



**Australian Government**

**Australian Fisheries Management Authority**

## **Northern Prawn Fishery Resource Assessment Group (NPRAG)**

### **Final meeting minutes**

**16 June 2023**

**Teleconference**

## Meeting participants

Position	Participant
Chair	Ian Knuckey, Fishwell Consulting
NPRAG members	Rik Buckworth, Scientific member Éva Plagányi, CSIRO <sup>1</sup> , Scientific member David Brewer, Scientific member Bryan van Wyk, Industry member Phil Robson, Industry member Darci Wallis, AFMA
AFMA Employees	Sarah Kirkcaldie (Acting Executive Officer)
Invited participant	Annie Jarrett, NPFI <sup>2</sup>
Observers / Presenters	Brandon Meteyard, NPFI
Apologies	
Tom Kompas, Economic member Ian Boot, Industry member Cate Coddington, AFMA Executive Officer	

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<sup>1</sup> Commonwealth Scientific and Industrial Research Organisation

<sup>2</sup> Northern Prawn Fishery Industry

## Agenda item 1. Preliminaries

### a. Welcome and apologies

Ian Knuckey, the Chair, opened the meeting at 11:00 AEST and noted that this meeting was to address a few agenda items that were not discussed at NPRAG meeting in May 2023 due to insufficient time.

### b. Declarations of interest

NPRAG noted the register of interest at [Attachment A](#) and that the conflicts of interest declared at the May 2023 meeting still apply for this meeting.

Members further noted that at the May 2023 meeting, research participants were deemed to have a potential conflict of interest with the *2024-25 Annual research statement and research scopes* agenda item. At the May meeting these participants left the meeting and their continued participation in the item was discussed by the remaining participants. It was agreed that these participants should be present for the discussion but will be asked to leave if making priority decisions. Additionally, if it is recognised that there is a conflict for researchers, these participants will be asked to leave.

### c. Adoption of agenda

The RAG adopted the agenda, outlined at [Attachment B](#).

### d. Correspondence

The RAG noted that there was only one email sent since the May 2023 regarding the Review of Fishery Management Paper Number 14 – AFMA's Approach to Ecological Risk Management and its supporting Guide to AFMA's Ecological Risk Management Framework. The purpose of the correspondence was to seek feedback and comments on the draft policy and guidelines. Members noted that comments are due by close of business on 31 July 2023.

The Chair noted that he has provided comments regarding live benthic or encrusting species which have not been included in the framework.

## Agenda item 2. Tiger Prawn Fishery Adaptation Strategy Workshop Outcomes

The AFMA member noted that a tiger prawn workshop was held in February 2023 which had the objective of improving the biological and economic performance of the NPF by identifying:

- concerns and trends regarding the productivity of the tiger prawn fishery;
- deficiencies in the tiger prawn stock assessment model/s and data collection framework that may impede the NPF meeting management objectives including legislative requirements and Marine Stewardship Council certification; and
- key projects that will address the deficiencies above to improve the tiger prawn stock assessment model/s.

NPRAG noted that the key projects identified would inform the new 5-year Strategic Research Plan which will be discussed at the next meeting.

Members discussed the short-term research priorities from the workshop outcomes for inclusion in the 2024-25 annual research statement to be considered by the AFMA Research Council (ARC) at their August 2023 meeting. The following four projects were identified as the current priorities:

1. **Effort threshold.** NPRAG noted that this project was identified as the highest priority with work needing to be done by November 2023, in preparation for the 2024 assessment. Members noted

that the aim of the project was to conduct an analysis of potential threshold effort levels within the NPF tiger prawn stock assessment. The AFMA member further noted that AFMA is providing \$39,032 (80% applied to levy base) funding, with total project costs of \$48,970 (CSIRO funding the remaining costs).

2. **Review of fishing power model.** This was a key issue identified at the workshop and at the May NPRAG 2023 meeting. NPRAG noted the project scope has been prepared and was considered by members. Members noted a fishing gear engineer (possibly independent) will be required to conduct this work and seeking more funding in the next financial year. NPRAG discussed undertaking a feasibility study 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, agreeing that a project scope should be developed. CSIRO noted that there may be higher cost associated with getting additional polling on VMS. Members noted that would form a smaller component of a larger project.
3. **Monitoring to understand changes in biology of species.** Members noted that a lot of information will be available from the species-split project and members agreed to wait until the results of species-split project are available before progressing this priority.
4. **Monitoring - environmental drivers/oceanography.** Members noted that this work was identified as a high priority at the workshop. Members noted that as part of an existing FRDC-funded project conducted by Fishwell Consulting, two TDS (temperature depth sensors) have been sent to NPFI to be deployed on NPF vessels and that AFMA is providing funds for an increased number of these TDS to be used on Commonwealth boats. The Chair noted that these sensors will record temperature and depth of the fishing gear by location. Members also agreed that it is a high priority to expand ocean monitoring in the Gulf (particularly the inshore areas) and Joseph Bonaparte Gulf (JGB) to provide more information that could feed into the assessment models. NPRAG noted that an environment monitoring project is starting next financial year (2023/24) but does not cover all the components discussed by the RAG at the May 2023 meeting, including equipment on vessels and skipper visits.

The Chair noted that three projects (Endeavor prawn, species-split and effort threshold) need to be incorporated into 2024 stock assessment. Members, however, noted that although the fishing power project is important it is highly unlikely to be done in time for the 2024 assessment as this the first component of larger project which has not yet been funded. Members noted that AFMA, CSIRO and NPFI will prepare the scope for this project.

NPRAG discussed forming a smaller sub-committee to develop a proposal for funding through AFMA e-monitoring program to improve the environmental monitoring in the NPF. NPFI stated that the Australian Institute of Marine Science is also moving into this type of data collection. Members noted that the aim of the sub-committee is to discuss what data would benefit our understanding of ecosystem and climate change in the NPF and identify potential funding sources. Members noted that Brodie Macdonald will be contacting members of the sub-committee in the next few weeks to organise a preliminary meeting.

A research member noted that as the weather moves to a El Nino climate pattern, there is urgency to get loggers in the water as soon as possible to record if there are temperature increases in the inshore area. It was noted that the Fishwell Consulting project could possibly consider expansion into monitoring of inshore areas.

**Action Item 1:** AFMA to seek immediate funding (2022/23) for the following two projects:

1. Costings of analysis of potential threshold effort levels within the NPF tiger prawn stock assessment.
2. Undertaking a feasibility study 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 (NPFI, AFMA and CSIRO to prepare scope for the project).

### Agenda item 3. Annual Research Statement 2024-25

The AFMA member noted that each year, RAGs are asked to provide advice on upcoming research needs for their fisheries. This is required in the context of the [Northern Prawn Fishery Strategic Research Plan 2019-23](#) (which incorporates needs from the [AFMA's five-year strategic research plan 2017-22](#)). RAGs are asked to consider the cost-effectiveness, priority and timeframes for achieving identified research priorities. NPRAG noted that the Annual Research Statement 2024-25 will assist the ARC at its annual meeting in August, to develop the annual call for research proposals released in September. The Annual Research Statement 2024-25 will also be provided to the Fisheries Research and Development Corporation (FRDC) for consideration of funding through their processes.

Members noted the timing process for the ARC:

- July - ARC to meet with RAG Chairs to discuss strategic direction, priority needs and AFMA's Strategic Research Plan;
- Mid-August - RAGs and MACs to identify priorities – this includes the development of an annual research statement for each fishery and accompanying scopes for priority projects (for both AFMA and FRDC projects). These will need to be submitted, alongside the fishery's five year strategic research plan, to the ARC for their consideration;
- Late August - ARC considers priorities/scopes submitted as well as strategic issues and agrees on priorities to include in AFMA call for proposals and recommends priorities for consideration for funding by the FRDC;
- Early September - ARC's call for applications is published, with proposals due mid-October;
- Late October - Proposals submitted are provided to RAGs and MACs and AFMA Management for comment, with comments due by mid-December;
- February - ARC meets to assess and recommend research proposals for funding.

NPRAG endorsed the five draft research scopes including:

1. Monitoring interactions with bycatch species using data collected in the Northern Prawn Fishery by crew member observers, scientific observers, and the integrated monitoring program.
2. Northern Prawn Fishery stock assessment 2024-25 to 2028-29. Members noted three new components had been included in the 2024-25 scope including:
  - a) a stock assessment of the black tiger prawn – due to be undertaken in the second half of 2024.
  - b) a review of the minimum threshold of 70 fishing days to undertake a redleg banana prawn stock assessment.
  - c) a between-year update of the fishery catch, effort and survey index of the tiger prawn fishery.
3. Integrated monitoring program NPF (2024-25 to 2027-28).
4. Vessel charter for the NPF recruitment/spawning surveys (2024-27).
5. Review of Fishing Power Model – Members noted that this was a new project following the outcomes from the February 2023 tiger prawn workshop. The project aims to determine the

accuracy of the estimation methods currently used to obtain the swept area index, and other offsets, while simultaneously exploring/developing alternative methods to obtain accurate information on the NPF fleets' relative fishing power over time. NPRAG noted that smaller components of the project will be conducted earlier but agreed that the project should be included in the research plan.

NPRAG noted that the five scopes and the AFMA member agreed to send all scopes to NPRAG once finalised by CSIRO, AFMA and NPFI. NPRAG noted the research priorities identified in the [NPF Strategic Research Plan 2019-23](#), which is due for review before the end of this year and will be considered at NPRAG in November 2023.

### **Other business**

The AFMA member noted that AFMA and CSIRO have been discussing the effort threshold project discussed at the May meeting and have produced a proposal and costings which was provided to NPRAG and discussed under agenda item 2. NPRAG noted that AFMA will be varying the current contract and including it as a milestone payment.

NPRAG noted that CSIRO had been approached regarding the Beehive prospect (Melbana's prospective oil permit areas) in the JBG and CSIRO have submitted a short summary on the potential impacts on the red leg banana prawn fishery, sawfish and other species that CSIRO are actively researching.

An industry member noted concerns that history has demonstrated that after a good banana prawn season there is usually a very bad banana season. This could result in industry going fishing for tiger prawns in the banana prawn season. Members noted that industry often choose not to fish for tiger prawns in the banana season to enable them to grow more, however, if fishers can't catch banana prawns in 2024 or if the prices remain low, then this could be an issue in 2024. NPRAG noted that this is a management issue that will need to be discussed before the start of the 2024 banana season. Members further noted that there are currently no limits on the catch of tiger prawns after 1 May each year, however, additional restrictions could be placed on tiger fishing during the banana prawn season if this is deemed necessary. Members noted that the next meeting will be organised out-of-session and that it would be a face-to-face meeting around November 2023.

## Attachment A

Table 1: Member, invited participant and observer declarations of interest.

Participants	Declared Interest
Chair	
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>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>Councillor –Victorian Marine and Coastal Council</p> <p>Member –The Geelong Agri Collective</p> <p><b>Fishwell current/recent projects:</b></p> <p>DAWE Project: Multi-sector fisheries capacity building</p> <p>AFMA 2022-:Annual monitoring, reporting and assessment of SPF marine mammal interactions, including effectiveness of mitigation measures</p> <p>AFMA 2020-0807: Bass Strait Scallop Fishery Survey – 2020-22</p> <p>FRDC 2019-027: Improving and promoting fish-trawl selectivity in the SESSF and GABTS</p> <p>FRDC 2018-021: Development and evaluation of SESSF multi-species harvest strategies</p> <p>Traffic Project: Shark Product Traceability</p> <p>Sea Cucumber Ass. : Design and implementation of various sea cucumber dive surveys.</p> <p>Australia Bay: Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery</p> <p>Expert Witness: Gladstone Harbour development impactsTraffic Project: Shark Product Traceability</p> <p>Sea Cucumber Assn: Design and implementation of various sea cucumber dive surveys.</p> <p>Australia Bay: Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery</p> <p>Beach Energy: BACI study of Prion Marine Seismic Survey impacts relative biomass of scallops on beds in the immediate vicinity.</p> <p>Expert Witness: Gladstone Harbour development impacts</p>

Members	
Rik Buckworth	<p>Scientific Member – NPRAG</p> <p>Director -Sea Sense Australia Pty Ltd</p> <p>Adjunct Professor – Charles Darwin University</p> <p>CSIRO Honorary Fellow</p> <p>Chair of the NT Aquarium Fishery Management Advisory Committee</p> <p>Consultancy contract with NPFI to review Red Endeavour Prawns</p> <p>Current and pending 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> <p>Member – Data Working Group for the GABTF</p>
Éva Plagányi	<p>Scientific member – NPRAG</p> <p>Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery.</p> <p>Research provider involved particularly in stock assessment research in NPF.</p> <p>Also currently receiving FRDC funding related to development of a GoC ecosystem model.</p> <p>Scientific member of TRLRAG and TS HCRAG</p>
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. Has provided charter for scientific surveys in NPF in the past and may in future.</p>
Bryan van Wyk	<p>Industry member – NPRAG</p> <p>Employed by Austral Fisheries, a company with SFR holdings in the fishery.</p>
Darci Wallis	<p>AFMA member – NPRAG</p> <p>Employed by AFMA, Manager of Northern Prawn Fishery.</p> <p>No interest, pecuniary or otherwise.</p>
Invited participants	
Annie Jarrett	<p>CEO – NPFI</p> <p>Commonwealth Fisheries Association Director</p> <p>Chair – Australian Council of Prawn Fisheries (ACPF)</p> <p>Member of the FRDC selection panel.</p> <p>Invited participant - NORMAC</p> <p>No pecuniary interests</p> <p>Represents the interests of industry.</p>
AFMA	
Sarah Kirkcaldie (EO)	<p>Employed by AFMA</p> <p>No interest, pecuniary or otherwise.</p>
Observers / Presenters	
Brandon Meteyard	<p>Employed by NPFI. No pecuniary interests. Represents the interests of industry</p>



## Attachment B

### FINAL AGENDA

Time	Item	Purpose	Presenter
1100	<b>1. Preliminaries</b> a. Welcome and apologies b. Declarations of interest c. Adoption of Agenda d. Correspondence	For action	Chair  (10 mins)
1110	<b>2. Tiger prawn strategic workshop outcomes</b>	For advice	AFMA  (30 mins)
1140	<b>3. 2024-25 Annual research statement and research scopes</b>	For advice	AFMA  (1 hr)
1255	<b>4. Other business</b>		(5 mins)
1300	<i>End of Meeting</i>		