



Australian Government

Australian Fisheries Management Authority

Northern Prawn Fishery Resource Assessment Group (NPRAG)

Final meeting minutes

21 February 2024

Virtual – via Microsoft Teams

Meeting participants

Position	Participant
Chair	Ian Knuckey, Fishwell Consulting
NPRAG members	David Brewer, Scientific member Rik Buckworth, Scientific member Tom Kompas, Economic member Éva Plagányi, CSIRO ¹ , Scientific member Phil Robson, Industry member Bryan van Wyk, Industry member Darci Wallis, AFMA ²
AFMA Employees	Sarah Kirkcaldie (Executive Officer) Brodie Macdonald
Invited participant	Annie Jarrett, NPFI ³
Observers / Presenters	Brandon Meteyard, NPFI Roy Deng, CSIRO Denham Parker, CSIRO Ben Liddell, AFMA ⁴ Brooke D'Alberto, ABARES
Apologies	
Laura Blamey, CSIRO	

Agenda item 1. Preliminaries

a. Welcome and apologies

Ian Knuckey, the Chair, opened the meeting with an Acknowledgement of Country at 10:30 AEDT⁵. The Chair noted that the meeting was being recording for the purposes of the minutes and the recording will be deleted once the minutes are finalised.

b. Declarations of interest

1. The RAG discussed potential conflicts of interest and participation under specific agenda items as outlined in FAP12, noting:
 - The register of interest is at [Attachment A](#).
 - Research participants were not deemed to have a potential conflict of interest with agenda items 3 or 7 as the RAG was only identifying projects to discuss at the June 2024 meeting and would not be making any recommendations or decisions.
 - Industry participants were deemed to have a potential conflict of interest under agenda item 4. Members noted that industry will be asked to leave the teleconference if a conflict is identified or recommendations are being made.

¹ Commonwealth Scientific and Industrial Research Organisation

² Australian Fisheries Management Authority

³ Northern Prawn Fishery Industry

⁴ Agenda item 5 only

⁵ Australian Eastern Daylight Time

c. Adoption of agenda

The RAG adopted the agenda with no changes ([Attachment B](#)).

d. Minutes from previous meeting

NPRAG noted that the minutes had been finalised and approved out-of-session from the NPRAG meetings held on 31 October-1 November 2023 and 27 November 2023.

Agenda item 2. Actions arising

The RAG noted the status of the action items from previous meetings are at [Attachment C](#). Members noted that only actions arising relevant to this meeting were included in the paper and all remaining actions arising will be discussed at the June 2024 meeting.

Agenda item 3. Identification of 2025-26 Research Priorities

The AFMA member noted that every February, RAGs are asked to prepare annual research statement which consider the cost-effectiveness, priority and timeframes for achieving identified research priorities in the fishery five-year Strategic Research Plan. Members noted that annual research statements assist the AFMA Research Committee (ARC) at its annual meeting in August, to develop the annual call for research proposals in September for potential AFMA funding or Fisheries Research and Development Corporation (FRDC) funding.

The AFMA member stated that the ARC budget for 2025/26 is nearly fully subscribed and only essential projects should be put forward for funding. NPRAG noted that business as usual projects will be commencing in the 2024/25 financial year. The Chair questioned if the process will be changing given the limited funds available and the AFMA member advised that there was no further advice regarding the budget for 2025/26 at this stage.

Industry stated that bycatch/sawfish research remains a priority with industry funding and co-funding a number of projects but they noted that there is currently no capacity to increase the level of industry funding. The Scientific member noted that the Tiger MICE project will be conducting the fieldwork as planned with AFMA and FRDC but will discuss when project payments will be made.

Members noted that the international market is causing issues for many fisheries, including the NPF. Domestic fisheries have high environmental standards to meet but these requirements are not applied to international imports. The industry invited participant stated that NGO's are working with industry on this issue but noted it is complicated by broader trade implications.

NPRAG noted that research scopes for any identified projects for funding in the 2025/26 financial year will need to be developed and provided to NPRAG for consideration at the June 2024 meeting. Members did not identify any projects for funding in 2025/26 at the meeting.

Agenda item 4.

a. Fishing Power - VMS Feasibility Update

Members noted that a review of the fishing power model was a key issue identified at the NPF tiger prawn fishery strategic workshop and at the May 2023 NPRAG meeting. A feasibility study was supported at the June 2023 meeting, to determine if a combination of vessel geo-positioning data (VMS or AIS) and net configuration can be used to estimate a relative swept area of the NPF fleet.

Denham Parker presented the results of the study which outlined the methods to estimate swept area rates for the NPF using VMS data. Members noted that several methods were tested to assign fishing “events” based on the vessel speed information, including: (1) NPFI gear survey speed data, (2) speed information calculated from VMS data for every year and aggregated across the NPF fleet, and (3) speed information calculated from VMS data for every vessel in every year across the NPF fleet. Dr Parker noted that the latter was considered the most appropriate to account for changes that may occur at the vessel level, but it was also the most data intensive method.

NPRAG noted the outcomes of the feasibility study, which included a comparison to the swept area index derived from the Prawn Trawl Performance Model (PTPM), specifically:

- NPF VMS data are variable but have generally improved over time. There are years when swept area cannot be estimated due to poor data (e.g. 2008, 2009).
- VMS data, in conjunction with lateral fishing span information derived from the PTPM, can be used to estimate vessel swept area rates. A timeseries of NPF swept area rates for the period 1998 to 2021 was produced (with 2008 and 2009 omitted).
- Current NPF VMS data analysed to date lacks instantaneous speed information and therefore the calculation of speed introduces bias, as it was dependent on the fundamental assumption that the vessel travelled in a straight line at constant speed between polling events. Consequently, when compared to the swept area index derived from the PTPM, the trends over time were similar but the VMS derived estimates were consistently lower in magnitude.
- When using NPFI VMS data that included instantaneous speed and had a high polling frequency (poll intervals of less than 10 minutes), the results were very similar to those produced by the PTPM and the bias associated with calculating speed was negated.
- If VMS data are to be used to estimate a swept area index for the NPF fleet, it was recommended the data include instantaneous speed with a maximum average polling interval of 20 minutes. Preliminary costings for acquiring and processing the necessary data to estimate swept area rates annually for the entire NPF fleet are also provided.

NPRAG noted that the data provided by NPFI used a polling rate of 10 minutes or less whereas the AFMA data was around 1 hour (on average). Members noted that when the data was removed to increase polling intervals there was very little difference between 10 and 20 minute intervals. NPRAG recommended a maximum average polling rate of 20 minutes and noted that instantaneous speed data was required from AFMA and/or NPFI.

The AFMA member noted that the cost of increasing the polling intervals to 20 minutes would be approximately \$40,000 extra, although this would not be directly charged to the NPF due to the allocation model for these costs under the AFMA Cost Recovery Impact Statement (CRIS).

Members discussed the possibility of industry providing cheaper data collected by the VSAT systems that are already used and paid for by industry members. Industry agreed to establish the number of boats that

currently have VSAT available at the March NPMI meeting (**Action arising 1**). Members noted that VSAT costs approximately \$10 per boat/month.

AFMA agreed to report back to June meeting regarding using alternative sources (such as electronic monitoring) for geolocation data. Members noted that the alternative source would need to be secure and tamper proof (**Action arising 2**).

NPRAG thanked Dr Parker for the presentation noting that the analysis showed that VMS data may be used in the future to better manage the fishery.

Action Item 1: Industry to establish at the NPMI meeting in March the number of boats that currently have VSAT available.

Action Item 2: AFMA to report back to June meeting regarding using alternative sources (such as electronic monitoring) for geolocation data.

b. Fuel Price (AI vs. constant)

The economic member provided NPRAG with a preliminary paper titled 'Economic Data and Fuel Price Forecasts for the Australian Tiger Northern Prawn Fishery 2023: Preliminary Estimates'. NPRAG noted that:

- Based on current conditions the average boat makes a loss of about \$330,000 over the two seasons.
- Industry agreed that it is not currently covering operating costs.
- Some boats do better than others, but this may be the result of savings from not undertaking repairs or maintenance.
- The current conditions are being driven by lower prawn prices and higher fuel prices.
- Forecasts show that fuel prices will be increasing substantially over time.
- The AI model catches much of the cyclical fuel price behaviour but currently overestimates the final actual price, although the Artificial Intelligence (AI) is still leaning and will continue to improve over time.

NPRAG considered whether to use a constant or an AI forecasted fuel price in the stock assessment model, agreeing to use a constant price for 2024 based on an average pre-season fuelling price across key ports. Members noted that NPMI will provide these prices to CSIRO by the first week in April (**Action arising 3**).

NPRAG supported the continuation of the AI modelling/projection, with an update to be provided at the NPRAG meeting in mid-2025 and re-consideration of the fuel price inputs to occur prior to the 2026 stock assessment.

The economics member thanked Brandon Meteyard and NPF Industry for the collection and compilation of survey data and additional guidance. NPRAG thanked the economic member for this ongoing work.

Action Item 3: NPMI will provide pre-season fuelling price across key ports to CSIRO by the first week in April 2024.

c. Minimum effort threshold

NPRAG noted that the current minimum effort threshold in the NPF tiger prawn stock assessment was identified as a key issue in May 2022, as this resulted in the assessment recommending a higher TAE than recent effort levels despite the key stock status indicators signalling the need for a more conservative approach. The AFMA member noted that several options to re-assess the effort threshold and preliminary analysis were presented at the NPF Tiger Prawn Strategic Planning Workshop and NPRAG meetings in 2023. Members noted that at the November 2023 NPRAG meeting members supported an industry proposal of a combined minimum effort threshold of 4,004 days, noting:

- The combined species minimum effort threshold provides more flexibility to the bioeconomic model to determine the best path to MEY over seven years.
- The threshold should be reviewed every four years, aligned with tiger prawn assessments.
- A maximum interannual effort change penalty should be applied in the model to prevent anomalies on how the model achieves the path to MEY, noting a sensitivity test will be conducted to determine the influence of this penalty and its associated threshold level as part of the 2024 stock assessment.

The industry-invited participant stated that industry's support of the proposed minimum effort threshold was canvassed via email. NPRAG noted that all industry supported the recommendation except one response that did not support due to concerns that they would not be profitable and could not maintain crew at that effort level.

Members noted that industry had provided a report to the March AFMA Commission meeting highlighting the current significant concerns in the fishery. The AFMA member stated that AFMA management would reiterate industry's concerns to the Commission at the meeting. Members noted that NPF were also meeting in March to discuss issues in the fishery and how they could be addressed.

NPRAG recommended a 4,004 day minimum effort threshold noting that:

- The majority of industry supported the proposal.
- This would enable a 77 day season with an even distribution of effort across the 52 boats operating in the fishery (noting the number of days would increase if not all boats fished).
- This will only apply when things aren't looking good for the fishery.
- It is an economic limit to allow minimum levels of operation in the fishery and avoid the model applying a very low TAE.
- Additional management can still be implemented as required, based on the stock assessment results.

On behalf of NPRAG the Chair thanked industry for their pro-active effort reduction in the tiger prawn fishery last year of 17%. Members noted that there had been a 47.8% effort reduction achieved across the last two seasons which is a significant achievement.

Agenda item 5. Data collection in the NPF

a. Observer sampling for the 2024 Banana season

NPRAG noted that since 2019, observers have been undertaking additional species sampling in the NPF for the species distribution project, in addition to the other biological and bycatch sampling requirements. This has added additional workload for observers that is no longer sustainable, and a decision is required prior to the 2024 banana prawn season to adjust the observer sampling requirements.

The AFMA member noted that CSIRO, NPFI, AFMA and the Chair had discussed the observer sampling requirements prior to the meeting and agreed that only an interim decision for the 2024 banana prawn season should be made at this meeting, with the final ongoing species distribution sampling decision deferred to the June NPRAG meeting. Members noted that this will ensure that additional information is available to support this decision (i.e. the impact of the new species distribution model on the bioeconomic model).

For the 2024 banana season, NPRAG supported the following interim changes to the observer sampling requirements:

- Commercial prawn sample (all shots, excluding where a 10kg bycatch sample or species distribution sample is taken). In practice, this change means two samples taken (on average) per night during banana fishing and one sample taken (on average) per night during tiger fishing.
- Removal of brown mantis shrimp and porcupine ray from the 'at-risk' species list. This is to ensure consistency with the CMO 'at-risk' species list.

NPRAG noted that the ongoing species distribution sampling will be discussed at the June meeting, which will allow consideration of potential additional information, including:

- The level of impact the species distribution models/data inputs have on the 2024 bioeconomic assessment.
- Further analysis on the statistical implications of different sampling levels/sizes.
- Advice from NPFI on the options/potential for direct industry funding or 'in-kind' support.
- Further advice regarding any capacity for species distribution sampling within the CMO program and mapping of recent spatial CMO coverage (as part of the current bycatch monitoring project).

The Chair noted that it was important to understand the percentage of time observers allocate for each task before the June 2024 meeting to ensure that the observers are not being over worked but the fishery is achieving sampling requirements. The AFMA observer noted that it takes approximately twenty minutes to get through 100 samples.

b. Environmental data working group

NPRAG noted that the environmental monitoring data working group (EMDWG) was formed following a recommendation from the 24-25 May 2023 NPRAG meeting, to consider ways to improve the environmental data collected in the NPF. Members noted that two meetings had been held, one on 11 August 2023 and a second meeting on 17 January 2024.

Members noted the following key outcomes/updates from the working group:

- Confirmation that the groups focus was environmental data monitoring (not the other elements of EM) and agreed the name should be updated to 'environmental monitoring data working group'.
- Agreement that both fixed-site data loggers along with data loggers on fishing gear are important to improve information across the region.
- Agreement that funding should be sought for additional data loggers in the Fishing Ships of Opportunity project (FishSOOP), with the goal of 12 loggers on NPF boats. Members noted that 5 units are currently allocated to NPF vessels, however, recent advice from the AFMA EM team is that funding for additional units is not a priority.
- Options for ongoing funding of the FishSOOP are being discussed with IMOS, noting the value of this information to numerous industries across Australia.

- Requests should be made to oil and gas companies operating in the NPF (noting most activities are in the JBG) to request available environmental data. Previous discussions have indicated this would be possible.
- It will be important to ensure co-ordination between agencies (e.g. IMOS, BOM, research organisations) to maximise the benefits/coverage of the future environmental data collection/monitoring.
- The need to focus on long-term cost-effective monitoring programs that have minimal ongoing maintenance needs (i.e. resourcing/costs). Collaboration with ranger programs was identified as a potential option.
- The Collection of environmental data across the Gulf is important, with the following areas identified as the key initial focus:
 - North West Bay
 - Blue Mud Bay
 - Groote Eyland
 - Macarthur River
 - Potential priority of an Eastern Gulf site if the region performs poorly again this year.
- Two options were identified for permanent monitoring sites including:
 - Satellite linked sensors: installed on permanent (weather-proof) platforms. These had high estimated set-up costs (~\$20,000) but minimal ongoing maintenance.
 - Non-satellite linked sensors: installed on unobtrusive temporary structure (e.g. star pickets). These had low estimated set-up costs (~\$2,000) but annual deployment would be required.

Members noted the following actions were underway following the meeting:

- CSIRO to follow up with relevant contacts regarding:
 - CSIRO/JCU researchers: The best way to engage with ranger programs on collaboration on environmental monitoring data projects.
 - BOM: gauge interest/potential funding options for permanent environmental monitoring sites in key areas across Northern Australia
- NPFI to follow up regarding some temperature stations around Groote, Karumba and Weipa.
- AFMA to touch base with relevant State/Territory governments on the required permissions/permits for permanent monitoring sites.

The Chair declared his interest under this project and noted that a paper has been submitted to Integrated Marine Observing System (IMOS) board for longer term support of this project.

Agenda item 6. Harvest Strategy review

The AFMA member noted that the updates were made to the NPF Harvest Strategy in 2021 and 2022 with additional changes recommended by NPRAG at the October/November 2023 meeting to meet the Red Endeavour Prawn MSC conditions and incorporate the agreed changes for the 2024 stock assessment.

Members noted that a Harvest Strategy working group will be established following this meeting to develop an updated draft Harvest Strategy for NPRAG approval at the June 2024 meeting (**Action arising 4**).

NPRAG discussed the application of the minimum effort threshold and whether this applied to the tiger prawn effort across the whole year or just within the second season. Members noted that:

- All tiger prawn catch and effort is an input to the stock assessment (across both seasons) and the TAE outputs are for the entire year, not just the tiger prawn season.

- A fishing day is considered to be a tiger prawn day if 75% or more of the catch is tiger prawns (including endeavour and king prawns).

NPRAG agreed that the TAE (including the minimum effort threshold) should apply to all Tiger prawn days in that year and noted that the mechanism to implement the TAE is decided following the stock assessment, taking into consideration the best available information at time.

NPRAG supported the inclusion of the minimum effort threshold and fuel price decisions discussed under agenda items 4 in the Harvest Strategy.

NPRAG agreed that AFMA would circulate a document with the stock assessment base-case changes that have been requested (**actions arising 5**)

Action Item 4: Harvest Strategy working group to be established to develop an updated draft Harvest Strategy for NPRAG approval at the June 2024 meeting.

Action Item 5: AFMA to circulate a document with the stock assessment basecase changes that have been requested.

Agenda item 6. Five-year NPF Strategic Research Plan 2024-28

NPRAG noted that the Strategic Research Plan summarises the priorities for research, development and extension investment for the NPF for the period 2024-28. Members noted that the draft Strategic Research Plan had been discussed at the November 2023 NPRAG meeting and the Plan had been updated accordingly.

Members noted that over the last 3 years there had been minimal, if any, profitability in the fishery which impacts the ability of the industry to fund future research. NPRAG noted that biologically the fishery is performing reasonably well, but external economic pressures such as prawn and fuel prices are causing economic issues. Industry stated that they had examined and were continuing to look for options to reduce costs noting external pressures outside of industry control.

NPRAG recommended the following further changes to the draft NPF Strategic Research Plan 2024-28:

- Section 5 – additional wording to be included regarding the impact of climate change and fuel pressure.
- Table 3 R&D need 11 - *Continue to explore methods to improve profitability, reduce operational costs and increase revenue in the NPF* priority should be increased to high and updated to explicitly mention profitability.
- Table 3 R&D need 13 - *Explore options for alternative fuel sources and strategies to move towards carbon net zero* priority was increased to medium.
- Minor updates to scheduling (appendix 1 table 3).

NPRAG noted that these changes would be made to the Plan and it would be presented to NORMAC for approval at their meeting on 28 February 2024.

Agenda item 7. Other Business

The Chair noted that this was Dave Brewer's last NPRAG meeting with his term expiring on 31 March 2024. On behalf of members, the Chair thanked Dave Brewer for his rare insight to the Fishery and thanked him for his extensive years of involvement and contribution to the RAG and the fishery as a whole.

Next meeting

Members noted that the next meeting of NPRAG is scheduled for the first week in June 2024.

Close of meeting: 15: 10 AEST

Attachment A – Register of interest

Participants	Declared Interest
Chair	
Ian Knuckey	<p>Positions: Director –Fishwell Consulting Pty Ltd Director –Olrac Australia (Electronic logbooks) Chair –Northern Prawn Fishery Resource Assessment Group Chair –Tropical Rock Lobster Resource Assessment Group Chair –Victorian Rock Lobster and Giant Crab Assessment Group Chair –Victorian Central Zone Abalone Fisheries Resource Advisory Group Chair –Gulf of St Vincent’s Prawn Fishery MAC Research Scientific Committee Scientific Member –Northern Prawn Management Advisory Committee Scientific Member –Gulf of St Vincent’s Prawn Fishery Management Advisory Committee Scientific Member –Tropical Tuna Resource Assessment Group Scientific Member – SESSF Resource Assessment Group Member –The Geelong Agri Collective</p> <p>Fishwell current/recent projects: DAWE Project: Multi-sector fisheries capacity building AFMA 2022: Annual monitoring, reporting and assessment of SPF marine mammal interactions, including effectiveness of mitigation measures AFMA 2020-0807: Bass Strait Scallop Fishery Survey – 2020-22 FRDC 2019-027: Improving and promoting fish-trawl selectivity in the SESSF and GABTS FRDC 2018-021: Development and evaluation of SESSF multi-species harvest strategies Traffic Project: Shark Product Traceability Sea Cucumber Assn: Design and implementation of various sea cucumber dive surveys. Australia Bay: Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery</p>
Members	
David Brewer	<p>Scientific member – NPRAG Director – Upwelling P/L (David Brewer Consulting) Scientific member – Torres Strait Fin Fish Working Group Chair – Torres Strait Fin Fish RAG Current consultancy work with the Quandamooka Yoolooburrabee Aboriginal Corporation/FRDC (Moreton Bay), Newcrest mining (Lihir I gold mine PNG) and MRAG (MSC certification assessment) Research provider. Has in the past and may in future seek and receive funding for research in the fishery</p>
Rik Buckworth	<p>Scientific Member – NPRAG Director -Sea Sense Australia Pty Ltd Adjunct Professor – Charles Darwin University CSIRO Honorary Fellow Chair of the NT Aquarium Fishery Management Advisory Committee Consultancy contract with NPFI to review Red Endeavour Prawns Current and pending projects with government agencies, CDU and fishing industry for projects in the NT, Torres Strait and Qld 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 Member – Data Working Group for the GABTF</p>

Tom Kompas	<p>Scientific Member – NPRAG Director -Sea Sense Australia Pty Ltd Adjunct Professor – Charles Darwin University CSIRO Honorary Fellow Chair of the NT Aquarium Fishery Management Advisory Committee Consultancy contract with NPFI to review Red Endeavour Prawns Current and pending projects with government agencies, CDU and fishing industry for projects in the NT, Torres Strait and Qld 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 Member – Data Working Group for the GABTF</p>
Éva Plagányi	<p>Scientific member – NPRAG 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 Research provider involved particularly in stock assessment research in NPF Also currently receiving FRDC funding related to development of a GoC ecosystem model. Scientific member of TRLRAG and TS HCRA</p>
Phil Robson	<p>Industry member – NPRAG Employee of A Raptis and Sons, responsible for managing NPF vessels & an NT demersal fish trawler. Has provided charter for scientific surveys in NPF in the past and may in future</p>
Bryan van Wyk	<p>Industry member – NPRAG Employed by Austral Fisheries, a company with SFR holdings in the fishery</p>
Darci Wallis	<p>AFMA member – NPRAG Employed by AFMA, Manager of Northern Prawn Fishery. No interest, pecuniary or otherwise</p>
Invited participants	
Annie Jarrett	<p>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</p>
AFMA	
Sarah Kirkcaldie	<p>Employed by AFMA No interest, pecuniary or otherwise</p>
Brodie Macdonald	<p>Employed by AFMA No interest, pecuniary or otherwise</p>
Observers / Presenters	
Trevor Hutton	<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>
Denham Parker	<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>
Brandon Meteyard	<p>Employed by NPFI. No pecuniary interests. Represents the interests of industry</p>
Brooke D’Alberto	<p>Research interests for ABARES projects, in particular the economic survey of operators in the NPF. No pecuniary interests, personal or otherwise in the fishery.</p>

Attachment B – Final meeting agenda

FINAL AGENDA – 21 February 2024 / Time: 1030 to 1540 AEDT

Time	Item	Purpose	Presenter
1030	1. Preliminaries a. Welcome and apologies b. Declarations of interest c. Adoption of Agenda	For action	Chair (15 mins)
1045	2. Actions arising from previous meetings	For information	AFMA (15 mins)
1100	3. Identification of 2025-26 research priorities	For advice	AFMA (30 minutes)
1130	4. 2024 Stock Assessment base case 4.a. Fishing Power - VMS Feasibility Update 4.b. Fuel price (AI vs constant) 4.c. Minimum Effort Threshold	a. For discussion b. For decision c. For decision	CSIRO/AFMA (1 hr)
1230	<i>Break – 1 hr</i>		
1330	5. Data collection in the NPF a. Observer sampling for the 2024 Banana season b. Environmental data working group	a. For decision b. For information	AFMA (1 hr)
1430	6. Harvest Strategy review a. Red endeavour prawn b. Tiger prawn (2024 base case)	For advice	AFMA (30 minutes)
1500	7. 2024-28 NPF Strategic research plan	For approval	AFMA (30 mins)
1530	8. Other business		AFMA (5 mins)
1535	9. Next meeting	For decision	AFMA (5 mins)
1540	<i>End of Meeting</i>		

Attachment C – Action items arising from the meeting

No.	Mtg Date	Action Item	Agency / Person	Progress
1	31 Oct-1 Nov 2023	<p>Paper to be provided to NPRAG for consideration on the process ahead for data collection and frequency of updating the species split project. This is to include:</p> <ul style="list-style-type: none"> • information on the processes used by observers for <ul style="list-style-type: none"> ○ collecting data on prawn biology ○ collecting data for the species distribution • the potential to use other data platforms (namely the CMO program). <p>an analysis of the implications of various update frequency for the project</p>	AFMA/CSIRO/NPFI	Complete. To be discussed under Agenda item 5.
11	31 Oct-1 Nov 2023	To enable proper consideration of the AI method to determine fuel prices for the tiger prawn stock assessment, Tom Kompas will run the AI method after the meeting (predicting until March 2024) for the RAG to consider the outcome at the February/March 2024 meeting.	Tom Kompas	Complete. To be discussed under agenda item 4b.
12	31 Oct-1 Nov 2023	<p>CSIRO to test, and provide to the NPRAG for consideration in late November 2023:</p> <ul style="list-style-type: none"> • for a moving average approach – the 2018 stock assessment model for the years 2015 and 2016 (similar years to 2022) should be tested. Noting it was raised at the end of the discussion that it can only be run against the existing models, which do not necessarily reflect the situation we want to test (i.e., high productivity to low productivity). • for a breakeven approach – the impact of spreading the fixed costs across the seasons. 	CSIRO	Complete. For decision under agenda item 4c.
13	31 Oct-1 Nov 2023	Industry to develop a minimum effort threshold for the RAGs consideration at the meeting in late November 2023, noting the basis for the 2008 decision to set the	Industry	Complete. For decision under agenda item 4c.

		threshold at 2777 and considering the current economic circumstances of the fishery.		
14	31 Oct-1 Nov 2023	AFMA to develop a summary document that outlining the changes to be made to the Harvest strategy for both tiger and endeavour prawns and the process to be followed for the NRPAG's consideration at the late November 2023 meeting.	AFMA	Complete. For decision under agenda item 6.
1	27 November 2023	AFMA to raise and discuss concerns with CSIRO regarding the increase in the costs for research undertaken by the CSIRO relating to: <ul style="list-style-type: none"> • the changes in co-contribution ratios; • the lack of transparency in how the costs are apportioned across the projects; and • that the work undertaken, while appearing to be standard research, are strategic and innovative. 	AFMA	Underway. AFMA is continuing to have discussion with CSIRO regarding the increase in the costs for research undertaken by the CSIRO. Initial discussions resulted in a revised co-contribution in the first year of the 2024/25 projects. Another meeting between the AFMA executive and CSIRO is scheduled for late February 2024.
6	27 November 2023	Darci Wallis to work with Annie Jarrett on the updates to the NPF harvest strategy to provide a draft for comment, incorporating the principles.	AFMA/NPFI	Underway. A draft NPF Harvest Strategy will be provided to the May 2024 NPRAG meeting.