



**Australian Government**

**Australian Fisheries Management Authority**

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

**Teleconference Minutes**

**Date: 29 August 2019**

**Time: 2.00 pm – 4.30 pm (AEDT)**

# Attendees

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Name	Member type i.e. industry member
<i>Ian Knuckey</i>	<i>Chair</i>
<i>Phil Robson</i>	<i>Industry Member</i>
<i>Ian Boot</i>	<i>Industry Member</i>
<i>Rik Buckworth</i>	<i>Scientific Member</i>
<i>David Brewer</i>	<i>Scientific Member</i>
<i>David Power</i>	<i>AFMA Member</i>
<i>Stephen Eves</i>	<i>Executive Officer - AFMA</i>
<i>Annie Jarrett</i>	<i>Invited Participant - NPFI</i>
<i>Adrienne Laird</i>	<i>Observer - NPFI</i>
<i>Trevor Hutton</i>	<i>Observer – CSIRO</i>
<i>Roy Deng</i>	<i>Observer – CSIRO</i>
<i>Rob Kenyon</i>	<i>Observer – CSIRO</i>
<i>Shijie Zhou</i>	<i>Observer – CSIRO</i>
<i>Robert Curtotti</i>	<i>Observer – ABARES</i>

## 1. Preliminaries

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### 1.1 Welcome and apologies

The Northern Prawn Fishery Resource Assessment Group (NPRAG) Chair, Ian Knuckey, opened the teleconference at 2.00 pm (AEDT) on 29 August 2019. The Chair noted apologies from Economic Member Tom Kompas.

### 1.2 Adoption of agenda

The Chair requested that the NPRAG consider the draft agenda (**Attachment 1**), identify any required amendments, and adopt the draft agenda for the meeting. No additional items were put forward for discussion.

### 1.3 Declaration of interests

The Chair requested that NPRAG members consider the standing table of declared interests (**Attachment 2**) and individually declare whether the stated interests are accurate, and if not, provide an update on those.

It was noted that CSIRO representatives may have a pecuniary interest in any agenda items that involves research, particularly if funding is discussed. The RAG noted that agenda item 2 – *Penaeus Monodon* stock assessment project, involves research discussion and if a particular conflict arose CSIRO representatives would be asked to leave the teleconference. The RAG noted that NPFI may also have a pecuniary interest in agenda item 2 and would also be asked to leave if a particular conflict arose during the discussion.

Industry Member Ian Boot declared that he is directly involved in targeted scampi fishing and undertakes broodstock collection trips on occasion. The RAG agreed that Ian would need to leave the teleconference during agenda item 3 – NPF scampi harvest strategy review, when it came time

for the group to make any recommendations and also during agenda item 2 if a particular conflict arose during the discussion.

No other apparent conflicts of interest were identified that would prevent individuals participating in discussions but if a particular conflict arose for any agenda item, the relevant party would be asked to leave the teleconference at the appropriate time.

#### **1.4 Minutes from previous meetings**

It was noted that the minutes from the 30-31 May 2019 meeting were accepted out-of-session via email as a true and accurate record of the meeting.

## **2. *Penaeus monodon* stock assessment project**

The NPRAG reviewed options to assess the *Penaeus monodon* stock. The potential stock assessment options provided to the RAG by CSIRO include a standardised CPUE time series, eSAFE (Tier 6-7), Bayesian biomass dynamics model (Tier 2) or a catch-only method plus CPUE (Tier 3). There was robust discussion on the level of certainty associated with each assessment option and what the best approach is to determine a sustainable catch limit. Key points from the discussion included:

- Management changes in the fishery, such as closures, may influence catch and CPUE data and it should be acknowledged that annual catch rates may not accurately reflect the biomass in the fishery. A standardised CPUE time series by region is a good approach as long as the paucity of data and the time step is considered.
- The ERA method provides a fishing mortality rate but not a biomass estimate. The Commonwealth Harvest Strategy Policy requires an estimate of both fishing mortality rate and biomass for key species. The eSAFE method can provide an estimate of both fishing mortality and biomass but doesn't provide an indication of unfished biomass that is needed to determine biomass depletion level.
- The CPUE standardisation plus the Bayesian biomass dynamics model is the most advanced assessment, but the level of uncertainty in the model results would not be known until the project is undertaken.
- The most comprehensive assessment would be a combination of a few assessments including the CPUE standardisation, Bayesian biomass dynamics model and the catch-only method. This would allow a comparison of each assessment's results and provide an indication of each model's accuracy.
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- NPMI expressed concern about developing a costly assessment project when *P. monodon* are only a very minor part of the total prawn catch in the NPF. NPMI recommended that the scope and cost of the project be approached with a view to providing the baseline information /assessment as required for 'minor species' under the new Commonwealth Harvest Strategy policy to deliver a sustainable catch limit for *P. monodon*.

The RAG noted that once the CPUE standardisation is undertaken it should give a clearer indication of the quality of the data and the potential level of uncertainty associated with different assessment approaches. The RAG supported initially conducting CPUE standardisation work and recommended costing each assessment component separately to enable it to decide on the best combination of assessment options. The RAG noted that conducting the CPUE standardisation along with both the Bayesian biomass dynamics model and the catch-only method would provide the most information and help to reduce the overall uncertainty through validating the results using

different methods. The RAG recognised, however, that there are budget implications that may influence whether one or both assessments could be conducted and recommended including a review point after the CPUE standardisation to seek the RAGs advice on proceeding with the Bayesian biomass dynamics and/or the catch-only method.

**Actions:**

- CSIRO to cost each component of the *P. monodon* stock assessment options separately and provide this to AFMA and the RAG
- AFMA and CSIRO to develop an assessment proposal package including CPUE analysis, Bayesian biomass dynamics and the catch-only method with a milestone review point after the CPUE analysis is available that prompts further review by the RAG.
- After CPUE analysis results are available, NPRAG to recommend which combination of *P. monodon* stock assessment options would be most suitable to provide a sustainable catch limit.

### 3. NPF scampi harvest strategy review

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NPRAG reviewed the current NPF Harvest Strategy decision rules for scampi. The current rule is based on a 12-month reference period aligned with the calendar year. The current reference period is not based on operational aspects but was developed out of the ease of referring to a calendar year. A proposal was put forward to change the reference period from the calendar year to a 12-month period beginning 1 December each year. It was advised that the reason for the proposed change is due to crew safety and vessel management. Because of the monsoonal trough and associated threat of cyclones, the ideal time to fish for scampi is from November to January each year. It is also costly to shut a vessel down for a month after the tiger prawn season and then prepare it again for operation. It was clarified that besides the current year (where on paper it will appear as though 60t was caught in 2019), 30t was still the limit in any 12-month period.

Following discussion on the issue, Mr Boot was requested to leave the room while the RAG further considered the issue and made a recommendation. The NPRAG agreed there were no sustainability concerns with moving the reference period forward by a month and supported the proposal as a sensible operational change.

The NPRAG was also asked whether it supported engaging an independent scientist to review the harvest strategy and the current scampi decisions rules. It was suggested that the review needs to provide a strategy that aligns with the new Commonwealth Harvest Strategy Policy and this had implications for other byproduct species in the NPF. The RAG supported the proposal and recommended that AFMA collaborate with NPFI to develop the terms of reference for a harvest strategy review.

**Action:**

- AFMA and NPFI to update the harvest strategy reference period for Scampi from the calendar year to a 12 month period beginning 1 December each year and present this to NORMAC for consideration.
- AFMA/NPFI to develop terms of reference for the NPF harvest strategy review for scampi and other byproduct species in light of the revised HSP.

## 7. Next meeting

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The Chair advised the next meeting will be a face-to-face meeting in November and then closed the meeting at 4.30 pm.

Signed (Chairperson): 

Date: 10/10/2019

## Attachments

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- 1) NPRAG 29 August 2019 Final Agenda
- 2) NPRAG 29 August 2019 Declared conflicts of Interest

## Northern Prawn Fishery Resource Assessment Group Agenda

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### NPRAG Teleconference 29 August 2019 2:00 pm – 4:00 pm (AEDT)

Dial in number: 02 8318 0009

Conference ID: 300 119 36#

Item	Responsibility	Paper
1. Introduction / Meeting Management <ul style="list-style-type: none"> <li>• Welcome</li> <li>• Adoption of agenda</li> <li>• Declaration of interests</li> <li>• Minutes from previous meetings</li> </ul>	Chair	Yes
2. <i>Penaeus Monodon</i> stock assessment project <ul style="list-style-type: none"> <li>• Assessment options and project scoping to assess the NPF <i>P. monodon</i> stock</li> </ul> <p><i>Outcomes: The RAG to consider the P. monodon stock assessment options and recommend the preferred approach.</i></p>	AFMA/CSIRO	Yes
3. NPF scampi harvest strategy review <ul style="list-style-type: none"> <li>• Harvest strategy conditions and recommendation</li> </ul> <p><i>Outcomes: RAG to review the NPF scampi harvest control rules and recommend a harvest option for 2019.</i></p>	AFMA	Yes

## NPRAG Declared Conflicts of Interest

Participant	Membership	Interest Declared
<b>Ian Knuckey</b>	<i>Chair</i>	<p><i>Director - Fishwell Consulting Pty Ltd</i></p> <p><i>Director - Olrac Australia – a company associated with electronic logbooks.</i></p> <p><i>Scientific member – NORMAC</i></p> <p><i>Member - North Marine Parks Advisory Committee</i></p> <p><i>Chair - Tropical Rock Lobster RAG</i></p> <p><i>Chair - Victorian Rock Lobster RAG</i></p> <p><i>Scientific member - SESSF shark RAG</i></p> <p><i>Scientific member - GABRAG</i></p> <p><i>Works with Indigenous communities in capacity building activities</i></p> <p><i>Chair - South Australia's Gulf of St Vincent prawn fishery's research committee</i></p> <p><i>Scientific member - South Australia's Gulf of St Vincent prawn fishery MAC</i></p> <p><i>Various research interests in other Commonwealth and State fisheries.</i></p>

<b>Participant</b>	<b>Membership</b>	<b>Interest Declared</b>
<b>Rik Buckworth</b>	<i>Scientific Member</i>	<p><i>Scientific Member - Torres Strait Finfish RAG</i></p> <p><i>Chair - NT Research Advisory Committee (FRDC)</i></p> <p><i>Chair – NT Aquarium Fishery MAC</i></p> <p><i>Director - Aquatic Remote Biopsy Pty Ltd</i></p> <p><i>Director - Sea Sense Australia Pty Ltd</i></p> <p><i>University Professional Fellow - Charles Darwin University</i></p> <p><i>Current consultancy contract with NPFI to review Red Endeavour prawns</i></p> <p><i>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.</i></p>
<b>David Brewer</b>	<i>Scientific Member</i>	<p><i>Director – Upwelling P/L (David Brewer Consulting)</i></p> <p><i>Honorary Fellow – CSIRO</i></p> <p><i>Scientific member – NPFRAG</i></p> <p><i>Scientific member – Torres Strait Fin Fish Working Group</i></p> <p><i>Chair - Torres Strait Fin Fish RAG</i></p> <p><i>Editorial committee - Moreton Bay and Catchments 2019</i></p> <p><i>Volunteer - Moreton Bay Environmental Education Centre</i></p> <p><i>Current consultancies with Quandamooka Yoolooburrabee Aboriginal Corporation, Redlands City Council, Torres Strait Regional Authority.</i></p>
<b>Phil Robson</b>	<i>Industry Member</i>	<p><i>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 (none of which are in JBG) in the past and may in future.</i></p>

<b>Participant</b>	<b>Membership</b>	<b>Interest Declared</b>
<b>Ian Boot</b>	<i>Industry Member</i>	<i>Managing Director of Austfish, a company which operates NPF vessels. Has a commercial interest in the fishery.</i>  <i>Participates in targeted scampi fishing in the NPF.</i>  <i>Participates in broodstock collection in the NPF.</i>
<b>David Power</b>	<i>AFMA Member</i>	<i>AFMA employee, no pecuniary interest in the fishery.</i>
<b>Stephen Eves</b>	<i>Executive Officer (AFMA)</i>	<i>AFMA employee, no pecuniary interest in the fishery.</i>
<b>Annie Jarrett</b>	<i>Invited participant - NPMI</i>	<i>CEO- NPMI</i>  <i>Member of the MSC Stakeholder Council</i> <i>Chair - Australian Council of Prawn Fisheries (ACPF).</i>  <i>Some research items are of relevance to NPMI.</i>
<b>Adrienne Laird</b>	<i>Observer - NPMI</i>	<i>Employed as a contractor by NPMI. Some research items are of relevance to NPMI.</i>
<b>Trevor Hutton</b>	<i>Observer - CSIRO</i>	<i>Research provider 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.</i>
<b>Shijie Zhou</b>	<i>Observer - CSIRO</i>	<i>Research provider. Has in the past and may in future seek and receive funding for research in the fishery.</i>
<b>Roy Deng</b>	<i>Observer - CSIRO</i>	<i>Research provider 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.</i>
<b>Rob Kenyon</b>	<i>Observer - CSIRO</i>	<i>Research provider 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.</i>
<b>Robert Curtotti</b>	<i>Observer - ABARES</i>	<i>Economics research provider. No current pecuniary interest in fishery. Potential to seek and receive funding for research in the fishery in future.</i>

