



**Australian Government**

**Australian Fisheries Management Authority**

## **Northern Prawn Management Advisory Council (NORMAC)**

**FINAL meeting minutes**

**7 June 2024**

**[View Hotel - Brisbane](#)**

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## Meeting participants

### Agenda item 1. Preliminaries

Position	Participants
Chair	John Glaister
<b>NORMAC members</b>	Ian Knuckey, Scientific member Geoffrey Muldoon, Conservation member Greg Albert, Industry member Ian Boot, Industry member Michael O'Brien, Industry member Phil Robson, Industry member Brodie Macdonald, AFMA (online) Bryan van Wyk, Industry member
<b>Executive Officer</b>	Sarah Kirkcaldie, AFMA
<b>Invited participant</b>	Annie Jarrett, NPFI
<b>Observers / Presenters</b>	Darci Wallis, AFMA Scott Spencer, AFMA Commission Brett McCallum, AFMA Commission Wez Norris, CEO AFMA Anna Willock, Deputy CEO, AFMA Éva Plagányi, CSIRO, NPRAG Scientific member Roy Deng, CSIRO Denham Parker, CSIRO, NPRAG Scientific member Sean Pascoe, CSIRO Rob Kenyon, CSIRO David Carter, Industry Norm Peovitis, Industry Andy Prendergast, Industry Stuart Nesbit, Industry Ken Hartley, Industry
<b>Apologies</b>	
Nil	

#### a. Welcome and apologies

The Chair opened the meeting at 8.20 am (AEST) at the Riverview Hotel in Brisbane on 7 June 2024 with an Acknowledgement of Country. The Chair welcomed all members and observers including the AFMA Commissioners, Scott Spencer and Brett McCallum and the AFMA CEO, Wez Norris and Deputy CEO, Anna Willock.

#### b. Declarations of interest

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

register was updated with changes declared at the meeting, and it was agreed that any potential conflicts of interest would be addressed by the meeting if/when they arose.

Attendees with research interests were deemed to have a potential conflict of interest with **Agenda Item 8: 2025-26 annual research statement**. Research attendees left the meeting so the remaining attendees could discuss participation in the item. It was agreed that these attendees should be present for the discussion as no funding for new projects was being considered.

Industry attendees were deemed to have a potential conflict of interest with Agenda Items: 4 (Harvest Strategy review), 5 (Stock assessments), and 6 (TAE recommendations). Industry attendees left the meeting so the remaining attendees could discuss industry participation in the items. It was agreed that industry should be present for all of Agenda Items 4 and 5 and the initial discussion but not the final recommendations under Agenda Item 6.

### **c. Adoption of agenda**

The agenda was adopted without change (**Attachment B**).

### **d. Minutes from previous meetings**

It was noted that the minutes from the 28 February 2024 meeting were circulated and accepted out-of-session.

### **e. Correspondence sent/received**

The MAC noted correspondence sent and received since the last meeting was administrative in nature relating to NORMAC 89.

## **Agenda item 2. Actions arising from previous meetings**

NORMAC noted the status of the action items from previous meetings and an update provided by the Executive Officer (**Attachment C**).

## **Agenda item 3. Reports/update**

### **a. Industry update**

Industry provided an update on operations in the 2024 banana season with NORMAC noting the following key points:

- Most boats were back in port prior to the season closing.
- It was a strong wet season so industry thought it would be a good catching year, but industry struggled to get good quantities of prawns.
- The east coast of the Gulf is a major concern for industry with catches lower than last year. The southern part of the fishery performed well with the west and north areas patchy.
- Overall prawn size was good, although industry stated they had adjusted their fishing operations this year – focusing on catching larger, better quality prawns over quantity. This focus will likely continue into the tiger prawn season.
- Industry have slowed down packing to reduce the need for a re-pack, aiming to improve quality and industry's reputation in the markets.

- The export market continues to be challenging, with the NPF competing against a global glut of other wild-caught and aquaculture prawns.
- The poor economic conditions in the fishery continue with low prawn prices and high fuel prices.
- The lack of a mothership for some companies meant there was adjustments to fishing operations including operating out of Darwin.

## **b. AFMA management update**

The MAC noted the following update provided by AFMA about key issues relevant to the NPF:

- The new NPF WTO approval came into force on 5 January 2024, expiring on 6 January 2027, which includes four new conditions (in additions to the standard conditions applied to all Commonwealth Fisheries), which include:
  - Undertaking a review of the NPF Scientific Observer program, due 30 June 2025;
  - Completion of an electronic monitoring (EM) trial in the NPF, due 15 December 2024;
  - Develop a sawfish bycatch mitigation strategy for the NPF, due 30 June 2026; and
  - Ensuring where possible, all sawfish and sea snakes interactions in the NPF are reported to the species level.
- The AFMA Commission approved the current broodstock catch limit (a 9,000 supply limit) until the end of the 2024 fishing season, noting a stock assessment was scheduled for late 2024. However, with the delay of this assessment, a decision is required from the AFMA Commission prior to the 2025 banana prawn season. Per previous decisions, a multi-year process is proposed with NPRAG and NORMAC advice to be sought later in 2024.
- In late 2023, the Commission considered the proposed amendments to the NPF Management Plan (the Plan) and agreed that the proposed amendments to the Plan should not be progressed at this time, noting the revised advice from NPFI regarding the removal of the minimum gear requirement. The other amendments will be progressed by AFMA Management over the next 12 months.
- The Fisheries Research and Development Corporation (FRDC) project on Indigenous engagement is nearing completion, which aims to meet AFMA's operational legislative requirement to take account of Indigenous interests in commercial fisheries decisions and any wider implications of the Department of Agriculture, Fisheries and Forestry's (DAFF's) resource sharing policy. The key findings and suggested approach were the development of a national level engagement structure which includes the formation of a national coalition/peak body, an Indigenous Fisheries Technical Working Group and formation of an Indigenous unit within DAFF.
- AFMA's MAC/RAG consultative framework review is complete, with Commission approval of the framework review implementation plan. The implementation plan aims to make obtaining stakeholder advice/recommendations more efficient, effective, and transparent. Key aspects of the implementation plan will initially be tested with a limited number of MACs, RAGs and Chairs (not yet determined).
- A review on the Sawfish and River Sharks Multispecies Recovery Plan commenced in 2021, although the finalisation of this review has been delayed while the proposals to upgrade listing are underway. Narrow Sawfish was recommended for up listing from migratory to endangered in 2019 and Freshwater Sawfish from vulnerable to endangered in 2020, with both assessments currently due on 30 October 2024.
- The EM trials in the NPF commenced on two 2024 recruitment survey vessels, expanding to three vessels in the banana season with further expansion to 5 vessels in the tiger prawn season. The trial is a WTO condition, focusing on the feasibility/cost-effectiveness of EM as data validation tool for TEP species (in particular sawfish and seasnakes).

- The trial outcomes will also be considered as part of another NPF WTO condition which requires a review of the NPF observer coverage, which will compare effectiveness and costs of each of the monitoring tools to determine the best mix of coverage tools to achieve the fishery data needs.
- The trial review will occur following tiger prawn season to assess the costs and feasibility of EM. AFMA expressed appreciation to industry for their involvement and assistance in the trial and requested any feedback from industry involved in the trial to inform the final review.
- The draft Redleg Ecological Risk Assessment (ERA) report was provided to AFMA in in mid-2023, as part of the automation trial. An extensive internal review was undertaken, which provided both broader comments on the report structure and ERA process and comments trial to the NPF report.
- The broader feedback to be considered by the Ecological Risk Management (ERM) steering Committee Steering Committee during 2024. The specific NPF comments were provided to CSIRO in April, with the revised report to be considered by the NPRAG ERA working group before consideration by NPRAG and then NORMAC later in 2024.

### c. NPRAG Report

Ian Knuckey, NPRAG Chair and NORMAC Scientific Member, provided the following update on the recent key discussions by NPRAG:

- A key focus for NPRAG since May 2022 has been reviewing the key elements of the Tiger Prawn stock assessment, as the 2022 model outputs were impacted by the minimum effort threshold (MET) which meant NPRAG couldn't support the recommended total allowable effort (TAE). Consequently, an alternative, more precautionary approach outside of the NPF Harvest Strategy, was used to set the 2022 and 2023 TAE.
- This work included a tiger prawn stock assessment workshop held in early 2023, along with reviews and other research projects focused on the key elements of the stock assessment model. This work included a revised endeavour prawn assessment, updated species distribution model, review of the MET and preliminary review of the fishing power model.
- The new endeavour prawn assessment, species distribution model and revised MET have been incorporated into the new base case, although inclusion of red endeavour prawns remain as a sensitivity.
- Following clarification on the inputs and working of the fishing power model, most of the initial concerns raised with the model were alleviated. Further analysis will be undertaken by CSIRO on using geo-spatial data to calculate swept area in the fishery, which is currently calculated within the fishing power model.
- The stock assessment updates have resulted in a more robust assessment, with NPRAG more confident in the model outputs.
- With respect to economic data, a softening of fuel prices since early 2024 was observed and economists predict this will continue. A model that uses artificial intelligence to predict fuel prices is being developed, but it was agreed that a fixed price should be used for the current stock assessment.

Dr Knuckey provided a summary of the NPRAG advice on the tiger prawn TAE, including:

- The NPF is the only Commonwealth fishery with formal maximum economic yield (MEY) driver, with the economic inputs having a significant impact on the model outputs.
- While the biological elements of the bio-economic model show that the stocks are in a good state overall, with all but one species assessed above maximum sustainable yield (MSY). Only brown tiger prawns were below MSY, although the stock is well above the limit reference point (LRP).

- Due to the recent economic conditions in the fishery, specifically higher fuel prices, the model outputs recommend reducing effort levels down to the revised MET introduced in the 2024 assessment. The primary reasons for this are to reduce operational costs by limiting fishing activity and also to increase the stock size of offset the poor economic inputs with higher catch rates in future.
- NPRAG accepted the 2024 stock assessment for the tiger prawn fishery and its recommended 2024 and 2025 TAE. However, considering fuel prices have already softened compared with the 2024 model inputs and potentially call fall further, NPRAG acknowledged the likelihood that the 2025 TAE model outputs would not represent the economic reality.
- Therefore, NPRAG was open to re-considering the 2025 TAE based on revised economic inputs – with potential plans to update the assessment, if deemed necessary, to be discussed at the November NPRAG meeting.

#### **d. Conservation update**

The MAC noted the following update from Environment/Conservation member Geoffrey Muldoon, with the following key points discussed:

- As a review of the AFMA observer program is required with the new WTO conditions for the fishery, it was proposed that this should consider increasing the coverage level in the fishery. The AFMA member advised that considering the EM trial currently underway, this review will consider the overall monitoring required in the fishery (whether EM or observer) and all available tools to meet coverage requirements in the fishery.
- An update on the Sawfish gear trials was provided by NPFI, specifically:
  - The gear trials are currently still underway, with adjustments made to the initial Sawfish/Turtle Excluder Devices (STED) designs.
  - There are some positive preliminary results from some gear trialled, e.g. the reduction in the width between STED bars saw fewer smaller and medium sized animals going through to the cod end. However, further review of trial footage, along with gear testing is required in the tiger prawn season to confirm these results.
  - The outcome of the recently completed FRDC MICE project, showed the potential impact of water extraction activities to significantly impact fisheries and key ecological species – posing a much greater risk to Sawfish and other key habitats than fishing. Industry remains concerned of the downstream impacts (e.g. run-off) from expansion of Northern agricultural activities and NPFI would be keen to partner with e-NGOs in this space.
  - The new NPF MSC accreditation has a condition on Sawfish, along with the other Sawfish tagging and population research which is also underway.

**Action Item 1: CSIRO to share the results of the initial MICE project to Geoffrey Muldoon.**

#### **e. CSIRO investment**

- Recently, there has been a decrease in CSIRO co-investment rates for research deemed as ‘standard’ fishery research (e.g. stock assessments). There is concern that this could potentially be viewed as intent to deprioritise fisheries research within CSIRO. NORMAC acknowledged the previous and ongoing representations made to CSIRO on the importance of this work to fisheries. It was also broadly agreed by the Group that CSIRO investing in and undertaking the type of research produced for the NPF supports the broader innovative climate change science and allows

breakthroughs to occur. Anna Willock noted that this has been discussed by the AFMA Commission and top AFMA and CSIRO levels, as it is an issue that impacts all Commonwealth fisheries. NORMAC agreed that a formal submission should be made from NORMAC to these higher AFMA and CSIRO levels.

- Further information would be provided on other requests in the conservation update would be covered under other agenda items.

**Action Item 2: NORMAC Chair to write a letter to the Executive and Board levels of AFMA and CSIRO on the importance of the routine fishery work to the NPF and other Commonwealth fisheries, with input to be sought from relevant NORMAC members where required.**

## Agenda item 4. Harvest Strategy review

Darci Wallis (AFMA) provided a presentation to NORMAC on the key changes proposed to the NPF harvest strategy, noting NPRAG endorsed the revised NPF harvest strategy at its recent meeting on 4-5 June 2024. The revised draft NPF harvest strategy had been developed by the Harvest Strategy Working Group (HSWG), with NORMAC noting the following key points:

- The HSWG and NPRAG supported maintaining a higher level of detail on stock assessment inputs in the revised harvest strategy, which will allow future adjustments without the need for an update.
- The new agreed MET of 4,004 days has been incorporated, with clarification on its application also included. This change confirms that the MET applies, except when the LRP for either tiger prawn species is breached. This reflects that different management responses are appropriate dependant on whether a tiger prawn (a target species) or endeavour prawn stock (a byproduct species) was below the LRP. While a reduction in effort levels below the MET would be appropriate if with tiger prawn species was below the LRP, alternative management options are available to prevent targeting on endeavour prawn stocks if below the LRP.
- This remains consistent with the current application of the tiger prawn decision rules, which assume that controlling the tiger prawn effort will equally maintain the stock size of blue and red endeavour prawns (caught as a bycatch of the tiger prawn fishery) and also the Commonwealth Harvest Strategy Policy (CHSP), which requires that no targeted fishing occurs on species below the LRP.
- The proposed new red endeavour prawn decision rule is consistent with the other tiger prawn fishery decision rules, preventing targeted fishing of red endeavour prawns until the stock is confirmed to be above the LRP.
- Combining previous decision rule 4 and 5, providing further clarification on how effort controls are applied and remove repeating statement. Additional explanation was also included to confirm:
  - That for all species, there will be no targeted fishing until the stock is confirmed to be above the LRP (consistent with the CHSP requirements), and
  - Specifying that NPRAG will consider the need to undertake a stock assessment prior to the next scheduled assessment (2 year cycle).
- NPRAG had requested an additional paragraph be included to clarify how the current NPF LRP relates to the  $B_{20}$  proxy, which would be included in the final version provided to the AFMA Commission.
- Other minor updates were identified during the review, to provide further clarification where required in the overview sections and to correction of editorial errors.
- The proposed changes had been considered against the previous MSE analysis, with NPRAG confirming that all other proposed changes remain within the previous MSE testing, except for the



new red endeavour prawn decision rule and revised MET. It was noted that the revised MET of 4,004 boat days is more precautionary than the previous 5,444 MET.

- Further review of the NPF harvest strategy will be required following release of new CHSP (expected in early 2025), with potential previously identified updates on the tiger and blue endeavour prawn decision rules and squid catch triggers to be considered in this review.

**NORMAC Recommendation**

NORMAC endorsed the revised draft NPF harvest strategy with no further changes, noting that an additional paragraph clarifying how the current NPF LRP relates to the B<sub>20</sub> proxy will be included prior to AFMA Commission consideration.

## Agenda Item 5. Stock assessments

### a. Tiger prawn stock assessment

Denham Parker, CSIRO, provided a presentation on the 2024 Tiger Prawn Stock Assessment which included the data inputs, stock status, bio-economic model outputs and sensitivity tests, noting the following discussion points:

- The updates to the 2024 stock assessment resulted in a much more robust assessment, with significant background work and sensitivity tests undertaken to ensure the model was performing well.
- Catches for all species increased from 2022 catches except for red endeavour prawns, because 2022 effort was much lower than normal. However, catches of grooved tiger prawns, brown tiger prawns, blue endeavour prawns and red endeavour prawns were 2%, 22%, 15% and 30% below the 2019-22 average respectively.
- Tiger prawn effort increased in 2023 compared to 2022, although grooved tiger prawn and brown tiger prawn effort was 8% and 10% below the 2019-22 average respectively.
- The overall 2024 recruitment survey indices were positive for grooved tiger prawns and red endeavour prawns. The grooved tiger index was 10% above the 2023 indices and the highest since 2019 and the red endeavour index was up from 2023 and was the highest since 2015.
- The 2024 brown tiger prawn and blue endeavour indices remain low, with the brown tiger index below that of 2023 (and 2nd lowest of the series) and the blue endeavour index down from 2023 and remaining below the series average.
- As predicted, the tiger prawn fishing power has continued to increase, although increases since 2019 are below normal trends (1.4% increase), compared with previous average annual increases of 2.7%. The swept area index is driving the overall increasing trend, with the other model components driving the inter-annual variability. There has been a shift in the spatial coverage of the fishery in recent years, with the 2023 fleet fishing on average further south than before.
- Compared with the 2022 assessment, a majority of the 2024 economic data inputs increased, with fuel costs up 104%.
- Overall, the stocks are in a healthy state with all stocks well above the LRP and either at or above MSY, except for brown tiger prawns which has a 5-year moving average of 87% of S<sub>MSY</sub>. While the biological side of the assessment is positive overall, the economic model inputs (driven by higher fuel prices and lower prawn prices) reflect the poor economic state of the fishery and have resulted in a lower recommended TAE compared with 2023 effort. The key stock assessment outputs are outlined in the tables below.

Species	S <sub>MEY</sub> /S <sub>MSY</sub>	5-year mav (S <sub>2019-2023</sub> /S <sub>MSY</sub> )	S <sub>2023</sub> /S <sub>MSY</sub>	S <sub>2023</sub> /S <sub>MEY</sub>
Grooved Tiger Prawn	1.5	1.07	1.08	0.72

Species	$S_{MEY}/S_{MSY}$	5-year mav ( $S_{2019-2023}/S_{MSY}$ )	$S_{2023}/S_{MSY}$	$S_{2023}/S_{MEY}$
Brown Tiger Prawn	1.43	0.87	0.81	0.57
Blue Endeavour Prawn	0.99	0.95	1.17	1.18
Red Endeavour Prawn	0.88	1.00	1.08	1.22

	2023 observed effort (days)	2024 model projected effort (days)	2025 model projected effort (days)
Grooved Tiger Prawn	3 314	2 645	3 036
Brown Tiger Prawn	1 116	1 368	977
<b>Total</b>	<b>4 430</b>	<b>4 013</b>	<b>4 013</b>
<b>% change from 2023</b>		<b>-417 (-9.4%)</b>	<b>-417 (-9.4%)</b>

	2023 observed catch	2024 model projected catch	% change from 2023
Grooved Tiger Prawn	921	675	-36%
Brown Tiger Prawn	321	361	11%
Blue Endeavour Prawn	233	209	-11%
<b>Total</b>	<b>1 475</b>	<b>1 275</b>	<b>-18%</b>

- The base case model outputs recommended a 2024 and 2025 TAE of 4,013 boat days (basically limited by the MET), with sensitivity testing demonstrating these outputs are primarily driven by the higher 2024 fuel prices model inputs. The sensitivity using the 2022 fuel prices (around half of the 2024 prices) showed a similar pathway to MEY over 7 years, however, profit improves significantly along with an improved TAE trajectory from 2025.
- While the revised MET was only implemented in the 2024 assessment, the model is already being constrained due to the poor economic conditions in the fishery. The  $S_{MEY}/S_{MSY}$  for both tiger prawn species are above the nominal 1.2 proxy, which means substantial increases in stock biomass are required to achieve MEY.
- NORMAC agreed that the NPF is under significant economic pressure, compounded by changing environmental conditions. The poor economic input data are driving the model outputs. To maximise net revenue the model reduces current effort to reduce current fishing (variable) costs. The effort reduction also leads to biomass rebuilding to be able to obtain higher catch rates in the future to offset the high cost of fishing.

## b. Redleg banana prawn stock assessment

Éva Plagányi, CSIRO, provided a presentation on the 2024 redleg banana prawn stock assessment, noting the following key points:

- This assessment is less data-intensive when compared with the tiger prawn assessment, using a simpler model that has CPUE as the key input (as no independent survey data is available).
- Key environmental indicators, including the Southern Oscillation Index (SOI) and mean sea levels, are considered alongside the stock assessment. The January SOI is key indicator, with a negative SOI indicating lower redleg banana prawn catches and CPUE and a positive indicating good catches and CPUE. The 2024 SOI is neutral, which makes the upcoming redleg banana prawn season harder to predict.

- The assessment focuses on the Joseph Bonaparte Gulf (JBG) but also tracks catches in the Colville-Melville (CM) and Fog Bay (FB) regions. In 2024, 82.4% of the redleg banana prawn catches were in the JBG, which is lower proportion of the catches compared with 2020-22 but is consistent with an associated reduction of 85% of redleg banana prawn effort days in the JBG.
- The 2023 effort level of 212 days was lower than the 2023 TAE of 689 boat days, although a proportional catch reduction of 254 tonnes was seen to the predicted 2023 catches (952 tonnes).
- Recent catch and effort is below historical levels, although variable with very low levels seen in 2019, 2020 and 2023. Catch and effort in 2023 was below the 1999-2022 average level.
- Catch and effort levels by quarter have been variable over the last ~15 years, although this has become more stable since the first season closure was introduced in 2021 and effort is now focused within the 3<sup>rd</sup> quarter.
- The fishing power model was updated with 2023 data, showing a 5% decrease in 2023 fishing power relative to 2021. The fishing power inputs are used to standardise CPUE in the model.
- Overall the model fit the standardised CPUE data for quarters 2, 3 and 4, with the recruitment indices fluctuating from good to average over the last few years. Since the low stock levels in 2015 and 2016, the assessment indicates the stocks have been recovering with the 2023 spawning biomass estimated to be above  $B_{MSY}$  and at  $B_{MEY}$ .
- NPRAG accepted the 2024 redleg banana prawn stock assessment at its June meeting, which recommended a TAE of 412 boat days and predicted catch of 683 tonnes.
- NORMAC thanked CSIRO for presenting the stock assessments and industry thanked CSIRO for attending the NPFI meeting on Thursday 6 June 2024.

## Agenda Item 6. TAE recommendations

### *Tiger Prawn Fishery*

NORMAC noted the following advice from NPRAG on the tiger prawn stock assessment and 2024 and 2025 TAE:

- The recent changes to the assessment inputs and methods have improved the quality and reliability of the assessment, and NPRAG accepted the 2024 stock assessment for the tiger prawn fishery and the recommend TAE of 4,013 boat days for 2024 and 2025 derived from the assessment.
- Considering the recent variability in fuel prices, NPRAG acknowledged that if fuel prices continued to decline, the fuel price used in the assessment to estimate the 2025 TAE would unlikely reflect the economic reality at that time. Therefore, NPRAG supported potentially updating the stock assessment in 2025, with the following two options identified:
  - 1) Updating the base case assessment with revised fuel and prawn prices from the 2024 NPFI economic surveys (would be available in early 2025), which could be undertaken for a relatively low cost.
  - 2) Undertaking a full stock assessment in 2025, including 2024 catch and effort data, 2024 winter and 2025 summer survey indices and updated economic inputs. This would be a significant cost.
- These recommendations consider that:
  - Any potential assessment update in 2025 needs to consider CSIRO's capacity to undertake the extra work, the additional cost to the NPF levy base and current constraints within the AFMA research budget, this is particularly important for the second option.
  - If the decision is to undertake a full stock assessment, the preferred option would be to adjust the assessment schedule, bringing the 2026 assessment forward to 2025, then recommencing the two year cycle (with the next assessment to occur in 2027).

- Bringing the assessment forward to 2025 would have the benefit of aligning the assessment and July spawning survey schedule (which currently isn't incorporated into the assessment until 18 months after the survey).
- NPRAG will further discuss the potential 2025 assessment update at the November meeting, noting the latest possible deadline for a decision on any 2025 assessment is the February NPRAG 2025.

NPFI presented the following proposal to operationalise the NPRAG 2024 TAE recommendation of 4,013 boat days:

- NPFI supported the 2024 NPRAG TAE recommendation of 4,013 boat days, which equates to an 11 week season closing the fishery on 17 October. However, industry had concerns with locking in this date which could result in unused effort due to uncertainty in the level of tiger prawn fishery fishing effort with indications some vessels may not fish and that some effort will be diverted into the JBG.
- Therefore, NPFI proposed in-season monitoring of fishing days from 1 October to inform the final closing date, noting that a catch monitoring process for the banana prawn season is already implemented as part of AFMA/NPFI co-management arrangement.
- This would ensure that effort wouldn't exceed the TAE and also allow the fishery to remain open past mid-October if effort remained below the 4,013 boat days, with the current average tiger prawn trigger limit of 350 kg/boat per day still applying.
- In light of the current uncertainty with operational costs, specifically the recent fuel price reductions, NPFI supported the re-consideration of the 2025 TAE to be informed by either a full or partial stock assessment update (to be further discussed by NPRAG at its November meeting).
- This recommendation considers:
  - Concerns that the MET was constraining the model the first time it was used in an assessment, with further questions on the calculation of fuel usage and cost inputs in the assessment, with this to be followed up directly by NPFI with Tom Kompas and CSIRO.
  - There are no significant sustainability issues with the stocks, which are not overfished or subject to overfishing. All stocks meet the MSC requirement to be fluctuating around MSY, although there have been some concerns around the brown tiger prawns in recent years.
  - That fuel costs have already reduced from the 2024 assessment inputs, with the AI projections indicating further reductions in 2024 and 2025.
  - The economic data are having a significant impact on the assessment projections and TAE outputs, noting that the MEY target reference point is under review as part of the current CHSP review.
  - The recent lower TAE and proposed 2024 TAE level are having a significant operational impact on industry, who cannot operate on a 10 week season in the longer term with overheads and fixed costs still incurred and impacts on crew retention.
  - AFMA has the capacity to close the fishing season at short notice, as this is done as required with the banana prawn MEY catch triggers.
  - Further discussion on the 2025 TAE process and whether a full or partial assessment is undertaken in 2025 will occur at the November 2024 NPRAG meeting, noting that the 2024 winter spawning and 2025 summer recruitment survey data will also be available to inform any revised assessment. These discussions will consider impacts on CSIRO resources and impacts on both NPF AFMA levy base (direct costs to industry) and AFMA's ARC budget.

NORMAC thanked CSIRO for their work on the assessment and industry for their proposal to operationalise the RAG recommendation. Industry participants, deemed to have a potential conflict of interest, left the meeting at this point.

Following industry participants leaving the meeting, deemed to have a potential conflict of interest, the NORMAC recommendation on the 2024 and 2025 TAE for the tiger prawn fishery is outlined below.

#### **NORMAC Recommendation**

NORMAC accepted the tiger prawn stock assessment and endorsed its 2024 TAE recommendation of 4,013 boat days, which was supported by NPRAG. Considering the current uncertainty in fuel prices and levels of fishing effort in the tiger prawn season, NORMAC supported the proposed NPFI approach, making the following recommendations to the AFMA Commission:

- A 2024 TAE of 4,013 boat days, to be monitored by AFMA and NPFI from 1 October and the fishery closed immediately once the TAE is reached.
  - An effective monitoring approach will be developed by AFMA and NPFI, with more clarity to be provided to the AFMA Commission in its advice.
- The 2025 TAE should be re-considered based on the outcomes of either a partial or full update to the stock assessment in 2025, with further NPRAG and NORMAC advice to be provided to the AFMA Commission on the 2025 TAE.

These recommendations note that:

- Further discussions on the 2025 stock assessment update will occur at the November NPRAG meeting, with a decision required by the end of 2024 if a full stock assessment is to be undertaken. If a partial assessment is to be undertaken in 2025, the updated elements must be finalised by February 2025 at the latest.
- Any potential assessment update in 2025 needs to consider CSIRO's capacity to undertake the work, the additional cost to the NPF levy base and current constraints within the AFMA research budget, this is particularly important for the second option.
- If the decision is to undertake a full stock assessment, the preferred option would be to adjust the assessment schedule, bringing the 2026 assessment forward to 2025, then recommencing the two year cycle (with the next assessment to occur in 2027).

**Action arising 3:** The calculation of fuel usage and cost inputs in the assessment to be discussed by NPFI with Tom Kompas and CSIRO.

### ***Redleg Banana Prawn Fishery***

Following industry participants leaving the meeting, deemed to have a potential conflict of interest, NORMAC confirmed its acceptance of the outputs of the 2024 redleg banana prawn stock assessment.

#### **NORMAC Recommendation**

NORMAC accepted the 2024 redleg banana prawn stock assessment and recommended 2024 TAE of 412 boat days for the redleg banana prawn fishery.

Following the above recommendations, industry participants re-entered the meeting and the Chair summarised the MAC recommendations.

## **Agenda Item 7. Performance monitoring report**

NORMAC noted that a key component of current system is measurement of the fishery against a series of indicators with the outputs reported in the annual NPF Performance Monitoring Report (PMR). NPFI delivers the PMR at least annually or biannually if required. Members noted that the last report was in 2022 as there was a lag with ABARES data.

The two combined critical economic indicators against which the fishery is monitored are:

- A minimum Net Economic Return (NER) (Total Fishery Profit) of \$5 million/annum (in real terms); and
- A combined minimum of 6cm headrope per SFR for quad gear or 6.6cm headrope length for twin gear AND the minimum number of fishing days of 44 days in the banana prawn season and 92 days in the tiger prawn season.

Members noted that management response (adjustment) will be required if the thresholds for the three critical indicators (NER, gear & available fishing time) are breached in three consecutive years.

NPFI stated that the thresholds for the three critical indicators have not been breached in three consecutive years and hence to do not trigger a required management response.

Members noted that a different value of effort days used by NPFI and the NPRAG economics member. NPFI noted that even though indicators have not been breached there has still been discussion regarding the current changing conditions including is the current fishery structure still suitable. NPFI have agreed to commission a CBA to examine the structural aspects of the fishery.

**Action arising 4:** NPFI and Tom Kompas to discuss the different effort days and confirm this out of session.

## Agenda Item 8. Annual Research Statement

The AFMA observer (Darci Wallis) 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 2024-28* (which incorporates needs from the [AFMA's five-year strategic research plan 2017-22](#)).

At the February NPRAG meeting members noted that the ARC budget for 2025/26 is nearly fully subscribed with previously approved research. As such, only essential projects should be put forward for funding. Members did not identify any projects for funding during 2025/26 and therefore no research scopes were developed to be considered at the June NPRAG meeting. NORMAC acknowledged the financial difficulties currently facing the industry makes it difficult to fund any additional projects.

NORMAC noted that at the June NPRAG meeting it was agreed that although the following projects that were due for completion before 30 June 2025 have been extended and therefore should be included in the 2025/26 research statement:

- Investigating potential for fishing gear, technology and management measures to reduce sawfish and sea snake interactions in Australia's Northern Prawn Fishery (NPFI).
- Mitigating Sawfish Interactions in the Northern Prawn Fishery (NPFI).

NORMAC noted that NPRAG confirmed that the following projects should be retained in the table titled 'Research projects identified for inclusion in future research statements':

- Estimation of banana prawn price flexibilities.
- Developing assessment methods and harvest strategy for by-product species in the NPF.
- Scampi identification project (raised at NPRAG November 2019).

NORMAC discussed including the Ships of Opportunity (SOOP) project which was initially funded by FRDC but is now being funded by Australia's Integrated Marine Observing System (IMOS) and administered by the University of NSW. The project titled 'Trials of oceanographic data collection on commercial fishing

vessels in SE Australia' will provide valuable data by installation and operation of oceanographic data collection equipment on a network of commercial fishing vessels.

NORMAC endorsed the 2025-26 Research Statement with the re-inclusion of the Sawfish projects that have now been extended into 2025/26 and the addition of the SOOP project.

#### **NORMAC Recommendation**

NORMAC endorsed the 2025-26 research statement, noting that the two projects proposed for removal (as initially were to be completed prior to 2025/26), should be retained as these projects have been extended and with the addition of the SOOP project.

## **Agenda Item 9. Research project update**

### **a. Integrated Monitoring Program**

NORMAC noted the update by Rob Kenyon on the recruitment survey undertaken in February 2024.

- The survey was conducted from 1 -19 February 2024 (determined by moon phase) with two hundred and eighty-three sites trawled by two vessels in five regions during night hours. The 2024 survey was interrupted by severe weather. However, an extra day of survey was supported by NPFI as well as an extra day supported by A. Raptis and sons which enabled 93% of planned trawl sites within the sampling frame to be sampled. NORMAC thanked NPFI and Raptis for enabling this.
- The gulf-wide indices from the survey for:
  - Banana prawns - wide index was moderate ( $8.9 \pm 1.4$  prawns  $\text{ha}^{-1}$ ; range  $\sim 1$  to 18 prawns  $\text{ha}^{-1}$ ), the seventh highest of the series, and about half that of 2023.
  - Brown tiger prawns had decreased significantly from 2023 to be the second lowest index of the series ( $3.9 \pm 0.4$  prawns  $\text{ha}^{-1}$ , range  $\sim 3$  to 15 prawns  $\text{ha}^{-1}$ ). The 2024 gulf-wide index was about half of the 2023 index and about one quarter of the highest index from 2016. The 2024 gulf-wide index was about half of the 2023 index and about one quarter of the highest index from 2016. The recruitment of brown tiger prawns in the vicinity of Mornington Island in 2024 ( $5.8 \pm 0.7$  prawns  $\text{ha}^{-1}$ , range  $\sim 3$  to 25 prawns  $\text{ha}^{-1}$ ) had declined to one third of the 2023 index, the third lowest of the series: only the 2003 and 2004 indices were lower.
  - Grooved tiger prawns were about 10% higher in 2024 than in 2023 ( $4.9 \pm 0.4$  prawns  $\text{ha}^{-1}$ , range  $\sim 3$  to 11 prawns  $\text{ha}^{-1}$ ), and the highest index since 2019. At north and south Groote, catches of grooved tiger prawns remained very low but were about a 27% increase in 2024 over 2023 ( $4.4 \pm 0.4$  prawns  $\text{ha}^{-1}$ , range  $\sim 3$  to 26 prawns  $\text{ha}^{-1}$ ), and higher than during 2021 to 2023.
  - Blue endeavour prawns had decreased from 2023, though it remained higher than the low 2022 index. The index was below 'average of the series' at  $2.3 \pm 0.2$  prawns  $\text{ha}^{-1}$  (range  $\sim 1$  to 4 prawns  $\text{ha}^{-1}$ ).
- Industry photo of the mangroves at Karumba airport show that they have re-established from seedlings, following the significant die back in 2015-16.
- The draft final report for this project was submitted to AFMA in early June 2024.

CSIRO thanked Raptis for conducting the surveys and the Chair thanked Rob Kenyon for his presentation.

## b. Bycatch monitoring

NORMAC noted the update from the CSIRO relevant to the monitoring of all TEP and at-risk bycatch species in the NPF including:

- All relevant CMO data has been processed and error-checked, with SQL scripts run to produce standardised catch rates.
- A new program (R Shiny) was developed by Data61 and has been run with previous data to ensure comparability standards are met. This has also been run with the additional 2020-22 data for updated catch rate trends.
- Expected completion of final report late June, model results of catch rate trends for each species will be available start of June for Marine Stewardship Council (MSC) reporting deadlines.

## c. Sawfish projects

NORMAC noted the update on relevant sawfish projects provided by NPFI:

- NPFI acknowledged industry's commitment to sawfish reporting and research.
- During 2023, a total of 936 sawfish interactions were recorded. Among the interactions, only 17% of species were not identified to species level, which is a slight increase from 12% in 2022. 12,643 seasnakes and 119 turtles were also reported in 2023.
- 51 sawfish tissue samples were collected, bringing the total to 465 samples since the project began in the 2018. Members noted to encourage further participation in this project CSIRO has generously offered four \$1000 prize incentives over the next three seasons. Additionally, NPFI is awarding 15 project-branded t-shirts (5 each season) to the winning boats that collect the most tissue samples. The prize incentives appear to be working with increased participation.
- During the 2023 tiger prawn season, 30 satellite tags were distributed to CMOs and AFMA observers. Ten tags were deployed (6 by CMOs and 4 by AFMA observers). Three tags released prematurely, yielding inconclusive data on survival. Two tags released after 2-3 weeks with the animals still alive, and one tag completed the 60-day deployment, showing the animal moving approximately 140km east within JBG. For the 2024 banana prawn season, 22 tags have been distributed to the NPF fleet and AFMA observers.
- The MSC Grant Funding looking at alternative fishing gear mitigation has commenced, initially analysing the available data to identify the key interaction points in the gear. To assess any differences, the introduction of "grey magna mesh" was systematically categorised and incorporated into the NPF fishery dataset for comparison with vessels utilising the original black mesh Turtle Excluder Devices (TED) flaps. The dataset also amalgamated individual vessel TED orientations and BRDs used throughout fishing years and seasons. Members noted that results are being finalised with the final report to be published by the end of June 2024.
- The Department of Climate Change, Energy, the Environment and Water (DCCEEW) provided funding in 2022 to look at gear mitigation to reduce sawfish interactions. Different net mesh designs were trialled during the 2023 tiger season during a 14-day period on three vessels (Admiralty Pearl, Flinders Pearl and the Arnhem Pearl). The aim was to determine the effectiveness of the modified net mesh design in reducing sawfish bycatch and/or escapement. Underwater cameras were installed on all four nets 600mm behind the TED forward facing to capture all sawfish interactions during fishing operations. Members noted that the footage is yet to be analysed but hoping to have the results by the end of 2024.
- Eight vessels from fishing companies: Australia Bay Seafoods, Raptis, Austral and WA Seafoods, participated in the gear trials comparing the grey magna mesh (experimental) against the control standard black mesh TED flap material. Vessels used the same gear type on port and starboard



sides for the entire season. The vessels recorded all sawfish interactions on provided field sheets noting species, length, fishing location, interaction location within the gear and whether the interaction was on the control or experimental gear. NPRAG noted that a total of 62 sawfish interactions occurred on the control gear and 45 with the experimental gear with most interactions occurring in the throat of the net, codend and within the TED area. NPFI noted that CSIRO will complete a full analysis of the raw data by October 2024.

- The Flinders Pearl trialled a different gear design during the tiger season where a 15-mesh extension 2m forward of the TED was used in the throat section (experimental) and compared sawfish interactions to the standard black mesh material (control) in the throat section. Members noted that four out of the five sawfish interactions were in the control throat gear type with none on the experimental magna mesh throat section.
- NFPI hosted a sawfish bycatch mitigation workshop on the 15 January 2024, specifically aimed at engaging key skippers from the NPF for potential gear modification ideas to reduce interactions with sawfish.
- One vessel continued the trial of the grey magna material 15 meshes 2m forward of the TED during the banana season with only one sawfish interaction.
- Austral designed a smaller bar spacing TED, reducing the bar space from 110mm to 70mm, to compare against the standard TED. The trial began on 22 May 2024 aboard the Beachlands for a 14-day sea trial. The aim of the trial is to reduce sawfish bypassing the TED into the codend where there is no chance of escapement. Members noted that the trial just finished and only 1 sawfish was observed, which wasn't tangled in the net. Industry noted that the large bycatch numbers have decreased with a 30-50% reduction in medium range species with an increase in prawn catch. NPRAG noted that Austral were now getting these manufactured with the aim of having 50% boats using them.

The Chair thanked Brandon Meteyard for the sawfish projects update.

## Agenda Item 10. MSC conditions update

NORMAC noted the following update on the MSC conditions provided by NPFI:

- The NPF was recertified by the MSC for the third time on 18 July 2023 with the new certification valid until 2028. The first annual audit will start in September 2024 with annual audits occurring thereafter until the fourth annual audit/ full reassessment commences in 2027.
- There were two rollover conditions from the previous assessment in relation to red endeavour prawns that are due for completion by September 2024. Once approved by the AFMA Commission, the proposed revisions NPF Harvest Strategy agreed by NPRAG at its June 2024 meeting will meet these conditions.
- The current MSC framework uses species-specific MSY targets, not a fishery MEY target. As the current assessment suggests that the stock is fluctuating around the MSY target, this demonstrates that current management arrangements are maintaining the stock in line with MSC requirements.
- A new condition was imposed in relation to sawfish in the white banana and tiger prawn fisheries which is due for completion by September 2027 (the fourth annual audit), requiring:
  - Milestone 1: By Sept 2024, NPFI will provide a Plan detailing how uncertainties about the magnitude of the impact from the NPF tiger prawn and white banana sub-fisheries will be reduced in order to demonstrate with a probability > 80% that those sub-fisheries do not hinder recovery of the sawfish species.
  - Milestone 2: By September 2027, demonstrate that systems are in place that allow >80% certainty that the tiger prawn and the white banana prawn sub-fisheries do not hinder recovery of the sawfish species.
- The draft NPF Sawfish Work Plan 2024-2027, endorsed by NPRAG at its June 2024 meeting, was developed in consultation with AFMA and CSIRO and outlines the processes, actions, timelines and entities responsible for undertaking actions that will assist to meet Milestone 1. NPFI noted that an update will be provided to NPRAG and NORMAC annually and aim to be in a position to demonstrated recovery of sawfish by the end of 2026.
- The MSC concluded their usual four-year review of the Standard in 2022/23, which resulted in a number of changes to previous requirements. Since the launch of Version 3.0 in May 2023, MSC has engaged in an intensive roll-out program, testing these new requirements with fisheries and gathering extensive feedback from independent assessors and fishery partners at workshops held around the world. This process has identified a significant number of areas that need to be amended to ensure application of the Fisheries Standard delivers the intended sustainability outcomes. MSC is currently undertaking a review of V3.0 and will release an updated Standard which will clarify new requirements and remove inconsistencies in July 2024.

### **NORMAC Recommendation**

NORMAC endorsed the draft NPF Sawfish Plan 2024-27.

## **Agenda Item 11. Other Business**

No other items of business were included in the agenda.

## **Agenda Item 13. Next meeting**

The Chair advised that the next meeting will be a teleconference late in 2024.

The Chair thanked the members and closed the meeting at 3:35pm.

### **Signed (Chairperson):**

John Glaister

30 August 2024

### **List of Attachments**

- 1) NORMAC annotated agenda
- 2) NORMAC declared conflicts of interest

## ATTACHMENT A: Declared conflicts of interest

Participant	Declared Interest
<b>Chair</b>	
John Glaister	NORMAC Chair, ex-AFMA Commissioner, no pecuniary interest in the fishery.
<b>Members</b>	
Bryan van Wyk	Industry member – NPRAG Employed by Austral Fisheries, a company with SFR holdings in the fishery.
Ian Knuckey	<p>Positions:</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 –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> <p>Fishwell current/recent projects:</p> <ul style="list-style-type: none"> <li>- FRDC 2023-063 Design of a fishery independent longline survey for chondrichthyans in Northern Australia.</li> <li>- Australia Bay Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery.</li> <li>- Tasmanian Seafoods Design of a fishery independent survey for NT Sandfish.</li> <li>- FRDC 2022-007 Trials of oceanographic data collection on commercial fishing vessels in SE Australia.</li> <li>- Pilbara scalefish Management options to reduce mortality of breached indicator species</li> <li>- Leichhardt Salt Impact Assessment of the Eramurra Solar Salt Project: Commercial and Recreational Fisheries.</li> <li>- NSW Fisheries Developing a harvest strategy framework for Aboriginal Cultural Fishing</li> <li>- DAWE Project Multi-sector fisheries capacity building.</li> <li>- AFMA 2023- Annual monitoring, reporting and assessment of SPF marine mammal interactions, including effectiveness of mitigation measures.</li> <li>- WAFIC Project Strategic Review of Western Australia’s Shark Fisheries.</li> <li>- AFMA 2023-0807 Bass Strait Scallop Fishery Survey – 2024.</li> <li>- FRDC 2019-027 Improving and promoting fish-trawl selectivity in the SESSF and GABTS.</li> <li>- FRDC 2018-021 Development and evaluation of SESSF multi-species harvest strategies</li> <li>- Traffic Project Shark Product Traceability.</li> <li>- Sea Cucumber Ass. Design and implementation of various sea cucumber dive surveys.</li> <li>- Northern Marine park</li> </ul>

Participant	Declared Interest
Brodie Macdonald	Employed by AFMA, Senior Manager – Northern Fisheries. No interest, pecuniary or otherwise
Geoffrey Muldoon	Employed by Global Fishing Watch, Director of Program Delivery No interest, pecuniary or otherwise.
Michael O'Brien	Commercial fishing licence holder in the NT Demersal Fishery General Manager, Australia Bay Seafoods Pty Ltd FRDC Seafood Industry Safety Initiative (SISI), Member Stay A Float trusted Advocate
Phil Robson	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.
Greg Albert	Manager of family business Madang contractors QLD, a company that operates NPF vessels in the NPF, Torres Strait, Queensland and Kimberly endorsement.
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
<b>AFMA</b>	
Darci Wallis	AFMA member – NPRAG Employed by AFMA, Manager of Northern Prawn Fishery. No interest, pecuniary or otherwise
Sarah Kirkcaldie	Employed by AFMA. No interest, pecuniary or otherwise.
<b>Observers / Presenters</b>	
Denham Parker	Employed by CSIRO. Research provider. Member of a research body providing scientific advisory services to the fishery management. May in future seek and receive funding for research in the fishery.
Roy Deng	Employed by CSIRO. Research provider. Member of a research body providing scientific advisory services to the fishery management. May in future seek and receive funding for research in the fishery.
Sean Pascoe	Employed by CSIRO. Research provider. Member of a research body providing scientific advisory services to the fishery management. May in future seek and receive funding for research in the fishery.

Participant	Declared Interest
Eva Plaganyi-Lloyd	Employed by CSIRO. Research provider. Member of a research body providing scientific advisory services to the fishery management. May in future seek and receive funding for research in the fishery.
David Carter	Employed by Austral Fisheries CEO a company with SFR holdings in the fishery. No pecuniary interests.
Andy Prendergast	Employed by Austral Fisheries (skipper), a company with SFR holdings in the fishery. No pecuniary interests.
Stuart Nesbit	Employed by Austral Fisheries (CFO), a company with SFR holdings in the fishery. No pecuniary interests.
Norm Peovitis	Employed by WA Seafood, a company with SFR holdings in the fishery. No pecuniary interests.
Ken Hartley	Employed by A Raptis and Son a company with SFR holdings in the fishery. No pecuniary interests.

## ATTACHMENT B – NORMAC 89: June 2024 meeting

**FINAL AGENDA – 7 June 2024 / Time: 8:15 to 16:30 AEST**

Time	Item	Purpose	Presenter
0815	<b>1. Preliminaries</b> <ul style="list-style-type: none"> <li>a. Acknowledgment of Country, welcome and apologies</li> <li>b. Declarations of interest</li> <li>c. Adoption of Agenda</li> <li>d. Minutes from previous meeting</li> <li>e. Correspondence</li> </ul>	For action	Chair (30 mins)
0845	<b>2. Actions arising from previous meetings</b>	For noting	AFMA (10 mins)
0855	<b>3. Reports / Update</b> <ul style="list-style-type: none"> <li>a. Industry report</li> <li>b. AFMA management report</li> <li>c. NPRAG report</li> <li>d. Environment/Conservation update</li> </ul>	For information	a. NPFI b. AFMA c. Ian Knuckey d. Geoffrey Muldoon (1.5 hr)
1025	<i>Morning Tea – 10 min break</i>		
1035	<b>4. Harvest Strategy review</b>	For decision	AFMA (30 mins)
1105	<b>5. Stock assessments</b> <ul style="list-style-type: none"> <li>a. Tiger prawn stock assessment</li> <li>b. Redleg banana prawn stock assessment</li> </ul>	For discussion	CSIRO (75 mins)
1210	<b>6. TAE recommendations</b>	For recommendation	AFMA (30 mins)
1240	<b>7. Performance monitoring report</b>	For information	NPFI (30 mins)
1310	<i>Lunch – 40 min break</i>		
1350	<b>8. Annual research statement</b>	For decision	AFMA (15 mins)
1405	<b>9. Research project update</b> <ul style="list-style-type: none"> <li>a. Integrated monitoring program</li> <li>b. Bycatch monitoring</li> <li>c. sawfish projects</li> </ul>	For information / recommendation	a. Rob b. Gary c. NPFI (1.5 hrs)
1535	<i>Afternoon Tea – 10 min break</i>		
1545	<b>10. MSC conditions update</b>	For information	NPFI (30 mins)
1615	<b>11. Other business</b>		AFMA (10 mins)
1625	<b>12. Next meeting</b>	For decision	AFMA (5 mins)