES update

- The 2025 Fisheries Status Report was released in September, later than the original July timeline. The 2026 report is already underway and is due in mid-July 2026.
- Suggested option to consider a rolled publication, updating chapters after the latest assessments are taken.
- A trial for a new economic survey technique is being conducted in the SESSF currently, with no timeframe for trials within the NPF.

**Action Item 1:** Industry and CSIRO to work together to find new mesh material with a similar physical structure to the current mesh for future NPF surveys.

**Action Item 2:** CSIRO / AFMA to review recruitment indices and other relevant indicators (including economic data) from lower tiger prawn catch years (2008, 2011, 2017 and 2025), including comparing with the MICE model for any correlations.

#### Recommendations

1. NPRAG agreed to identify and test new net material with similar physical properties and commence the transition from 2027.

## Agenda item 5. 2026 NPF Tiger Prawn Stock Assessment

### 5a. 2026 stock assessment inputs

#### Base Case

NPRAG noted the overview provided by AFMA and CSIRO regarding the base-case assessment parameters, with the following points discussed:

- The red endeavour prawn stock assessment has more uncertainty than the other species assessments (brown tiger, grooved tiger, blue endeavour prawns) input into the bio-economic model and could potentially increase uncertainty in the model outputs if included in the base case.
- The maximum annual effort change (as percentage) was included in the 2024 assessment to prevent significant change in species-specific interannual effort projections in the model outputs. This adverse model behaviour was identified as a result of the NPRAG deciding to alter the MET from being applied in combination (joint species) to being species-specific.
- Other than the minimum effort threshold (MET) and maximum effort change which were included or changed for the 2024 assessment, the other base case parameters have been consistent in recent assessments.
- Economic inputs have been the key driver behind the recent assessment TAE outputs, and additional work by CSIRO shows that the TAE outputs are more sensitive to changes in prawn prices than fuel prices.
  - However, prawn prices across all species have not increased over the last 25 years, with significant increases in fuel prices over the same period.
  - When adjusted for inflation, prawn prices have declined by 70% since 2020 (2023-24 lowest on record), with fuel prices also lower than 2020 (but not the same reduction as prawn prices). Prawn prices would need to double to match current inflation.
  - Members noted that these economic trends reinforce the importance of accurate price forecasting and robust cost modelling.
- Tom Kompas's AI-based fuel price forecasting model outputs had been reasonable accurate projecting short-term price (6–8 months), although further development is required to improve the accuracy of the longer-term projections.
- Noting this, NPRAG agreed that using a constant, rather than dynamic, fuel price in the 2026 assessment would likely be best. However, this decision would be confirmed at the next RAG meeting, pending the latest results on the AI-model to be presented by Tom Kompas.
- NPRAG supported using the data from the 2025 economic survey for prawn price inputs to the 2026 assessment, with NPFI to provide fuel prices at the banana prawn season start to CSIRO in April 2026.

- A total of 46 vessels fished during the 2025 tiger prawn season, with several leaving much earlier in the season than usual. The NPFI economic surveys collect data from 41 vessels was collected, although the model assumes 52 vessels. NPRAG agreed that the best approach for extrapolating this data to better represent the full fleet should be reviewed at the next meeting.
- The heterogeneity across the fleet is a longer-term issue, with significant variation in profitability across the fishery.
- Pending the outcome of the concurrent AFMA Commission meeting considering a potential gear SFR value reduction in the NPF, the 2026 assessment inputs may need to be reconsidered at the next NPRAG.

Sensitivities

NPRAG noted the sensitivities undertaken in the 2024 tiger prawn stock assessment when considering the required sensitivity tests for 2026. The following key points were discussed:

- In addition to the 100% maximum effort change in the base case, three sensitivities were undertaken in the 2024 assessment (no constraint,  $\pm 50\%$  and  $\pm 200\%$  effort change constraints).
- Based on advice from CSIRO, NPRAG agreed that only the no constraining effort change sensitivity was required for the 2026 assessment.
- It was agreed that the previous Marine Stewardship Council (MSC) requirements regarding red endeavour prawns had been met, therefore continuing assessing red endeavour prawns as a sensitivity was appropriate, with harvest strategy control rules in place to trigger management action if required.
- Members agreed that while red endeavour prawn assessment is currently stable, this species has a wide spatial distribution and any future decreases in fleet capacity may lead to a disproportional loss in data on red endeavour prawn compared to the target Tiger prawn species. Hence, its inclusion in the base case may add unnecessary complexity, and uncertainty, without significant benefit.
- It was agreed that other than the  $\pm 50\%$  and  $\pm 200\%$  effort change constraints, all other sensitivities from the 2024 assessment should be undertaken (**Table 1** below).

**Table 1: 2024 Tiger Prawn Stock Assessment sensitivity tests to be undertaken in the 2026 assessment**

Scenario name	Models	Fishing power	Weekly pattern	Max. effort change <sup>#</sup>	Combined low effort threshold	No. of species*
Mid-High Fishing Power	SSB	<b>Mid-High</b>	Last 2-year av.	100%	4,004	3
DDD	<b>DDD</b>	Low	Last 2-year av.	100%	4,004	3
Estimate season	SSB	Low	<b>Estimated</b>	100%	4,004	3
No Constraining effort change	SSB	Low	Last 2-year av.	<b>N/A</b>	4,004	3
No effort threshold	SSB	Low	Last 2-year av.	100%	<b>1</b>	3
Base case plus red endeavour prawn	<b>SSBB</b>	Low	Last 2-year av.	100%	4,004	<b>4</b>

NPRAG considered the new sensitivities proposed by CSIRO:

- Based on the latest outcomes of the Tiger MICE project, demonstrating a regime shift in 1999 for brown tiger prawns, a regime shift scenario was proposed which incorporates an alternative stock-recruitment relationship which reflects climate-driven changes in carrying capacity for brown tiger prawns post-1999.

## OFFICIAL

- While NPRAG broadly supported the use of the latest best available science in the 2026 assessment, it was agreed this decision be deferred to the next NPRAG meeting when the results of further validation undertaken by CSIRO is presented.
- CSIRO also agreed to follow up on the broader implication of the MSC requirements, noting that evidence suggests a regime shift is climate induced rather than caused by overfishing.
- It was agreed that the other outcomes of the Tiger MICE project will be considered at the May 2026 meeting, with their inclusion to be considered for the 2028 stock assessment.
- As the bioeconomic model tends to drastically reduce initial effort in the TAE projections in order to quickly rebuild stocks, the so-called 'discount dip', a TAE averaging approach was suggested. This approach provides a TAE estimate across groups of years using an "averaging" approach (2 and/or 3 year averages have been proposed) as opposed to a unique TAE estimate for every year. The bioeconomic model is still optimised by changing the TAE over the initial 7-year period, but the trajectory of the TAE projections is less dynamic over that period. Based on testing to date, this would not result in any significant biological or economic trade-offs in the long-term, it will smooth the high interannual variability in TAE estimates from the initial projection years.
  - NPRAG supported the inclusion of the TAE averaging as a sensitivity for 2026 assessment.

**Action Item 3:** Dr Tom Kompas to present information on the AI dynamic fuel price model at the next NPRAG meeting (March 2026).

**Action Item 4:** CSIRO to present the latest outcomes on the brown tiger prawn regime shift at the March NPRAG meeting for NPRAG consideration for inclusion to the 2026 assessment (either the base case or as a sensitivity).

**Action Item 5:** CSIRO to follow up on the broader implication of the MSC requirements regarding the implications of the inclusion of a brown tiger prawn regime shift in the NPF stock assessment

**Action Item 6:** CSIRO to present the broader Tiger MICE project outcomes at the May 2026 NPRAG meeting, with their inclusion to be considered for the 2028 stock assessment.

**Action Item 7:** NPF to provide 2025 banana prawn fuel prices to CSIRO prior to the end of April.

### Recommendations

NPRAG made the following recommendations regarding the 2026 stock assessment inputs:

2. No changes to the 2024 base case parameters, including red endeavour prawns remaining as sensitivity (per **Table 2** below).
3. In-principle support for using a constant fuel price projection, pending consideration of the latest AI-fuel price model outputs at the next meeting.
4. The 2025 economic survey prawn price data and fuel prices from the banana prawn season (provided by NPF in April 2026) are used for the 2026 assessment.
  - a. The decisions on two assessment inputs are deferred to the next NPRAG meeting, including the extrapolation process for the 41 vessels from the NPF economic survey and the inclusion of the Tiger MICE regime shift for brown tiger prawns results (in the base case or as a sensitivity).
5. All 2024 sensitivities should be undertaken, except for the  $\pm 50\%$  and  $\pm 200\%$  effort change constraints sensitivities, along with the inclusion of the TAE averaging sensitivity.
6. The other Tiger MICE project outcomes will be considered by NPRAG in May 2026 for potential inclusion in the 2028 stock assessment.

Pending the decision on a gear SFR value reduction, NPRAG agreed some inputs may need to be reconsidered at the next NPRAG meeting.

Table 2. Agreed 2026 Tiger Prawn Stock Assessment Base-Case Parameters

Models	Fishing power	Weekly pattern	Max. effort change	Combined low effort threshold	No. of species
SSB	Low	Last 2-year av.	100%	4,004	3

### 5b. Longer-Term Stock Assessment Updates

NPRAG considered future model improvements beyond the 2026 assessment, noting the AFMA Commission and NORMAC requested advice on longer-term issues, including:

- MET interactions with model, including potential for a dynamic MET.
- Inclusion of banana prawn fishery in tiger prawn bioeconomic model.
- Regime shift implications for stock-recruitment relationships (discussed under **Agenda Item 5a**).

In addition, NPRAG acknowledged the CHSP is currently under review, which could impact the way the fishery is managed (i.e. moving away from MEY targets), fundamentally altering the NPF assessment settings

- ABARES and AFMA noted that there is not a recent update regarding the timeframes for the next CHSP consultation. Currently MSY/MEY is 1.6, well above the CHSP proxy of 1.2 and reflective of the poor economic conditions in the fishery. NPRAG noted that the NPF is the only Commonwealth fishery that uses a model estimate of MEY instead of the proxy and therefore would be the only fishery directly impacted by a change around MEY within the CHSP.
- Members agreed that no major structural changes should be made to the stock assessment until the outcome of this review is known.

#### MET

- NPRAG agreed that any fleet reductions resulting from a potential gear SFR value reduction (concurrently being considered by the AFMA Commission), would likely require a MET adjustment due to the relationship between MET and fleet – although it is not a linear relationship.
- However, the required adjustment could not be assessed until the outcomes of any structural adjustment had occurred. It was noted that the current MET was based on 52 boats fishing until mid-September.
- NPRAG acknowledged that while the purpose of the MET was to avoid substantial effort reductions that would have significant operational impacts on the industry, its implementation could constrain the extent to which management responses outlined in the Harvest Strategy could be applied. While the MET limited the model reducing the initial TAE outputs, MEY was still optimised over the initial 7-year period (offset through delayed increases in TAE).
- Prawn prices have not kept pace with inflation and continuing increases in operational costs, with the current fishery economic conditions / viability something to be considered in any future changes to the MET.
- The interaction of the MET with the NPF Harvest Control Rules and the NPF Performance Monitoring Framework (PMF) also needs to be considered. The MET impact on the PMF triggers was acknowledged, as the minimum days would have been breached in some years if the MET had not been in place – noting that this was a combined trigger with minimum SFR value.

- Noting this, NPRAG agreed that the NPF PMF should be reviewed by NPFI, in consultation with AFMA and CSIRO as required.

Integration of banana prawn data into the bioeconomic model

- NPRAG noted the outcomes of the 2022 CSIRO research to include banana prawn costs and catch/effort data into the bioeconomic model, including:
  - Overall profitability in the fishery is largely dependent on banana prawns, which are highly variable, largely due to environmental drivers (monsoonal rainfall).
  - As the banana prawn fishery is not included, the current model over-estimates the optimal level of effort to be applied to tiger prawns, except during periods of very low banana prawn abundance, as effort cannot be 'allocated' to the banana prawn fishery.
- The inclusion of banana prawn data into the bio-economic model has been a future NPF research priority in the recent Annual Research Statements, however, to date has not been as high priority as other NPF research.
- It was acknowledged that full integration of the banana prawn fishery into the NPF stock assessment (i.e. not just the costs, catch and effort data) was not considered practical due to high variability of banana prawns and other fundamental differences between the fisheries.

Noting the CHSP review and potential gear SFR value reduction, NPRAG agreed that the MET review and addition of banana prawn data are considered as part of the 2028 NPF stock assessment process, with initial discussions to occur at the May 2026 meeting.

**Action Item 8:** AFMA to outline processes and timeframes for the 2028 assessment to be considered at the May 2026 NPRAG meeting.

**Action Item 9:** NPFI, in consultation with AFMA and CSIRO, review the NPF Performance Monitoring Framework.

**Action Item 10:** AFMA to prepare a paper for the May NPRAG meeting addressing the MET review.

**Recommendations**

7. An MET adjustment and the inclusion of banana prawn data should not be implemented in the 2026 stock assessment. Instead, these should be considered as part of the 2028 NPF stock assessment process, with initial NPRAG consideration at the May 2026 meeting.
8. Consideration of the implications of any CHSP changes is delayed until further information is available on the review outcomes.

**Agenda item 6. Data Collection**

**6a. Electronic Monitoring Implementation Data Requirements**

In August 2025, the AFMA Commission decided to implement EM in the NPF from 1 April 2027, to verify logbook interactions of Endangered, Threatened, and Protected (ETP) species. NPRAG considered data requirements that may be impacted by Electronic Monitoring (EM) implementation and to consider options for maintaining essential data collection in a cost-effective manner.

The following key points were discussed:

- Alternative collection methods are required for some elements of the data currently collected by observers, that cannot currently be collected by EM, including:
  - Species distribution sampling

## OFFICIAL

- Commercial prawn sampling
- Bycatch catch composition sampling
- Species ID of smaller ETP species, such as sea snakes and Syngnathids
- Noting this, NPRAG provided advice on these data components:
  - Both the species distribution and bycatch catch composition data are essential, with the former required for future updates to the species distribution model (key input in the NPF stock assessment) and the latter used in key analysis for the MSC re-certification process.
  - Although the commercial prawn sampling data has potential use to update biological information in the NPF assessment, it is not currently used and therefore was considered a low priority.
  - Alternative processes are required to maintain sufficient levels of species ID for smaller ETP species.
- In addition, NPRAG noted that EM cannot provide equivalent information on post-capture life-state of ETP species, currently recorded by observers.

Noting that maintaining full observer coverage alongside EM is financially unsustainable, especially considering the current severe economic pressure in the fishery, NPRAG agreed that cost-effective solutions are essential. The following approaches were discussed:

- Undertaking periodic projects to collect required species distribution data, rather than annual sampling.
- Crew-based sample collection for bycatch samples (e.g., freezing random bins pre-sorting).
  - Industry noted the current additional work being asked of the crew (i.e. sawfish sampling), with existing issues in finding and retaining crew. Therefore, additional workload should be carefully considered and prioritised to prevent crew fatigue.
- Retaining a reduced level of AFMA observer coverage (i.e. 50% of current levels, 1%) to maintain a level of annual bycatch catch composition and species distribution sampling across the fishery.
  - CSIRO noted that this is very low coverage but would be preferable to no observer coverage.
  - Members highlighted the risk of losing observer expertise if coverage is reduced significantly. NPRAG agreed that continuity of skilled personnel is critical for accurate species identification and data integrity.
- Low level sample collection by the CMO program, due to the higher level of spatial and temporal coverage, noting further consideration is required of what is achievable from an operational standpoint.
  - However, it was agreed that CMOs would not have the capacity to undertake full processing of species distribution or bycatch samples at sea.
- Based on costings provided to date, the EM program costs were slightly higher than the current observer costs. There NPRAG acknowledged even a reduced level of observer coverage would increase overall data collection costs, which was not feasible for industry due to the current economic circumstances in the fishery.
  - NPRAG requested AFMA provide estimated costings of a reduced observer / EM review rates for consideration at the next meeting.
- Noting this, NPRAG considered a potential initial reduction in EM review, with this saving used to help fund a project to 'train' an AI model to (at a minimum) detect larger TEP species, but ultimately aim to identify large TEPs to species level, with the goal of significantly reducing review costs whilst moving forward with integration of EM.
  - Members noted that detection of large ETP species is technically straightforward, significantly reducing manual review costs (as AI would mark the events for review).

## OFFICIAL

- In addition, it was agreed that any project should also aim to identify TEPs to species level, which should be possible with a reasonably high degree of confidence (based on recent AI footage review projects in other fisheries).
- NPRAG noted that this should be able to occur within 12-18 months if sufficient levels of footage were available, with ~1 year of footage across the fleet suggested as the required.
- The potential of using the extensive image database from CMOs / AFMA observers could potentially be used as well (although there are likely limitations as this would be at different angles etc. to the EM footage).
- NPRAG supported proposing an initial reduced level of EM review (i.e. 5%) for consideration by the AFMA Commission, with savings to be used to fund development of an AI-detection and identification model. This notes the reduced level does not have a scientific justification, however, its only proposed on a short-term basis and its outcomes are intended to reduce review costs, potentially allowing higher levels of review to be achieved in the future.

**Action Item 11:** AFMA to provide costings of alternative observer coverage levels / EM review rates for consideration at the next meeting (March 2026).

**Action Item 12:** AFMA to explore options AI-based automation for EM review and develop a project proposal in consultation with NPFI, NPRAG Chair and CSIRO for consideration at the next meeting (March 2026).

#### Recommendations

NPRAG provided the following recommendations regarding EM implementation data requirements:

9. AFMA observer coverage should be maintained for the 2026 banana prawn season, with further discussions on 2026 tiger prawn season coverage to occur in early 2026, considering 2026/27 AFMA budget and EM system installation processes (EM funding ceasing on 30 June 2026).
10. The AFMA Commission considers the NPRAG proposal of an initially reduced level of EM review of 5%, with savings to be used to fund development of an AI-model to detect / identify larger ETP species.
11. NPRAG recommended prioritising species distribution and bycatch composition sampling, to be undertaken through a lower level of AFMA observer coverage, pending consideration of revised EM and observer cost being provided by AFMA.

#### 6b. NPF Data Strategy Development

- NPRAG noted the WTO condition requiring development of a Data Strategy for the NPF by 30 June 2026, which was recently updated to take account of the NPF Data Collection and Monitoring Program review currently underway.
- The purpose of the NPF Data Strategy is to outline the data collection and monitoring requirements to support the ongoing assessments and management in the fishery.
- NPRAG emphasised the need to understand cost implications before finalising the strategy.

**Action Item 13:** AFMA and NPFI to report workshop outcomes to the NPRAG in March for NPRAG endorsement of Data Strategy draft inputs.

**Action Item 14:** AFMA to organise a Data Workshop in March 2026 to review monitoring priorities and options and develop the NPF Data Strategy.

#### Recommendations

12. NPRAG endorsed the following approach proposed by AFMA, noting the need to align with AFMA Commission expectations and budget cycles:
  - a. NPF Data Workshop held adjacent to the next NPRAG meeting to provide recommendations on the ongoing NPF data collection and monitoring needs.
  - b. NPRAG endorsement of the key NPF Data Collection and Monitoring Protocols (DCMP) elements at the next NPRAG meeting (March 2026).
  - c. AFMA / NPFI to develop a draft NPF Data Strategy, incorporating agreed DCMP elements, for consideration at the May 2026 NPRAG meeting.
  - d. NORMAC consideration / endorsement sought following NPRAG meeting (May/June 2026).
  - e. Final NPF Data Strategy published on AFMA website by 30 June 2026.

### **FishSOOP Project Update**

Dr Ian Knuckey presented an update on the FishSOOP project managed by IMOS and the University of NSW.

- Data coverage has expanded significantly, with over 165 vessels participating across the Austral-Pacific region. In particular, the project has increased available data in Northern Australia which has been a gap, with over 250,000 data points now available from NPF alone.
- A new web interface is being launched, allowing users to access historical and near-real-time data, including temperature anomalies and depth profiles. It was noted that the upload of the NPF data occurs at the end of each season, as agreed with the industry.
- NPRAG noted the potential to use FishSOOP data for validating satellite observations and improving climate models relevant to prawn recruitment, with the more benefit shown the greater the likelihood that IMOS will continue their support in the future.

### **Agenda item 7. Tiger MICE Project Update**

Dr Éva Plagányi (CSIRO) provided a preliminary update on the project “Methods to account for climate impacts in fisheries models and management: Case study example of environmental contributors that affect Tiger Prawn population dynamic”, known as the Tiger Prawn MICE project. Members noted the following key points:

- Project milestones were delayed due to higher than expected processing requirements for seagrass and prawn samples, with completion now expected by May next year.
- Brown tiger and blue endeavour prawns have a narrower temperature tolerance of the NPF target species, making them highly sensitive to climate changes (i.e. reducing juvenile survival).
- Recent years have recorded the warmest sea surface temperatures on record, with anomalies linked to ENSO and IOD variability and delayed monsoon onset.
- Some of the key recent work in the project includes:
  - Developing heat stress indices, similar to the degree heating week monitoring for coral reefs, calibrating this for prawns to identify cumulative thermal stress based on individual species temperature tolerance.
  - Cross calibrating river models (only available up until 2019) with river flow gauge data to use as a key input in the model moving forward – with a reasonable correlation achieved to date.
- The project will also develop guidelines for incorporating climate variables into fishery models, including technical steps for practitioners.

NPRAG noted the presentation from Rob Kenyon (CSIRO) on the November 2024 fieldwork to support the MICE project, including the following preliminary results:

- The processing of the prawn samples has been completed, with seagrass samples still being processed.
- Preliminary comparisons 2024 and 1980's survey data shows:
  - An overall comparable juvenile prawn abundance between surveys, with similar prawn abundance at many survey sites.
  - Seagrass communities' species composition has changed, with some of the more exposed survey sites showing a succession from the 'coloniser' species to the more established 'climax' species (which would support a higher biomass of juvenile prawns).
- NPRAG thanked Rob, Eva and the team for their work, noting the importance of this work for the future research and management in the fishery.

## Agenda item 8. Sawfish WTO/MSC Conditions

### 8a. MSC Sawfish Condition Requirements

NPRAG discussed the MSC condition that requires '*demonstration that the tiger prawn and white banana prawn sub-fisheries do not hinder the recovery of sawfish species with >80% probability certainty*'. The NPRAG considered the three elements of this condition:

1. Demonstrating reduced impact from NPF fishing activity.
2. Showing this reduction with >80% probability.
3. Ensuring recovery of sawfish species is not hindered.

The following points were noted:

- Narrow sawfish were recently reassessed under the EPBC Act, and their listing remains 'Migratory'.
  - Other species of sawfish (green, dwarf, large-tooth) have very low interaction rates but are listed as vulnerable or endangered under the EPBC Act.
  - The multi-species recovery plan for sawfish and river sharks is currently under review.
  - Mitigation measures such as gear trials, TED modifications, and EM will take time to show measurable impact.
- Narrow sawfish accounts for more than 90% of NPF interactions.
- Preliminary results of the Close-Kin-Mark-Recapture (CKMR), led by Toby Patterson from CSIRO, estimate approximately 50,237 breeding adult narrow sawfish, noting wide confidence intervals (4,263 to 604,243 individuals).
  - Continued collection of samples are required to improve the precision of CKMR estimates.
- These population estimates will be essential to contextualise the NPF interaction rates and mortality rates, with the current tagging project to support available life-history parameters, to demonstrate the actual impact of the NPF on narrow sawfish populations.
- NPRAG agreed that NPF should seek further clarity from the NPF MSC assessment team regarding demonstrating a reduced NPF impact with 'an 80% probability' and what 'not hinder recovery' means in practice.
- Members highlighted the need to reduce uncertainty in CKMR population estimates, continuing to collect additional samples, with an additional ~700 samples required to reduce uncertainty for a population of around 50,000.
- Additional population modelling within the MICE framework was suggested as a way to refine assessments and support compliance with the MSC condition.

- NPRAG noted the mortality estimates across small and large animals, with species other than narrow sawfish have less overlap with fishing grounds due to their preference for estuarine habitats.
  - NPRAG agreed that comparing fishing mortality with natural mortality for different species and sizes would provide useful insights.
- It was noted there is potential to expand the current project (dependent on resources / funding), to estimate interaction and mortality rates using current biomass and life-history parameters.
  - It was agreed that further consideration was needed on how to address the MSC condition for species other than narrow sawfish, with further advice to be sought from Toby Patterson (CSIRO).
- The CSIRO Bycatch Monitoring Project currently cannot provide trend analysis for species other than narrow sawfish due to insufficient data.
- It was also noted that the Sawfish Recovery Plan (2015) does not cover narrow sawfish, which is listed as migratory under the EPBC Act.

**Action Item 15:** NPFI to seek further clarity from the NPF MSC assessment team regarding demonstrating a reduced NPF impact with ‘an 80% probability’ and ‘not hindering recovery’.

**Action Item 16:** AFMA / NPFI to seek further advice from Toby Patterson (CSIRO) on available population information / estimated fishing and natural mortality estimates for species other than narrow sawfish.

## 8b. Sawfish Mitigation Strategy Development/Process

NPRAG noted the process and updates to date for developing the NPF Sawfish Mitigation Strategy, as outlined in the supporting paper and presentation, noting the following points:

- The proposed process and timelines conclude with the publishing of the strategy by 30 June 2026, in line with WTO requirements.
- A Sawfish Workshop will be held following the NPRAG meeting (13 November), *‘To identify practical, cost-effective mitigation measures to reduce the impacts of commercial prawn trawl fishing on sawfish in the NPF for inclusion in the NPF Sawfish Mitigation Strategy’*.
  - The outcomes of this workshop will be used in the development of the Sawfish Mitigation Strategy.
- The formation of the Sawfish Working Group (SWG) had been previously agreed, with NPRAG confirming the SWG membership to include scientific, industry, government and conservation members, along with potentially a DCCEEW representative.

**Action Item 17:** AFMA and NPFI to commence drafting the Sawfish Mitigation Strategy, considering outcomes / recommendations from the Sawfish workshop, with further NPRAG consideration at the next NPRAG meeting (March 2026).

**Action Item 18:** AFMA to organise SWG meetings with agreed members as required.

**Action Item 19:** CSIRO (Toby Patterson) to provide an update on the potential expansion of the CKMR project to estimate interaction and mortality rates using current biomass and life-history parameters at the next meeting (March 2026).

## Recommendations

13. NPRAG confirmed the SWG membership to include: Darci Wallis (AFMA), Toby Patterson (CSIRO), Rich Pillans (CSIRO), Bryan Van Wyk (Industry), Brandon Meteyard (Industry), Annie Jarrett (Industry), Geoffrey Muldoon (NORMAC conservation member) and Ian Butler (ABARES).
14. NPRAG endorsed the proposed approach for the development of the Sawfish Mitigation Strategy:
  - a. NPRAG to consider the Sawfish Workshop outcomes and agree to the key mitigation and management measures to be included in the Sawfish Mitigation Strategy at its next meeting (March 2026).
  - b. AFMA and NPFI, in consultation with the SWG as required, develop a draft NPF Sawfish Mitigation Strategy for NPRAG consideration at the May 2026 meeting.
  - c. NORMAC consideration / endorsement sought following NPRAG meeting (May/June 2026).
  - d. Final NPF Sawfish Mitigation Strategy published by 30 June 2026.

### **Agenda item 9. Other Business**

No other business was raised.

### **Agenda item 10. Next meeting**

Noting members available provided at the meeting, NPRAG agreed the next meeting is scheduled for the first week of March 2026.

Considering the CSIRO advice on stock assessment timelines and required data, NPRAG agreed the following meeting would be held in the first week of May, with NPFI to provide fuel prices to CSIRO in the last week of April.

**Action Item 20:** AFMA to send placeholder invitations for the March 2026 NPRAG.

### **Close of meeting**

The Chair closed the meeting at 5:06pm.

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

Participants	Declared Interest
<b>Chair</b>	
Ian Knuckey	<p><b>Positions:</b></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 – Tropical Rock Lobster 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>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>
<b>Members</b>	
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 HCRA</p>
Denham Parker	<p>Scientific member – NPRAG &amp; 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 &amp; an NT demersal fish trawler.</p> <p>Has provided charter for scientific surveys in NPF in the past and may in future.</p> <p>GABIA – Member</p>

**OFFICIAL**

Bryan van Wyk	Industry member – NPRAG Employed by Austral Fisheries, a company with SFR holdings in the fishery.
Ian Boot	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.
<b>Invited participants</b>	
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
<b>AFMA</b>	
Lauren Crowley	Employed by AFMA No interest, pecuniary or otherwise
Brodie Macdonald	Employed by AFMA No interest, pecuniary or otherwise
Ben Liddell	Employed by AFMA No interest, pecuniary or otherwise
<b>Observers / Presenters</b>	
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
Toby Patterson	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.
Richard Cottrell	Employed by ABARES. No pecuniary interests, personal or otherwise in the fishery.

## Attachment B – NPRAG November 2025 Adopted Agenda

Wednesday 12 November 2025 / Time: 8:30am-5:30pm

Time	Item	Purpose	Presenter
830	<b>1. Preliminaries</b> <ol style="list-style-type: none"> <li>Acknowledgement of Country</li> <li>Welcome and apologies</li> <li>Declarations of interest</li> <li>Adoption of Agenda</li> <li>Minutes from previous meeting</li> <li>Correspondence</li> </ol>	For action	Chair (30 mins)
900	<b>2. Actions arising from previous meetings</b>	For information / discussion	AFMA (10 mins)
910	<b>3. Outcomes of out-of-session items</b>	For information	AFMA (5 mins)
915	<b>4. Update reports</b> <ol style="list-style-type: none"> <li>Industry update</li> <li>AFMA management update</li> <li>CSIRO update</li> <li>ABARES update</li> </ol>	For information	a. NPFI / Industry b. Darci c. Eva d. ABARES (1.25 hrs)
1030	<i>Morning Tea – 15 mins</i>		
1045	<b>5. 2026 NPF Tiger Prawn Stock Assessment</b> <ol style="list-style-type: none"> <li>2026 stock assessment inputs</li> <li>Longer-term stock assessment updates</li> </ol>	For discussion / recommendation	CSIRO / AFMA (1.75 hrs)
1230	<i>Lunch – 30 mins</i>		
1300	<b>6. Data collection</b> <ol style="list-style-type: none"> <li>EM Implementation Data Requirements</li> <li>NPF Data Strategy Development (WTO)</li> </ol>	For discussion	AFMA (2 hrs)
1500	<i>Afternoon Tea – 15 mins</i>		
1515	<b>7. Tiger MICE project update</b>	For discussion	CSIRO (Eva) (1 hr)
1615	<b>8. Sawfish WTO / MSC Conditions</b> <ol style="list-style-type: none"> <li>MSC Sawfish Condition Requirements</li> <li>Sawfish Mitigation Strategy Development / Process</li> </ol>	For information / discussion	AFMA / NPFI (1 hr)
1715	<b>9. Other business</b>	For information	AFMA (10 mins)
1725	<b>10. Next Meeting</b>	For information	AFMA (5 mins)
1730	<i>Meeting Close</i>		

**Attachment C – Actions arising from meetings previous to the November 2025 NPRAG.**

Complete		Redundant	Underway	Need NPRAG advice	Not yet started
No.	Mtg Date	Action Item	Agency / Person	Timeframe	Progress
3	8-9 February 2022	AFMA, CSIRO and NPFI to develop a proposal to review the information on squid to support updating the NPF harvest strategy. Need to ensure that the protection of spawning aggregations and the experience from other squid fisheries (including pre-season surveys) are considered. An update to be provided to the NPRAG in May 2022, with further consideration to occur in October/November 2022 if required.	AFMA, CSIRO and NPFI	As soon as practicable	<b>Pending</b> – When resources are available to direct to this task, likely to be during next update of the Harvest Strategy for tiger prawns.
1	17-18 May 2022	<p>AFMA to continue development of a data and monitoring plan for the fishery in consultation with the RAG. The following items to be considered:</p> <ul style="list-style-type: none"> <li>• Refining the objectives of the data and monitoring plan including updating the drivers of data needs by considering habitat and communities, social licence / values and acceptability, market access, animal welfare and indigenous interests;</li> <li>• Determining the temporal and spatial observer needs of the fishery, taking into consideration the scientific report that originally established the program;</li> <li>• Consider setting and monitoring of observer program targets on an annual basis;</li> <li>• Determining the worth of continuing to collect species abundance counts and, if retained, whether the current protocols are suitable;</li> <li>• Exploring options for validating the CMO and Scientific Observer eyeball estimates of total bycatch;</li> <li>• Automating data quality checks and the rectification of data errors;</li> <li>• Consider if there are any required changes to byproduct species data collection and monitoring; and</li> </ul>	AFMA	During development of the data plan	<b>Ongoing.</b> Update to be provided at the meeting under Agenda Item 6.

OFFICIAL

		<ul style="list-style-type: none"> <li>Consider the feasibility (including costs) and options of introducing finer scale reporting (shot level) for tiger prawn fishing and, potentially, banana prawn fishing.</li> </ul>			
14	17-18 May 2022	Annie Jarrett and Toby Patterson to discuss the development of processes that will enable appropriate management responses to occur in parallel with [sawfish] research, rather than needing to wait until the completion of research projects.	NPFI / CSIRO	As soon as practicable	<p><b>Pending</b> – Lack of available resources.</p> <p><i>Note: Sawfish gear mitigation trials are currently underway.</i></p>
6	24-25 May 2023	<p>Members of the MSC condition working group to consider the implications of, and how to meet, the MSC milestone requirement:</p> <p><i>By September 2027, demonstrate that systems are in place that allow &gt;80% certainty that the tiger prawn and the white banana prawn sub-fisheries do not hinder recovery of the sawfish species</i></p> <p>Membership: Toby Patterson, Rich Pillans, Darci Wallis, Dave Brewer, Bryan van Wyk, Brandon Meteyard</p>	MSC condition working group	As soon as practicable	<p><b>Ongoing.</b> For discussion under <b>Agenda Item 8.</b></p>
12	24-25 May 2023	Annie Jarrett to provide AFMA her fishery history document. AFMA to consider collating the history.	NPFI / AFMA	As soon as practicable	<p><b>Pending</b> – lack of available resources.</p>
5	4-5 June 2024	NPFI/AFMA/NPRAG to confirm the approach to calculate fuel price for the MEY trigger in the future.	NPFI/AFMA/NPRAG		<p><b>Complete.</b></p>
9	4-5 June 2024	CSIRO to provide an update on the pilot aquaculture project at the Tiwi Islands at future RAG meetings (as available).	CSIRO	As available.	<p><b>Ongoing.</b> CSIRO advised that no further updates were available on the Tiwi Islands project at the May 2025 NPRAG meeting.</p>

OFFICIAL

5	11-12 November 2024	AFMA to revise the draft NPF data strategy to include the need for ongoing monitoring (due to climate change impacts), economic data and an additional reporting requirements field (WTO and data to support MSC conditions).	AFMA		<b>Ongoing.</b> AFMA is in the process of implementing the proposed updates to the Data Strategy.  For discussion under <b>Agenda Item 6.</b>
10	11-12 November 2024	NPRAG Chair to write to AFMA Commission expressing concerns that the automation process has not resulted in time or cost saving.	NPRAG Chair		<b>Ongoing.</b>
5	11 February 2025	AFMA to confirm mandatory fields in e-observer app and determine extent of possible changes.	AFMA		<b>Ongoing.</b> For discussion under <b>Agenda Item 6.</b>
6	11 February 2025	Data and Monitoring Working Group to discuss remaining changes to data collection protocols and make recommendation to NPRAG.	AFMA/CSIRO/NPFI		<b>Ongoing.</b> For discussion under <b>Agenda Item 6.</b>
7	11 February 2025	AFMA/CSIRO/NPFI to discuss and develop research proposals for NPRAG in May 2025.	AFMA/CSIRO/NPFI		<b>Complete.</b> AFMA emailed to RAG for feedback on 16 July 2025.
1	20-21 May 2025	AFMA to discuss with ABARES offline about NPF data quality control and timelines for Fishery Status Report purposes.	AFMA/ABARES		<b>Ongoing.</b> An update will be provided at the March 2026 NPRAG meeting.
2	20-21 May 2025	AFMA, NPFI and CSIRO to discuss offline about NPF data processes and determining what data will become the 'single source of truth'.	AFMA/NPFI/CSIRO		<b>Ongoing.</b> An update will be provided at the March 2026 NPRAG meeting.
3	20-21 May 2025	AFMA to provide a flow diagram of all the NPF data processes for the next NPRAG meeting.	AFMA		<b>Ongoing.</b> Will be provided to the March 2026 NPRAG meeting.
4	20-21 May 2025	AFMA to confirm what "percentage of logbook shots observed" refers to in the 2024 NPF Annual Observer Report and whether days would be a more accurate measure.	AFMA		<b>Ongoing.</b> An update will be provided at the March 2026 NPRAG meeting.

OFFICIAL

5	20-21 May 2025	AFMA to confirm the process of correcting erroneous reports following subsequent ETP data becoming available.	AFMA		<b>Ongoing.</b> An update will be provided at the March 2026 NPRAG meeting.
6	20-21 May 2025	AFMA to determine where ETP interactions are being reported and how they are being reported.	AFMA		<b>Ongoing.</b> An update will be provided at the March 2026 NPRAG meeting.
7	20-21 May 2025	AFMA to organise a presentation on e-observer data collection and data warehouse processes (including QC).	AFMA		<b>Ongoing.</b> A presentation will be organised for the March 2026 NPRAG meeting.
8	20-21 May 2025	CSIRO to provide the climate briefings link to NPRAG members.	AFMA		<b>Complete.</b>
9	20-21 May 2025	AFMA Climate Team/Steph Brodie to retrospectively look at BoM reporting to see whether there were any indications that 2025 would be an anomalous year.	AFMA/CSIRO		<b>Complete.</b> Included in the AFMA Update at <b>Agenda Item 4b.</b>
10	20-21 May 2025	Dr Tom Kompas to provide a presentation on his Artificial Intelligence (AI) fuel price model at the next NPRAG meeting.	Tom Kompas		<b>Ongoing.</b> Update to be provided under <b>Agenda Item 6.</b>
11	20-21 May 2025	Dr Tom Kompas to provide clarification on the impacts of fleet adjustment and extrapolation and explain why fuel price changes have minimal impacts on modelled results.	Tom Kompas		<b>Complete.</b> An update will be provided at the March 2026 NPRAG meeting.
12	20-21 May 2025	CSIRO to provide presentations for distribution to the RAG.	CSIRO		<b>Completed.</b> Provided by CSIRO to AFMA on 21 May 2025. Distributed to the RAG on 27 May 2025.
13	20-21 May 2025	AFMA to undertake a desktop-study scoping exercise as a first step to broader coordination between jurisdictions on AI projects.	AFMA		<b>Pending</b> – lack of available resources.
14	20-21 May 2025	AFMA to report back to NPRAG on contemporary EM and AI discussions occurring between jurisdictions and any coordination work that is taking place.	AFMA		<b>Ongoing.</b> Update to be provided at the March 2026 NPRAG meeting.

OFFICIAL

15	20-21 May 2025	AFMA should seek to advance a broader AI project encompassing multiple fisheries in collaboration with FRDC.	AFMA		<b>Ongoing.</b> Update to be provided at the March 2026 NPRAG meeting.
16	20-21 May 2025	NPFI and CSIRO to discuss potential low-cost options to encourage continued industry participation in the Sawfish research.	NPFI/ CSIRO		<b>Underway.</b> Agreement for CSIRO to continue to provide financial incentives for 2025 NPFI tissue sampling programme.
17	20-21 May 2025	NPRAG Chair Dr Ian Knuckey, with input from Scientific Members Dr Eva Plaganyi and Dr Denham Parker to write to AFMA putting forward NPRAG's concerns and dissatisfaction with chosen process to implement EM in the NPF without the RAG having seen either the final report of the cost-benefit analysis or being able to provide further input.	Ian Knuckey/ Eva Plaganyi/ Denham Parker		<b>Complete.</b> Correspondence sent 18 June 2025.
18	20-21 May 2025	Dr Ian Knuckey (as co-investigator in the FishSOOP project) to provide an out-of-session update on the FishSOOP project to support the Climate and Ecosystem Status Report and provide an update at the next NPRAG meeting.	Ian Knuckey		<b>Complete.</b> Verbal update to be provided at the meeting.
19	20-21 May 2025	That further clarity is provided by AFMA on the future resourcing and funding for the CRF (if approved by the AFMA Commission).	AFMA		<b>Ongoing.</b> Update to be provided under <b>Agenda Item 4a</b> , with further information to be provided to NPRAG in 2026.
20	20-21 May 2025	CSIRO to present additional details on the biological elements of the tiger prawn stock assessment model, including the key components influencing the model outputs, at the May 2026 NPRAG meeting.	CSIRO		<b>Ongoing.</b> Update to be provided at the March 2026 NPRAG meeting.
21	20-21 May 2025	CSIRO to calculate the area of the NPF subject to trawling using grid cells.	CSIRO		<b>Ongoing.</b> Update to be provided at the March 2026 NPRAG meeting.

## Attachment D - Summary of Actions and Recommendations November 2025

Agenda Item	No.	Action	Agency/Person Responsible	Timeframe
4	1	Industry and CSIRO to work together to find new mesh material with a similar physical structure to the current mesh for future NPF surveys.	CSIRO/Industry	Prior to the 2027 surveys
4	2	CSIRO / AFMA to review recruitment indices and other relevant indicators (including economic data) from lower tiger prawn catch years (2008, 2011, 2017 and 2025), including comparing with the MICE model for any correlations.	CSIRO/AFMA	Prior to May meeting
5a	3	Dr Tom Kompas to present information on the AI dynamic fuel price model at the next NPRAG meeting (March 2026).	Dr Tom Kompas	Following meeting
5a	4	CSIRO to present the latest outcomes on the brown tiger prawn regime shift at the March NPRAG meeting for NPRAG consideration for inclusion to the 2026 assessment (either the base case or as a sensitivity).	CSIRO	Following meeting
5a	5	CSIRO to follow up on the broader implication of the MSC requirements regarding the implications of the inclusion of a brown tiger prawn regime shift in the NPF stock assessment	CSIRO	Prior to May meeting
5a	6	CSIRO to present the broader Tiger MICE project outcomes at the May 2026 NPRAG meeting, with their inclusion to be considered for the 2028 stock assessment.	CSIRO	At May meeting
5a	7	NPFI to provide 2025 banana prawn fuel prices to CSIRO prior to the end of April.	NPFI	End of April
5b	8	AFMA to outline processes and timeframes for the 2028 assessment to be considered at the May 2026 NPRAG meeting.	AFMA	At May meeting
5b	9	NPFI, in consultation with AFMA and CSIRO, review the NPF Performance Monitoring Framework.	NPFI/AFMA/CSIRO	Prior to Feb 2027 Banana Season

OFFICIAL

<b>5b</b>	10	AFMA to prepare a paper for the May NPRAG meeting addressing the MET review.	AFMA	Following meeting
<b>6a</b>	11	AFMA to provide costings of alternative observer coverage levels / EM review rates for consideration at the next meeting (March 2026).	AFMA	Following meeting
<b>6a</b>	12	AFMA to explore options AI-based automation for EM review and develop a project proposal in consultation with NPFI, NPRAG Chair and CSIRO for consideration at the next meeting (March 2026).	AFMA	Following meeting
<b>6b</b>	13	AFMA and NPFI to report workshop outcomes to the NPRAG in March for NPRAG endorsement of Data Strategy draft inputs.	AFMA/NPFI	Following meeting
<b>6b</b>	14	AFMA to organise a Data Workshop in March 2026 to review monitoring priorities and options and develop the NPF Data Strategy.	AFMA	Prior to March meeting
<b>8a</b>	15	NPFI to seek further clarity from the NPF MSC assessment team regarding demonstrating a reduced NPF impact with 'an 80% probability' and 'not hindering recovery'.	NPFI	Prior to May meeting
<b>8a</b>	16	AFMA / NPFI to seek further advice from Toby Patterson (CSIRO) on available population information / estimated fishing and natural mortality estimates for species other than narrow sawfish.	AFMA/NPFI	Prior to May meeting
<b>8b</b>	17	AFMA and NPFI to commence drafting the Sawfish Mitigation Strategy, considering outcomes / recommendations from the Sawfish workshop, with further NPRAG consideration at the next NPRAG meeting (March 2026).	AFMA/NPFI	Following meeting
<b>8b</b>	18	AFMA to organise SWG meetings with agreed members as required.	AFMA	As required.
<b>8b</b>	19	CSIRO (Toby Patterson) to provide an update on the potential expansion of the CKMR project to estimate interaction and mortality rates using current biomass and life-history parameters at the next meeting (March 2026).	CSIRO (Toby Patterson)	Following meeting
<b>10</b>	20	AFMA to send placeholder invitations for the March 2026 NPRAG.	AFMA	As soon as possible

OFFICIAL

Agenda Item	No.	Recommendation
4	1	NPRAG agreed to identify and test new net material with similar physical properties and commence the transition from 2027.
5a	2	No changes to the 2024 base case parameters, including red endeavour prawns remaining as sensitivity for the 2026 stock assessment.
5a	3	In-principle support for using a constant fuel price projection, pending consideration of the latest AI-fuel price model outputs at the next meeting.
5a	4	The 2025 economic survey prawn price data and fuel prices from the banana prawn season (provided by NPFI in April 2026) are used for the 2026 assessment
5a	4a	The decisions on two assessment inputs are deferred to the next NPRAG meeting, including the extrapolation process for the 41 vessels from the NPFI economic survey and the inclusion of the Tiger MICE results (in the base case or as a sensitivity).
5a	5	All 2024 sensitivities should be undertaken, except for the $\pm 50\%$ and $\pm 200\%$ effort change constraints sensitivities, along with the inclusion of the TAE averaging sensitivity.
5a	6	The other Tiger MICE project outcomes will be considered by NPRAG in May 2026 for potential inclusion in the 2028 stock assessment.
5b	7	An MET adjustment and the inclusion of banana prawn data should not be implemented in the 2026 stock assessment. Instead, these should be considered as part of the 2028 NPF stock assessment process, with initial NPRAG consideration at the May 2026 meeting.
5b	8	Consideration of the implications of any CHSP changes is delayed until further information is available on the review outcomes.
6a	9	AFMA observer coverage should be maintained for the 2026 banana prawn season, with further discussions on 2026 tiger prawn season coverage to occur in early 2026, considering 2026/27 AFMA budget and EM system installation processes (EM funding ceasing on 30 June 2026).
6a	10	The AFMA Commission considers the NPRAG proposal of an initially reduced level of EM review of 5%, with savings to be used to fund development of an AI-model to detect / identify larger ETP species.
6a	11	NPRAG recommended prioritising species distribution and bycatch composition sampling, to be undertaken through a lower level of AFMA observer coverage, pending consideration of revised EM and observer cost being provided by AFMA.

<b>6b</b>	12	<p>NPRAG endorsed the following approach proposed by AFMA, noting the need to align with AFMA Commission expectations and budget cycles:</p> <ul style="list-style-type: none"> <li>a. NPF Data Workshop held adjacent to the next NPRAG meeting to provide recommendations on the ongoing NPF data collection and monitoring needs.</li> <li>b. NPRAG endorsement of the key NPF Data Collection and Monitoring Protocols (DCMP) elements at the next NPRAG meeting (March 2026).</li> <li>c. AFMA / NPFI to develop a draft NPF Data Strategy, incorporating agreed DCMP elements, for consideration at the May 2026 NPRAG meeting.</li> <li>d. NORMAC consideration / endorsement sought following NPRAG meeting (May/June 2026).</li> <li>e. Final NPF Data Strategy published on AFMA website by 30 June 2026.</li> </ul>
<b>8b</b>	13	<p>NPRAG confirmed the SWG membership to include: Darci Wallis (AFMA), Toby Patterson (CSIRO), Rich Pillans (CSIRO), Bryan Van Wyk (Industry), Brandon Meteyard (Industry), Annie Jarrett (Industry), Geoffrey Muldoon (NORMAC conservation member) and Ian Butler (ABARES).</p>
<b>8b</b>	14	<p>NPRAG endorsed the proposed approach for the development of the Sawfish Mitigation Strategy:</p> <ul style="list-style-type: none"> <li>a. NPRAG to consider the Sawfish Workshop outcomes and agree to the key mitigation and management measures to be included in the Sawfish Mitigation Strategy at its next meeting (March 2026).</li> <li>b. AFMA and NPFI, in consultation with the SWG as required, develop a draft NPF Sawfish Mitigation Strategy for NPRAG consideration at the May 2026 meeting.</li> <li>c. NORMAC consideration / endorsement sought following NPRAG meeting (May/June 2026).</li> <li>d. Final NPF Sawfish Mitigation Strategy published by 30 June 2026.</li> </ul>