

Small Pelagic Fishery Scientific Panel Stakeholder Forum

Sydney, 24th January 2017

Independent Facilitator's Report

1 Introduction

In 2015 the Australian Fisheries Management Authority (AFMA) Commission established a scientific panel for the Small Pelagic Fishery (SPF). The SPF Scientific Panel provides scientific and economic advice on the status of fish stocks, species (target and non-target species), the impact of fishing on the marine environment and application of the harvest strategy and harvest control rules adopted by the Commission for this fishery.

The SPF Scientific Panel is required to seek advice from stakeholders to ensure its advice to the Commission is sound, well-founded and takes account of stakeholders' views and experience. Stakeholder forums are convened by the panel to provide interested stakeholders with the opportunity to consider and discuss the scientific advice of the panel.

A stakeholder forum was held on 24th January, 2017 in Sydney.

Eighteen people attended the forum, of which nine represented stakeholders' interests – recreation (4) and industry (5). The balance comprised members of the Scientific Panel, AFMA and the Department of Agriculture and Water Resources (Fisheries Branch). Two apologies were reported. There were no representatives from the environmental sector at the forum, despite being invited, and it was noted that it would be useful to understand why this was the case.

Simon McGuinness, a Principal at RM Consulting Group, was the independent facilitator at the forum and author of this report. The independent facilitator is required to provide a written report of key points of discussion and any outcomes at the forum¹.

2 Discussion Points and Outcomes

This section presents each agenda item and the main points of discussion. Most of the speakers used slides for their presentation, and these are to be made available by AFMA.

¹ Acquiring scientific advice by the use of a Scientific Panel and Stakeholder Forums in the Small Pelagic Fishery. September 2015
afma.gov.au

2.1 Small Pelagic Fishery Update: Ms Sally Weekes, AFMA Fishery Manager

S. Weekes provided a brief update on the management of the Small Pelagic Fishery:

- The Commonwealth Fisheries Harvest Strategy Policy and Bycatch Policy – review ongoing, led by the Department of Agriculture and Water Resources
- AFMA Bycatch Strategy – under development
- Ecological Risk Assessment – AFMA is working with CSIRO to update the Ecological Risk Assessment for each Commonwealth fishery
- The Senate Inquiry: *Environmental, social and economic impacts of large-capacity fishing vessels commonly known as 'Supertrawlers' operating in Australia's marine jurisdiction* - final report and a dissenting report were published on 23 November 2016 and are publically available.
- Vessel Update: The *Geelong Star* is no longer under Australian jurisdiction.
- The *Geelong Star's* revised Vessel Management Plan (VMP) was released 31 October 2016.
- Seafish Tasmania's Voluntary Offer to recreational fishers - final report on the AFMA website.
- SPF Scientific Panel and Stakeholder forum – the two year trial is due to be reviewed in 2017.
- SEMAC – call for nominations for recreational member

Data for the 2015/16 SPF fishing season was also presented in relation to Catch versus Total Allowable Catch (TAC); Effort SPF (all methods); Bycatch & discards (excluding protected species); Retained and discarded species by tonnage (all methods); Protected species interactions. The presentation generated a number of questions mainly to clarify understanding of the 2015/16 data.

2.2 Previous SPF Stakeholder Forum: Mr Max Kitchell, Chair, SPF Scientific Panel

Mr Max Kitchell provided a summary of the four main issues raised by stakeholders at the last forum. The issues and subsequent Panel responses were:

1. The need for greater frequency and finer scale of DEPMs to improve confidence in the data on fish stocks - *In taking into account,*
 - *MSE modeling,*
 - *conservative exploitation rates,*
 - *cost of DEPM surveys, and*
 - *the need to cover whole spawning area (as far as possible),**the Panel concluded that the current frequency and scale of DEPMs is appropriate.*
2. Concern that a reference to localised depletion in the draft Harvest Strategy had been removed – *The Panel agreed with this concern and accordingly recommended inserting the following paragraph in the Harvest Strategy "The risk of localised depletion in the SPF is considered to be low due to the high mobility and rapid re-distribution of small pelagic species. That risk is further diminished by the application of spatial management arrangements that have been established to spread fishing effort."*
3. Spawning disruption from mid-water trawling - *The Panel noted that DEPM surveys show that spawning occurs over very extensive areas and over extended periods of time, so localised disturbance of some shoals is unlikely to affect spawning success.*
4. Concern that there was too little reference to protected species interactions - *The Panel agreed and recommended including the following paragraph into the Harvest Strategy – "Effective and transparent*

processes are being developed to monitor, assess and mitigate interactions of the SPF with TEPS. This includes the establishment of a Marine Mammal Working Group and a document outlining procedures for monitoring, evaluating, reviewing and publishing information on interactions with TEPS."

Mr Kitchell indicated that the Panel wrote to all Forum attendees outlining these responses. Likewise, a written response was provided to both parties that made written submissions. He also advised that the Panel had found the Forum allowed for a useful exchange of views and had improved the advice it provided on the Harvest Strategy

2.3 SPF Harvest Strategy: Mr Max Kitchell

M. Kitchell reported that the Panel identified three separate but linked matters that were investigated to support the revision of the Harvest Strategy:

- a) Stock assessments for Eastern Jack Mackerel and Eastern Blue Mackerel
- b) Alternative reference points
- c) Further Management Strategy Evaluation analysis, in light of the mackerel stock assessments.

A presentation on each of these topics then followed.

2.3.1 Stock Assessments: A/Prof Tim Ward, SPF Scientific Panel

T. Ward presented the research into stock assessments for Eastern Blue Mackerel and Jack Mackerel undertaken by CSIRO.

Comments from stakeholders and discussion in response to the presentations included:

- It appears there are fewer older fish, however it is hard to be conclusive as the collection of samples which provides the age and length frequency data on SPF stock is generally poor, primarily due to the variable fishing effort in the fishery.
- There is a high level of uncertainty on what the data means. There are limitations in interpreting the modelled outputs.
- Given the uncertainty with the data, and the changing natural environment, it is even more important to take a conservative approach to the management of the fishery.
- There was concern expressed that industry experience is not sought as part of the scientific advice, as it was prior to the establishment of the Scientific Panel. As a consequence, assessment of the science lacks an understanding of the context of fishing operations, market conditions and so on. This will inevitably result in an unbalanced interpretation of the data.

2.3.2 Economic Reference Points: Prof. Caleb Gardner, SPF Scientific Panel

C. Gardner presented the CSIRO research into bioeconomic reference points for SPF species, particularly Eastern Jack Mackerel. In short, the analysis found that biomass at Maximum Economic Yield (MEY) equals that at Maximum Sustainable Yield (MSY), so the biological target MSY becomes the important target to achieve.

Comments from stakeholders and discussion in response to the presentations included:

- Criticism that the hypothesis of the study was obvious and concerns expressed that therefore this funding could have been spent on a more necessary research project.
- An opposing view that the investment was needed to confirm the hypothesis and that research to better understand the SPF is important.
- Given the marginal viability of the SPF it was proposed that alternative uses of the SPF be explored that will provide a greater benefit than those generated by commercial fishing. For example, game fishing off the NSW coast is a very important driver of the fishing retail sector (which the recreational sector advised had been impacted by the negative perception associated with the presence of and the fishing activities of the Geelong Star).
- The benefit provided by commercially fishing the SPF is not yet fully realised as the fishery is under-developed. Further, commercial fishing in the SPF has also provided important economic benefits to regional communities (eg. the Eden sardine processing facility).
- The economic and social benefits generated through recreational game fishing are not appreciated by AFMA. Given that the fishery is meant to be managed to optimise benefits to the Australian community, there was a strong plea that any economic analysis should include the value of recreational fishing and other uses, and not be limited to only commercial fishing by industry.

2.3.3 Management Strategy Evaluation: Mr Andrew Penney, SPF Scientific Panel

Mr Andrew Penney, Scientific Panel, presented the additional MSE analysis conducted using updated operating models based on initial catch-at-age stock assessment models for Eastern Jack Mackerel and Blue Mackerel. The MSE update confirmed that the proposed Tier 3 maintains risk equivalency across Tiers, that is, where the exploitation rate at Tier 3 is 50% of Tier 2.

Comments from stakeholders and discussion in response to the presentations included:

- The MSE does not deal well with natural changes in stock abundance, so the model is limited as it over-estimates risk. It was agreed that the model does not model the biology well enough and needs to better factor in greater variability.
- The model is driven by autocorrelation and the limited data that is programmed in to it. The longer the model projects are run, the more uncertain the results become. There are issues with the model's protocols. This has been raised with AFMA before and still needs to be addressed.

2.3.4 Summary of SPF Harvest Strategy – Panel's Advice: M. Kitchell

Mr Max Kitchell summarised the Panel's advice on the SPF Harvest Strategy.

- Reference Points: There is no basis to change reference points as current target reference point of B_{50} and limit reference point of B_{20} meet the biological, ecological and economic requirements of the SPF.
- MSE Analyses:
 - No change to Tier 1 and Tier 2 exploitation rates
 - Tier 3 exploitation rates as previously recommended be adopted, ie, 50% of Tier 2 rate for species with DEPMs and 25% of Tier 2 rate where no DEPM has ever been undertaken.

- If the MSE is updated in the future, a dynamic B0 could be investigated; however in the Panel's view there is no need for more MSE analyses unless fishing activity significantly increases

2.4 Stakeholder Presentations

2.4.1 Dennis Brown, DI Fishing Eden Pty Ltd

D. Brown presented his views on the Scientific Panel two-year pilot. He indicated that under the previous arrangement, industry involvement meant that scientific advice considered the commercial context of the fishery, eg. what industry did, why it did it, and this helped to inform the data analysis. He would like to see AFMA involve industry again and utilise industry's views and experience in the scientific advice process. He also recommended that AFMA needs to implement its own rules in relation to the convening and running of advisory committees.

S. Weekes noted that AFMA will conduct a review of the Scientific Panel/Stakeholder forum model during 2017.

2.4.2 Graham Pike, Australian Recreational Fishing Advocacy

G. Pike presented a number of points on behalf of recreational fishing groups covering concerns with the pair trawling application, need for more DEPM surveys, impacts of the Geelong Star's fishing on the SPF, the need for industry investment in research, the secrecy of the operation of the Geelong Star and stakeholder forums not being open to the public.

Some of the points made were noted to be factually incorrect by AFMA.

Discussion followed in relation to the importance of getting a wider understanding of the economic and social benefits from all uses of the SPF.

2.5 SPF Research

2.5.1 Research projects update: T. Ward

T. Ward provided an update on SPF surveys:

- Recent (< 5 years) DEPM surveys for Jack Mackerel, Blue Mackerel and Sardine (East)
- DEPMs for Blue Mackerel (West) and Redbait (East) > 5 years old)
- DEPM survey Jack Mackerel (West) is currently underway, and likely to provide further information on other SPF species.
- DEPM survey not undertaken for Redbait (West) but is a priority for 2017/2018.
- It is likely there are two stocks of Australian Sardine off eastern Australia – a recently published study suggests that the Eastern stock may have a north/south population spilt which may have implications for management

- Single stock of Australian Sardine off east and west coasts of Tasmania and Victoria (i.e. mixing across Bass Strait)

It was commented that it is likely that SPF stock structures are far more complex than currently thought.

2.5.2 Future research priorities: Dr Jeremy Lyle, SPF Scientific Panel

J. Lyle provided a brief overview of research proposed for the future, primarily concentrating on improving understanding of fish stocks and strengthening monitoring capacity.

2.6 Pair Trawling Application: M. Kitchell

M. Kitchell outlined the pair trawling proposal from Muollo Fishing Pty Ltd, an SPF quota holder and Australian company active in Commonwealth fisheries. The proposal is for a 12-month trial to be operated out of southern NSW ports involving two trawlers (31m and 35 m in length) towing one net. The fish are to be sold in Australia for human consumption, bait, fish food and pharmaceutical oils. The environmental controls are proposed to include:

- Marine mammal excluders
- Dolphin pingers
- No net conde cable
- Use of bafflers to reduce seabird interactions
- Electronic monitoring on both vessels

The Scientific Panel's advice:

- Should be no sustainability issues as within TAC and quota
- Risk of localised depletion is very low
- Data collection: a) 50 randomly selected fish of each species from each shot to monitor age composition and changes in growth pattern, b) fish samples to be collected by observer (preferred) or operator
- Electronic monitoring on each vessel
- Observer for first 10 trips after which level and mix of coverage to be reviewed

Questions followed in relation to the types of excluder devices to be used (applicant response – aim to use the best as appropriate to the boat size) and whether underwater cameras will be used for monitoring (had not planned to at this stage however may consider).

The applicants noted that the Panel's recommendation for an observer for the first 10 trips imposed a cost of \$1,300 per day which was relatively onerous however they are keen to do the right thing and prove the effectiveness of the electronic monitoring system in identifying interactions of protected species.

It was clarified that the capacity of the pair trawling proposal is approximately 10% of the Geelong Star.

Some stakeholders were of the view that it was preferable to have locally-owned and operated fishing businesses compared to foreign owned ones. It was also noted that there was a risk that if this application

is subject to the same restrictions as placed on the Geelong Star, then it may impact on the viability of proposals of this type.

It was suggested that AFMA should consider providing more flexible arrangements (i.e. the one dolphin trigger) for smaller operators as these businesses have less opportunity to relocate their operations than a larger vessel.

2.7 Concluding comments

2.7.1 Facilitator's summary

The facilitator provided a brief wrap up of the meeting and key points which will be included in the written report on the forum. Some key points from the forum were:

- The need for a more comprehensive understanding of the economic and social benefits that are derived from the different sectors accessing small pelagic stocks
- The need to continue investment into stock assessments and DEPM surveys
- Caution with the use of the Management Strategy Evaluation modelling in its current form which overestimates risk
- Desire to see industry and other stakeholder input into the advisory processes on the SPF so that advice is provided with a balanced perspective and context.
- A preference for locally owned and operated fishing of the SPF involving smaller boats where the benefits are shared in local communities, compared to foreign owned enterprises using larger factory trawlers. The conditions imposed on smaller operations, like the pair trawling proposal, need to be commensurate with the scale of the operation which is not in the same league as the Geelong Star.

2.7.2 Closing Comments, M. Kitchell

M. Kitchell provided concluding comments to the forum on what he saw as the four points that gained broad agreement from the stakeholders:

1. Industry interests should be reinjected into the scientific considerations early in the process - this is not a matter for the Panel directly but something that can be considered by AFMA when reviewing the two-year trial of the Scientific Panel
2. The MSE modelling recently undertaken overestimates risk - the Panel agrees with this assertion and hence did not use its findings to alter its recommendations about exploitation rates
3. Need to explore the full mix of uses of the fishery to maximise overall community benefit - this may be outside the remit of the Panel but further discussion with AFMA will occur as to whether it is within the scope of the Panel to consider these issues.
4. Request for flexibility in the conditions that should apply to the pair trawling proposal based on the contention that conditions relevant to a large factory trawler may not be appropriate to smaller operations - this is definitely within the Panel's remit and will be considered by us when we next meet in early February.

The forum was advised that the Panel will also accept submissions from stakeholders until 31st January 2017. Further assessment of the feedback at this forum and of any submissions received will be undertaken by the Panel.

Forum Closed 2.15pm