



Australian Government

Australian Fisheries Management Authority



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

Teleconference Minutes

Date: 2 October

Attendance

Name	Membership (type i.e. chair etc.)
Ian Knuckey	Chair
Rik Buckworth	Scientific Member - CSIRO
Malcolm Haddon	Scientific Member - CSIRO
David Brewer	Scientific Member - CSIRO
Ian Boot	Industry Member
Michael O'Brien	Industry Member
Phil Robson	Industry Member
Brodie Macdonald	AFMA Member
Don Bromhead	Executive Officer - AFMA
Renee Kinnersly	Observer - AFMA
Matt Barwick	Observer - NPFI
Trevor Hutton	Observer - CSIRO

Minutes

Agenda Item 1 - Preliminaries

1.1 Welcome and apologies

The Northern Prawn Fishery Resource Assessment Group (NPRAG) Chair, Ian Knuckey, opened the meeting and noted that there have been some changes to RAG processes that were outlined in a letter (with attached documents) from the AFMA CEO. While the changes are not large, members need to be aware of them and he requested that AFMA distribute the letter and associated documents to RAG members and observers.

The RAG noted an apology from Tom Kompas.

Action item 1 – AFMA to circulate recent letter and documents from AFMA CEO relating to revised RAG processes.

1.2 Adoption of Agenda

The NPRAG adopted the draft agenda for the meeting (**Attachment 1**).

1.3 Declaration of interests

Each NPRAG member and observer declared their conflicts of interest and then excused themselves from the meeting to allow the remaining members to discuss their further participation and identify agenda items where each member/observers might need to be excluded from either discussion or decision making processes. The full list of conflicts of interest declarations made by the NPRAG participants is provided in **Attachment 2**. The NPRAG agreed that all participants should be allowed to participate in the meeting discussions due to their relevant expertise and capacity to contribute to discussions, but noted that:

- Scientific members may need to be excluded from any formal endorsements of the research priorities being discussed.



- Phil Robson would not participate in recommendations relating to the vessel charter to undertake pre-season surveys (as A. Raptis & Sons Pty Ltd has historically provided vessels for this charter).

Agenda Item 2 – NPRAG memberships

The Chair congratulated all members on their appointment to the NPRAG and in particular welcomed the two new members, Phil Robson (Industry member) and David Brewer (Scientific member). He warmly acknowledged outgoing members Mr Ron Earle (Industry), Dr Norm Hall (Murdoch University) and Dr Rodrigo Bustamante (CSIRO) who had made important and valuable contributions to the work of the NPRAG over many years. He noted in particular their participation in recent years in the difficult discussions around the key management tools and noted that as a result of their and other RAG members' hard work, it is now possible for the fishery to move forward and plan for the future. The Chair's sentiments regarding new and outgoing members were strongly endorsed by the AFMA member. The Chair indicated that he would write letters of acknowledgement to each of the outgoing members.

Action item 2 – Chair to write letters of acknowledgement and thanks to each of the outgoing NPRAG members (Ron Earle, Norm Hall, Rodrigo Bustamante).

Agenda Item 3 – Research planning

3.1 Five Year Research Plan

Matt Barwick (NPF) provided a summary of the process used to develop the draft NPF Five Year Research Plan. This involved initial drafting by NPF, followed by discussions at the NPF Management Advisory Committee (NORMAC) to identify and add further priorities, feedback and inputs from CSIRO and now consideration of the draft plan by the RAG. The Chair asked the RAG to assess and identifying how further priorities identified by CSIRO might fit in, noting that the plan currently reflects industry priorities.

The RAG thanked and complemented the NPF on its development of the draft plan but also suggested that in future, the NPRAG be engaged in the discussion of priorities and development of the plan at an earlier point in the drafting process. The RAG also asked that the draft plan be revised to remove any reference to the "subcommittee of the Management Advisory Committee (NORMAC)", an informal group that no longer exists.

The RAG discussed whether unforeseen circumstances in the fishery, which might require specific and urgent research activities that were not included in the five year plan, might be accommodated in research planning processes. The AFMA member clarified that the annual research plan is a RAG driven process (then fed through NORMAC) which, while taking its main direction from the five year plan, has the flexibility to include previously unforeseen but urgently needed research activities.

The Chair asked AFMA to draft a brief outline of the five year and annual research planning processes including how the RAG, MAC and NPF feed into these, and circulate this to RAG members and observers to provide clarity on this issue and improve the process for future years.

Action item 3 – AFMA to draft and circulate a brief summary of AFMA research planning process.

The RAG then discussed **Table 1 (At Sea Monitoring Programs)** and **Table 2 (R&D sequenced priorities)** in the draft 5 year research plan. There was some suggestion that grouping of strategic R&D needs in Table 1 and Table 2 could be improved if the ongoing NPF monitoring (surveys and CMO and scientific observers) and stock assessment was grouped together but separately from the more strategic research projects.



With regard to **Table 1**, there was uncertainty expressed by some RAG members as to whether the currently listed timing of the spawning surveys (July 2015 and 2017) should in fact be 2016 and 2018. The NPRAG asked that the NORMAC meeting minutes be checked to determine the agreed timing and the reasoning for that, and if necessary, amendments be made to the timing stated in the draft five year research plan. The NPRAG noted that the current contract for the recruitment survey finishes in 2015 and that CSIRO will need to prepare a proposal for 2016 onwards.

- Action item 4** – AFMA to check the NORMAC meeting record and report back to the RAG regarding the agreed timing (years) for the spawning surveys and the reasoning behind that timing
- Action item 5** – CSIRO to draft proposal for recruitment survey continuation from 2016 onwards

The RAG discussed research activities in **Table 2**. Comments and recommendations in relation to each R&D need are listed in the table below:

Project No.	R&D Need	RAG Comments/observations
1	RAG assessments: To set TAE for tiger, white banana prawns and red-legged banana prawns in accordance with NPF Harvest Strategies.	<ul style="list-style-type: none"> Scientific members expressed concern that unforeseen technical issues/problems that urgently needed additional time and resources (as has happened in the past) might not be resourced under item #1 given its current wording, and asked that it be amended to reflect such work. The Chair, with support from the AFMA member, clarified that firstly, R&D needs listed in Table 2 are intended to be broad and further details can be included in the associated 8-10 page project proposals. Secondly, any unforeseen, uncosted but urgent technical work required for the assessments can be identified and included by the NPRAG in annual research plans (and annual research rounds). The NPRAG agreed with this approach.
2	Recruitment survey	<ul style="list-style-type: none"> To be removed, already in Table 1
3	Spawning survey	<ul style="list-style-type: none"> To be removed, already in Table 1
4	Annual analysis of Crew Member Observer (CMO) Data (abbrev.)	<ul style="list-style-type: none"> RAG members agreed that this should be amended to include “<i>and scientific observer data</i>”. It was suggested that this could be placed in Table 1
5	Undertake a SAFE assessment for the JBG sub-fishery.	<ul style="list-style-type: none"> It was noted that this project has been developed already and funding set aside
6	Reduce fuel consumption and improve economic efficiency through monitoring and/or exploration of technological innovations in Australia and overseas.	<ul style="list-style-type: none"> Industry members felt that this was in fact either a medium/low or low priority area and would clarify this with other industry before finalising the plan



Project No.	R&D Need	RAG Comments/observations
7	Undertake a survey of current and past crew members in the NPF to improve understanding of motivations for involvement in fishing in the NPF, and factors that may positively influence skilled crew retention that are able to be emphasized. Investigate the influence of other sectors (eg mining) on crew recruitment and retention.	<ul style="list-style-type: none"> • In response to a suggestion that #7 and #8 be combined, Matt Barwick (NPF) explained that they had very separate purposes, the first being focused on understanding turnover and the second on improving safety standards. • Matt agreed with a suggestion by The Chair who noted that the theme addressed by #7 was relevant to fisheries Australia wide and as such should be modified to reflect that and increase the likelihood FRDC funding.
8	Develop an on-line induction course for NPF crew.	<ul style="list-style-type: none"> • Matt Barwick (NPF) noted that #8 has already received funding and is underway.
9	Develop and implement TAFE accredited training for CMOs ... to improve scientific data collection skills, increase participation in the CMO program and empower crew.	<ul style="list-style-type: none"> • Matt Barwick (NPF) clarified that this was a subcomponent of broader crew training program and was not yet underway as they are still sourcing funding.
10	Develop and implement training initiatives to better skill the NPF workforce to improve skilled staff retention and provide more effective OH&S training ...	<ul style="list-style-type: none"> • Matt Barwick (NPF) noted this was another component of crew training with secured funding which will be brought forward in the draft plan to 2014/15.
11	Advance co-management including through investigation of a 'standards' approach to auditing management functions undertaken by NPF.	<ul style="list-style-type: none"> • The AFMA member clarified that this will be a case study within the broader FRDC funded "Standards" project
12	Establish improved methods for traceability and chain of custody.	<ul style="list-style-type: none"> • Matt Barwick (NPF) indicated that this is a low priority with no funding yet sourced and the timeline listed in Table 2 would in fact need to be pushed back.
13	Continue research to identify devices and techniques to enhance bycatch reduction, and respond to changes in bycatch policy.	<ul style="list-style-type: none"> • This is a high priority in the NPF fishery given its bycatch interactions. • The NPRAG discussed the potential for utilisation of NPF bycatch in some northern regional communities; however, industry members felt that much of the bycatch did not comprise desirable food species. • Nevertheless, NPRAG asked that the title be edited to include "<i>and accreditation needs</i>" and "<i>explore bycatch utilisation</i>".



Project No.	R&D Need	RAG Comments/observations
14	Develop an understanding of ecological and economic tradeoffs of the impact of existing and proposed water resource development in Northern Australia (abbreviated title)	<ul style="list-style-type: none"> • NPRAG agreed that this is an immediate and very high priority for the NPF and should be promoted strongly as such in plans/discussions • NPRAG asked that “high priority” R&D items be moved to the top of Table 2.
15	Extend historical monitoring series to track food-web, seagrass health/extent and other indicators of ecological health and stability in response to coastal and catchment development in the Gulf of Carpentaria.	<ul style="list-style-type: none"> • Matt Barwick (NPMI) noted that while industry understands its importance, this would not be pushed strongly by industry in the immediate future given other competing research priorities. • In relation to #15 and #16, scientific members expressed concern at the general lack of long term ecological monitoring, noting that a suite of non-fishing factors (e.g. increases in GOC shipping traffic, freshwater flows) may have potential to impact on GOC ecosystems and NPF target stocks, and without data on these factors, it may reach a point where it is not possible to disentangle what factors are driving fishery trends.
16	Confirm a baseline and monitor medium term change of temperature and other environmental drivers on GOC littoral habitats (abbrev.)	<ul style="list-style-type: none"> • NPRAG noted that current monitoring surveys do not collect habitat data. • NPRAG noted that this issue is much bigger than just the NPF and that the Department of the Environment may hold responsibility for monitoring habitats in the GOC and elsewhere.
17	Address gaps in the biology of target and byproduct species e.g. red-leg banana prawns, red endeavours, bugs, squid and scallops. Look at the potential contribution to income and effect on MEY calculations.	<ul style="list-style-type: none"> • NPRAG noted that while research into byproduct species was not a high priority for FRDC or AFMA funding, such research is important, and as such it should be elevated to medium priority to assist in attracting funds from sources such as universities.

Following the discussion the RAG endorsed the draft 5 year research plan, pending the amendments (listed above in Action Item 5) that were identified during the discussion. The AFMA member indicated that the plan would then be presented to NORMAC (distributed out of session) for approval.

Action item 5 – Matt Barwick (NPMI) to amend the draft 5 year research plan to reflect suggestions made and agreed to by the NPRAG for each R&D need in Table 2 (see comments by RAG in above table)

Action item 6 – AFMA/NPMI to distribute the draft five year research to NORMAC members out of session



3.2 Annual Research Statement/Plan

The AFMA member requested that the RAG utilise the endorsed draft 5 year research plan to assist in the identification of research priorities for the coming year.

There was insufficient time during the teleconference to fully identify all priorities for the coming year (discussion focussed around one specific potential project – see below) and it was agreed that immediate research priorities would be developed out of session by AFMA and NPFI and distributed to the NPRAG out of session.

Action item 7 – AFMA/NPFI to develop a draft annual research statement for out of session consideration by RAG members.

The limited amount of discussion that was held focussed on two areas of research.

The first half of the discussion focussed on the potential need for the **“Development of testing procedures for the Species Split model”**, a project proposed by CSIRO but not initially supported by industry as a high immediate priority. A scientific member emphasised the need for this project to improve the assessments, and Matt Barwick (NPFI) indicated that industry could reconsider their initial assessment of the priority of this project if further information was provided (noting that it is difficult to properly prioritise projects based on their title alone). Both the RAG Chair and the AFMA member encouraged CSIRO to develop and submit an EOI to the RAG for further consideration if CSIRO felt that this work was critical in the near future.

Action item 8 – CSIRO to develop an EOI for the project **“Development of testing procedures for the Species Split model”** for consideration by the RAG and NPFI.

The second half of this agenda item discussion focussed on CSIRO projects 9-13 (Attachment 3) which correspond and/or overlap with items #14 and #15 (partly) of Table 2 of the draft five year research plan . The Chair expressed concern that it was difficult to know how to prioritise amongst CSIRO projects 9-13 (i.e. which one or a combination to take forward), noting that they had some overlap and a common theme (effectively, environmental drivers and their impacts on prawn stocks/fisheries, with the potential for reduced river flows to impact the fishery a key underlying driver). After further discussion amongst RAG members it was agreed that a working group comprising of the scientific members, Matt Barwick (NPFI) and Brodie Macdonald (AFMA) would work out of session to identify the priorities within this R&D area and develop an EOI for presentation to the RAG and then NORMAC. The Chair asked that the group focus on getting the proposal content developed as a priority and then budget and funding considerations could follow later.

The AFMA member noted that the AFMA Research Committee was due to meet on the 16th of October followed by ComFRAB on the 17th October. AFMA is required to present the five year research plan and if possible the annual research plan/statement, to the ARC on the 15th. Given the timeframe allowed for the teleconference, the Chair asked and the RAG agreed to consider and comment on the annual research statement out of session.

Next meeting

It was agreed that the next meeting would be held in late November on a date still to be determined.



Signed (Chairperson):

Date:

List of Attachments

- 1) NPRAG 2 October 2014 - Annotated Agenda
- 2) NPRAG 2 October 2014 - Declared conflicts of Interest
- 3) NPFI Recommendations on Research Priorities submitted to NORMAC 78 by CSIRO



Attachment 1

NPRAG Teleconference Agenda

2 October 2014

3:00pm – 4:00pm

Phone in details

Toll Free Number: 1800 153 721

Participant PIN Code: 667768

Item	Responsibility	Paper
1. Welcome/meeting management	Chair	No
2. NPRAG membership	AFMA	Yes
3. Research planning	CSIRO/AFMA	Yes
4. Other business		No

Confirmed attendees: *Ian Knuckey* *Malcolm Haddon*
Trevor Hutton *Brodie Macdonald*
Phil Robson *David Brewer*
Mike O'Brien *Ian Boot (TBA)*
Don Bromhead

Observers : *Annie Jarrett* *Robert Curtotti*
Matt Barwick

Apologies : Tom Kompas



Attachment 2**NPRAG Declared Conflicts of Interest**

Name	Membership	Interest Declared
Ian Knuckey	Chair	Fishwell Consulting has applied to provide 8-10 observer days monitoring the tiger prawn fishery.
Rik Buckworth	Scientific Member - CSIRO	Research provider. Has in the past and may in future seek and receive funding for research in the fishery.
Malcolm Haddon	Scientific Member - CSIRO	Research provider.
David Brewer	Scientific Member - CSIRO	Research provider. Has in the past and may in future seek and receive funding for research in the fishery.
Ian Boot	Industry Member	Managing Director of Austfish, a company which operates 4 NPF vessels. Has a commercial interest in the fishery.
Michael O'Brien	Industry Member	Employee of a company that owns statutory fishing rights (SFRs) in the NPF.
Phil Robson	Industry Member	Employee of A Raptis and Sons, responsible for managing 12 NPF vessels. Has provided charter for scientific surveys in NPF in the past and may in future.
Brodie Macdonald	AFMA Member	No pecuniary interest in the fishery
Don Bromhead	Executive Officer - AFMA	No pecuniary interest in the fishery
Renee Kinnersly	Observer - AFMA	No pecuniary interest in the fishery
Matt Barwick	Observer - NPFI	Employed by and represents NPFI and has played a large role in developing the research plan to be discussed
Trevor Hutton	Observer - CSIRO	Research provider. Has in the past and may in future seek and receive funding for research in the fishery.



Attachment 3

NPFI Recommendations on Research Priorities submitted to NORMAC 78 by CSIRO

Background:

Rik Buckworth presented a number of strategic research projects for consideration at NORMAC 78 relating to NPF assessments, monitoring surveys and other projects.

NORMAC was advised that the proposed projects are either extensions of the current assessment and other recent projects and/or are intended to improve assessment outcomes or knowledge of target and bycatch species, that may enhance knowledge of fishery status.

NPFI gave an undertaking to review the projects and provide advice to the RAG regarding industry's research priorities.

Comments on Proposed Research Projects

NPFI recommends that the projects highlighted in YELLOW (below) are supported, based on the comments below:

- the JBG SAFE (1) is strongly supported as it is an MSC condition
- the stock assessments projects (3) should proceed, provided the frequency is consistent with the NPF harvest strategies
- The monitoring project (4) should proceed – consideration must be given in the development of the project spec to the results of the MSE (project 5) on whether the spawning survey needs to be undertaken every year or biennially
- the MSE (5) should proceed to determine the impacts of reverting to undertaking the spawning survey biennially
- projects 9-13 are critical to addressing the unknowns around water allocation and northern development which is the NPF's biggest threat at the moment. Project specs and funding sources should be identified for these projects as a matter of urgency.

NPFI does not support proceeding with the other projects at this time.

	Project	Timing	Status
1.	A SAFE assessment of the JBG fishery for red-leg banana prawns	FRDC EOI immediate	In prep
2.	Economics of sequential fisheries	FRDC EOI June 2014	In review
3.	2015-2017 NPRAG Assessment Project	AFMA EOI due Jan	In prep
4.	2015-17 Monitoring Surveys Project	AFMA EOI due Jan	In prep
5.	Examining the impact on assessments of tiger and endeavour prawns of reducing spawner surveys to a biennial period	AFMA EOI due Jan	In prep
6.	Development of testing procedures for the Species Split model	AFMA EOI due Jan	In Prep
7.	Protocols for inclusion of NPF observer data in the tiger prawn assessment	AFMA	In Prep
8.	Development of an Assessment of the White Banana Prawn		



Fishery

9. Understanding the movements and connectivity of banana prawns between estuarine, inshore and offshore environments, and their relation to river flows

10. Evaluating the importance of nutrients transported from rivers to the survival and growth of banana prawns and tiger prawns

11. Ecosystem effects of reduced river flows on coastal species with emphasis on banana and tiger prawns

12. The economic and social value of the Northern Prawn Fishery to regional communities, and the consequences of sustained reduction in fishery outputs.

13. Examination of environmental drivers in the t red-legged banana prawn and tiger prawn fisheries

14. Evaluation of monitoring approaches for seagrass tiger prawn nursery areas

CSIRO Notes:

1. An urgent tactical project developed to provide audit support for Marine Stewardship Council accreditation;
2. This project addresses an underlying economics problem that was identified in the Tiger Prawn assessment conducted earlier this year. It is common to many fisheries;
3. On-going - assessment;
4. On-going -Surveys to provide information for assessment;
5. It has been suggested that spawner surveys be conducted every second year to reduce costs to industry, and this project includes an MSE to evaluate that;
6. The “species split” is an important part of the fishery assessment process, separating logbook catch and effort data by species. The model principally relies on data collected before 1998. Additionally, new sediment composition data for northern Australia may be incorporated to improve reliability of the “species split”;
7. A small project to include observer information in the assessment, providing a pathway to maximise utility;
8. This project would utilise the methods developed in the Banana Prawn Methods Comparison project, and the approach of Venables et al. to provide input to a stock assessment model for banana prawns;
9. 10 arise as gaps remaining after the work CSIRO and Burford et al.;
11. 12 are based on consideration of the importance of flows to the fishery and the consequences should flows and thus the fishery be reduced;
13. Environmental drivers may be important in the fluctuating recruitment of the tiger and red-legged banana prawn fisheries; these should be investigated; and,
14. Potential approaches include the incorporation of new remote sensing information and the collaboration of Indigenous Ranger groups in monitoring seagrass to evaluate the effects of development and changing climate.

