



Australian Government

Australian Fisheries Management Authority

Commonwealth Fisheries Marine Mammal Working Group (CFMMWG) Meeting No 1

Meeting Minutes

Date: 24 November 2016

Venue: Melbourne Airport

Attendees

Name	Member type i.e. industry member
Mr Bill Talbot	Chairperson
Ms Alexia Wellbelove	Conservation Member
Dr Karen Evans	Scientific Member
Dr Julian Pepperell	Recreational Fishing Member
Dr Alice Mackay	Scientific Member
Mr Kyriakos Toumazos	Invited industry participant
Dr Nick Rayns	Executive Manager, Fisheries Management Branch
Dr Mike Double	Member for the Department of the Environment and Energy
Ms Allison Runck	A/g Member for the Department of Agriculture and Water Resources
Mr Ryan Murphy	AFMA, A/g AFMA member for Phil Ravello
Mr Ryan Keightley	AFMA
Ms Michelle Wilson	AFMA
Ms Claire Wallis	Executive Officer, AFMA

1. Welcome and introductions

Apologies were received from Dr Mark Hindell (Scientific Member) and Dr John Wakeford (Industry Member). Ms Alexia Wellbelove attended via teleconference.

The group noted that the role of the CFMMWG is as an advisory body only, and accepted the Terms of Reference as appropriate and reasonable. The scientific members raised the issue of the CFMMWG being referenced on AFMA decisions as a consultative body in the absence of a consensus and implied approval of management strategies as a result of this. AFMA agreed that it would not characterise agreement or consensus where it had not been met.

Adoption of Agenda

The Agenda was adopted with no changes.

Declaration of Conflicts of Interest

The members of the CFMMWG were canvassed for verbal declarations of interest. No declarations were received during this process.

The group noted that an interest register has historically been developed and distributed prior to meetings, and requested that a table be made up by the Secretariat and distributed to members (Action Item 1).

Action Item 1

AFMA to generate an interest register and distribute to members to fill in

The group noted a presentation by Dr Nick Rayns on AFMA's current work in regards to bycatch in Commonwealth Fisheries. The presentation described AFMA's legislative and policy requirements to address Threatened, Endangered and Protected Species (TEPS) interactions with fisheries, and its intention to move from individual fishery and issues based responses towards species group based management strategies across all Commonwealth managed fisheries.

The group discussed the role of conservation status of species groups in determining a response, noting that public perception of status can vary in alignment from legislative or scientific designation of status and resultant conservation requirements. The discussion noted that mitigation measures that work for some species may impact the risk of interactions for others (e.g. differences in night fishing interaction rates for albatross and petrels), and that this needs to be considered in the light of conservation status.

Dr Rayns highlighted that AFMA is developing bycatch strategies by species group to apply across all Commonwealth Fisheries where possible in order to provide consistency across management arrangements and allow the management of cumulative impacts across fisheries. Dr Rayns noted that the first of these which AFMA would be seeking advice towards is the expansion of the Dolphin Strategy, currently applied to the Coorong Zone of the Gillnet Hook and Trap (GHaT) sector of the Southern and Eastern Scalefish and Shark Fishery. This in time, would be expanded to be a dolphin strategy across all Commonwealth managed fisheries.

2. Gillnet Hook and Trap (GHaT) Sector Dolphin Strategy

Current strategy applied to the Coorong Zone

Mr Ryan Keightley gave a presentation to the group on Stage 1 of the Dolphin Strategy as applied in the Coorong Zone, noting the multiple levels of management response, and focus on individual accountability. The group discussed the spike in reported dolphin interactions in 2011, noting that the Coorong Zone is a highly productive area of the GHaT sector, which may have seen increased fishing activity combined with increased observer coverage in 2010 as a result of AFMA's implementation of the Australian Sea Lion (ASL) Strategy. The group also noted that due to their population structure based around small semi-discrete colonies, ASL management is not compatible with individual accountability.

The group discussed the importance of identification of species for all dolphin bycatch and potential differential impacts by species of interactions with fishing gear. Concern was raised regarding the accuracy of species identification data, and the ability of electronic monitoring (EM) to facilitate accurate species identification and record all interactions. The group requested that AFMA provide examples of EM footage from the GHaT sector to clarify whether species identification would be possible (Action Item 2). Later in the meeting, the group noted a video of EM data from the GHaT, noting that quality of the cameras has improved further since the footage was taken and that members would like to see footage reflecting currently available image quality. A scientific member confirmed that moving forward it would be advisable to retain any still shots with TEPS interaction forms.

It was emphasised that the shots should be used for species identification, noting that ability to collect length and sex data would also be valuable.

The group provided advice that AFMA seek to store a still shot from EM footage with every TEPS interaction report, to allow for confirmation of species identification and the potential collection of age class, sex, and other morphometric data. AFMA noted that any action on this recommendation would be reliant on advice received following Action Item 2.

Action Item 2

AFMA to provide examples of EM video footage to members to determine suitability for species identification, and an update on where AFMA is up to with organising provision of stills or video for permanent storage with interaction reports. **Note - Example of EM footage was provided to the group at the end of the meeting.**

The group raised concern that provision of TEPS interaction data to AFMA from EM has a potential lag time of up to two months. The industry participant advised that the use of e-logs allows industry to upload logbook data whenever a vessel is within phone range. An AFMA member also clarified that under current management arrangements, each dolphin interaction has to be reported directly to AFMA as soon as possible as well as the submission of a dolphin bycatch evaluation report.

The group noted advice from AFMA and the industry participant that while interactions with cetaceans appear random, some vessels in the GHaT have consistently lower interaction rates than others, and best practice gear setting techniques (e.g. large anchors, head-rope flotation, increasing weighting to increase net tension) appear to reduce interaction rates. Advice from the industry participant is that all vessels trialling the use of pingers in the GHaT had had interactions while using these devices. The industry participant indicated that the GHaT industry bodies were seeking to observe operators with low interaction rates in order to develop a voluntary Code of Practice for the sector.

The group noted that AFMA's Ecological Risk Assessment (ERA) process is currently under review, and requested that the draft ERA guidelines be provided to members. AFMA agreed to provide the ERA draft guidelines (Part A) to members initially, with the technical-focused part B to follow if subsequently requested (Action Item 3).

Action Item 3

AFMA to distribute Part A of the draft Environmental Risk Assessment document to members, followed by Part B if requested.

Proposed expansion of the Coorong Zone strategy to the whole Gillnet, Hook and Trap sector

The group discussed whether the application of the Coorong Zone rate to the rest of the GHaT would be appropriate.

The scientific members raised concerns that population characteristics of pelagic bottlenose dolphins and common dolphins are generally unknown, and that nearshore bottlenose dolphin population information is geographically fragmented. The scientific members also raised that the '1:50 trigger' (i.e. more than 1 dolphin mortality per 50 gear

sets over a six month review period) in the Coorong Zone was based on effort data from five boats in a limited area, and that any expansion of the strategy would require an understanding of effort and cetacean interactions across the range of the GHaT. The group noted that some consideration will need to be given to this data, in particular new information on interaction rates outside the Coorong Zone since the introduction of EM across the sector. This data is required in order to assess what the level of cumulative impact might be likely based on an individual accountability system, noting that the overall number of shots in the fishery is limited by the total allowable catch.

The group requested that the graph of interactions by month from AFMA's presentation be remade with effort overlaid (Action Item 4), and requested that a data set be made available to group members that includes effort, shot, location, date, time, soak time, depth, net length, interaction/no interaction, species, and number of animals (Action Item 5).

Action Item 4

AFMA to re-produce graph showing interactions by month with effort overlaid, and distribute to members.

Action Item 5

AFMA to provide Scientific Members with data to explore cetacean interaction characteristics across the GHaT.

The group noted that AFMA is seeking to have consistent arrangements across the GHaT in place by 1 May 2017, and discussed whether it would be possible for the group to provide advice prior to this deadline. The group requested a timeline of consultation and document development be distributed (Action Item 6).

Action Item 6

AFMA to provide members with a timeline of consultation and document development events intended to support development of the GHaT Dolphin Strategy Phase 2.

AFMA suggested data for all Commonwealth fisheries could be supplied for development of an overarching marine mammal strategy following this, in a staged management approach. AFMA advised that the process for development of a strategy follows the steps of industry consultation, meeting with advisory groups, development of a document for public consultation, and incorporation of feedback from advisory groups on the final document prior to finalisation.

The group noted that the population abundance and status of most cetacean populations in Australia is unassessed, and therefore bycatch strategies linked to the sustainability of bycatch levels are limited as a result. Given the lack of population abundance estimates, AFMA has historically chosen an approach of continuous improvement. The group discussed the use of differential rates of cetacean bycatch based on species characteristics, and approaches to determining whether it's possible to identify whether a rate is sustainable and providing an appropriate incentive, given the lack of data. The group noted that AFMA's strategy must aim to mitigate and minimise interactions, and that

in the absence of population data, the focus must be to minimise interactions to the extent that it's possible.

The group noted that the GHaT is subject to a network of spatial closures, and that further implementation of closures may disproportionately affect some vessels. The industry participant stated that industry view personal accountability favourably and emphasised that a stepped management response that allows operators an opportunity to review their practices at each step whereby the end-point management response to repeated cetacean interactions is progressively more severe, is preferred. The example given by the industry participant was a 3 strike- 3 step approach where at the end an operator would be excluded from the entire fishery if they had not made a measureable effort to improve. The industry participant expressed that if an operator is excluded and subsequently receives another 3 strikes following re-entry to the fishery, then a second, longer exclusion should apply, with the example given being a full year. They noted that the penalty needs to exceed the cost of a gear change, which may be in the tens of thousands of dollars.

The industry participant expressed confidence that with continuous improvement in fishing, gear and techniques that very low interaction rates should be achievable. The issue was raised of whether extending the current rate applied to the Coorong Zone ('1:50 trigger') would be an effective incentive to minimise interactions across the entire fishery, if the current dolphin bycatch rates outside the Coorong Zone are currently lower than 1 in 50 shots. The industry participant indicated that the introduction of a consistent framework would be beneficial overall, and that after the 1:50 trigger had been implemented throughout the GHaT, the trigger should be lowered in the future as a stepped incentive to improve industry practices. The conservation member approved of the approach described by the industry participant, and noted they would be likely to support a scientifically robust strategy aiming for a close-to-zero bycatch approach. The conservation member stated that if a bycatch rate is included in the strategy, they would like to see stated within the strategy that the intent of industry is to ultimately achieve zero dolphin bycatch. AFMA indicated that in the event of reducing rates of bycatch, an annual review of interaction reports to determine whether the strategy was having the desired effect will be undertaken. The Department of Agriculture and Water Resources (DAWR) representative stated that the Department is comfortable with the use of incentives, and rates can provide a performance management and monitoring approach even where not biologically based.

The group noted advice from AFMA that industry consultation via port visits had been undertaken, and commentary from industry suggested management responses to strikes might be an appropriate system for implementing individual accountability. A first strike may result in an operator undertaking a review of mitigation against best practice, and implementing a Dolphin Management Plan (DMP). A second strike would result in an investigation by AFMA and the industry association at the cost of the operator. The second strike would likely involve an immediate return to port, implementation of observers, and review of EM footage. A third strike would result in exclusion from fishing with gillnets for a (to be defined) period. AFMA advised that DMPs are in place for some vessels in the fishery, and would require development for the rest of the fleet.

The group discussed how the International Whaling Commission only use abundance estimates and catch history data to assess the long-term population level impact on stock

impacted by direct takes or bycatch in the absence of accurate life history parameters (e.g. calving rates, survival, natural mortality, age of maturity) . The group also discussed whether the calculation used to determine Potential Biological Removals (PBR) in USA fisheries could be applied 'in reverse' to give an estimate of abundance level necessary such that the estimated removals would not impact the population in the long term, and whether this could be translated to a rate for species of interest. Such an exercise could employ expert advice to assess the risk to dolphins populations (given an estimated rate of bycatch) particularly those populations most vulnerable because they are likely to be sedentary, structured, and small. The group noted that this could be a more fruitful use of expert advice - previously it had been used in an attempt to describe population structure and abundance within the area of operation for the Small Pelagic Fishery with limited success. A risk based, species specific trigger limit was suggested for further exploration by AFMA. The group noted that if such a back-calculation exercise is undertaken, then the results will not be available in time for consultation and implementation by May 1 2017, and the strategy may need to be updated in 6 or 12 months if implemented by May. AFMA advised that any process implemented in May will be open to updates as advised by scientific assessments i.e. if science says management needs to change, AFMA will act on that advice. AFMA advised that it is likely to progress the expansion of a dolphin strategy by May 1 2017, and would like to further discuss the back calculation PBR approach at the next meeting of the group.

The group discussed the use of move-on rules, with concerns raised around their efficacy for particular species or zones beyond localised effort reduction. It was noted that management arrangements, if species specific, should maintain an incentive for fishers, and preferably be consistent across fisheries and species at the higher levels. No more specific advice on the matter was provided.

Obtaining and utilising reliable data

AFMA asked the group to consider what is needed to improve the reliability and consistency of data needed to support a strategy. The group discussed conducting a power analysis for the GHaT to determine level of coverage required to estimate rates of interaction, knowing the rates are likely to vary considerably throughout the fishery. The group noted that level and quality of coverage for other Commonwealth fisheries are variable, and it was noted that historical changes in coverage regimes in individual fisheries are likely to impact the ability to conduct power analyses. The group queried the difference between observer and logbook data, and whether they were substantially different, noting that the rates of bycatch reported in each were not identical. AFMA asked the group to consider how to determine the most cost effective way of clarifying ongoing data needs for species with low levels of interaction. The group discussed "blitzing" a fishery with high levels of coverage for at least one (preferably two) seasons, versus lower levels of coverage in a longer term targeted program. The group noted that blitzing a fishery provides a comprehensive baseline, and to be cost effective would collect as much data as possible during that period (such as biological samples). It was noted that cetacean interactions occur so infrequently that a single year may not be sufficient to determine a baseline, and an approach must be able to filter out temporal effects on a larger scale. A scientific member clarified that based on management decisions, AFMA will

need the ability to decide that if bycatch greater than “X”, a management action needs to be taken. AFMA also needs to be able to say with 95% confidence that bycatch is less than “X”. AFMA confirmed that it is seeking advice on how best to determine “X”. The group noted that it would be good to get a broad description of available data already collected to determine its limitations prior to giving advice on the implementation of a costly observer program. The group discussed how to determine the frequency of interactions across fisheries, and requested data from fisheries and fishery independent surveys that have 100% observer coverage (Action Item 7). The group requested a summary table of cetacean interactions from the last 5-10 years, including species, numbers, effort, and observer coverage levels by fishery, and an updated effort vs cetacean interactions graph with interaction markers separated by species, for members to explore for the presence of trends in interaction (Action Item 8).

Action Item 7

AFMA to provide data sets from fisheries activities that have 100% observer coverage to support preliminary calculation of cetacean interaction frequency in those fisheries.

Action Item 8

AFMA to update a heat map showing effort vs interactions in the GHaT by cetacean species, and to create and distribute a table of cetacean interaction data by fishery, describing species encountered, effort levels and observer coverage, and distribute to the CFMMWG.

3. Initial Considerations for Managing Seal Interactions

AFMA asked the group to consider what data was needed in regard to seal bycatch mitigation and determination of interactions, noting that the Commonwealth Trawl Sector (CTS) of the Southern and Eastern Scalefish and Shark Fishery has high levels of interactions. It was highlighted that the CTS is currently implementing updated seabird mitigation devices, and will be looking toward seals following this. The scientific members noted that species identification for seals by fishers is poor, with one third of interactions in 2012 recorded as “seals”. The group noted that without an understanding of effort or observer coverage, it is difficult to make statements even for species with higher interaction rates. The group noted that good information is available on fur seal colonies and foraging ecology, providing the potential to look at finer scale impacts of the CTS in terms of age, sex, and colony of origin of bycatch. The group discussed the challenges faced by the CTS, particularly in regards to the impact of boat size on available mitigation devices.

The group noted that spatial or temporal mitigation may be necessary but acknowledged that this may have a large impact on industry as they have a footprint of approximately 6 per cent of the fishery. A scientific member indicated that it might be unreasonable to suggest closures if they have a substantial impact on the fishery, or are otherwise not implementable. The group commented that it was not aware of examples of highly effective seal mitigation from other national or international trawl fisheries.

The group discussed the use of gear modification as a mitigation measure, including the use of hydrostatic bindings to bypass the dive profile. The group acknowledged that seals

actively depredate trawl gear, and that underwater cameras generally show seals moving freely in and out of trawl gear, rather than being swept up passively. The scientific members identified that the group needs to know whether interactions are clumped spatially and/or temporally, or whether interactions are unpredictable. A scientific member questioned whether tow-speeds or tow-times impact interaction rates for seals. AFMA advised that no trends have been identified at this time.

AFMA asked the group whether there was a preference for mitigation versus a rates based approach for seals. A scientific member noted that trialling mitigation approaches requires innovation, money, and time, and that management and industry need to have a timeline and a level of comfort with ongoing interaction rates during the trials. The DAWR member commented that should effective mitigation be developed, rates could then be utilised as an incentive for continuous improvement. The industry participant commented that the difference is that seals are motivated to depredate gear as they receive nutritional rewards from the behaviour. The industry participant stated that lacking a physical barrier to net entry by seals, or by providing easy escape routes, there appear to be few other options to prevent entanglements of motivated animals. AFMA commented that to introduce rates, there must be a method for industry to meet or do better than the rate, noting the inherent difficulty in determining cryptic mortality. The group noted that the data needed for a seal strategy is similar to that needed for the development of a dolphin strategy, and requested that it be made available for members to examine for the presence of interaction patterns (Action Item 9).

Action Item 9

AFMA to provide CTS data for seals including species, shot time and date, location, effort, tow-time, gear specifications (including bycatch mitigation) and details of operation, depth, interaction/no interaction, and number of animals.

4. Further Business and Close of Meeting

The group agreed to meet in March pending member availability, with AFMA to consult and confirm dates via poll.

The conservation member notified the CFMMWG that she would be on maternity leave at the time of the next meeting. The secretariat advised that the conservation member's replacement should submit their CV to AFMA for consideration in relation to the extant merit list, and appropriate recruitment action will be undertaken (Action Item 10).

Action Item 10

Conservation Member to facilitate provision of a CV to AFMA from their maternity leave replacement staff member.

Signed (Chairperson):

Abraham

Date:

Attachments

- 1) CFMMWG Meeting 1 Annotated Agenda
- 2) CFMMWG Meeting 1 Action items arising
- 3) CFMMWG Meeting 1 Interest Register

RATIFIED

Commonwealth Fisheries Marine Mammal Working Group Agenda – Meeting 1

Objective

The objective of this meeting is to discuss the development of protected species strategies across Commonwealth Fisheries and seek guidance from the working group on a desired direction for dolphins

Date	24 November 2016	
Time	8.30am to 3.45pm	
Location	Qantas Meeting Room - Melbourne	
Chair	Mr Bill Talbot	
Attendees	Ms Alexia Wellbelove Dr Karen Evans Dr Julian Pepperell Ms Allison Runck (DAWR) Mr Kyri Toumazos Dr Alice Mackay	Dr Mike Double (DoE) Dr Nick Rayns (AFMA) Mr Ryan Murphy (AFMA) Mr Ryan Keightley (AFMA) Ms Michelle Wilson (AFMA) Ms Claire Wallis (AFMA)
Apologies	Dr Mark Hindell Dr John Wakeford	

Agenda item	Speaker	Duration
1. Welcome and introduction	Chair / Nick Rayns	8.30am – 9am
2. Gillnet Hook and Trap Fishery Dolphin Strategy	Ms Michelle Wilson / Mr Ryan Keightley	9am – 2.30pm
3. Initial considerations for managing seal interactions	Mr Ryan Murphy	2.45pm – 3.30pm
4. Further business and close of meeting	Chair	3.30pm – 3.45pm

<i>Morning tea</i>	<i>10.30am – 10.45am</i>
<i>Lunch</i>	<i>12.30pm – 1.00pm</i>
<i>Afternoon tea</i>	<i>2.15pm – 2.30pm</i>

Next meeting

TBD

Commonwealth Fisheries Marine Mammal Working Group Action Items

Action item	Who	What	Progress
1	AFMA	Generate an interest register and distribute to members to fill in	<i>Complete</i> - Table distributed with the draft meeting minutes on 9 January 2017
2	AFMA	Provide examples of EM video footage of dolphin interactions from GHaT sector to members to determine suitability for species identification, and an update on where AFMA is up to with organising provision of stills or video for permanent storage with interaction reports.	<i>In progress</i> - Example of EM footage was provided to the group at the end of the meeting. AFMA has previously sought advice on cetacean ID from EM footage, and the report on this is provided at Attachment A , Agenda Item 4 for CFMMWG Meeting 2
3	AFMA	Distribute Part A of the draft Ecological Risk Assessment document to members, followed by Part B if requested.	<i>Complete</i> – Document was distributed to members on 26 May 2017, following Commission approval in April 2017.
4	AFMA	Reproduce graph showing interactions by month with effort overlaid, and distribute to members.	<i>Complete</i> – AFMA distributed to members 28 March 2017
5	AFMA	Provide Scientific Members with data to explore cetacean interaction characteristics across the GHaT.	<i>Complete</i> – AFMA distributed to members 28 March 2017
6	AFMA	Provide members with a timeline of consultation and document development events intended to support development of the GHaT Dolphin Strategy Phase 2.	<i>Complete</i> – AFMA distributed to members 28 March 2017
7	AFMA	Provide data sets from fisheries activities that have 100% observer coverage to support preliminary calculation of cetacean interaction frequency in those fisheries.	<i>Complete</i> – AFMA distributed to members 28 March 2017
8	AFMA	Update a map showing effort vs interactions in the GHaT by cetacean species, and to create and distribute a table of cetacean interaction data by fishery, describing species encountered, effort levels and observer coverage, and distribute to the CFMMWG.	<i>Complete</i> – AFMA distributed data (map) to members 28 March 2017. <i>Complete</i> – graphs included in Attachment B , Agenda Item 4 for CFMMWG Meeting 2
9	AFMA	Provide CTS data for seals including species, shot time and date, location, effort, tow-time, gear specifications and details of operation, depth, interaction/no interaction, and number of animals.	<i>Complete</i> – AFMA distributed to members 28 March 2017 Effort maps and cumulative interactions vs effort and observer coverage included in Attachment A , Agenda Item 5 for CFMMWG Meeting 2
10	Alexia Wellbelove	Facilitate provision of a CV to AFMA from their maternity leave replacement staff member.	<i>Complete</i>

Commonwealth Fisheries Marine Mammal Working Group Interest Register

Participant	Membership	Interest declared
<i>Bill Talbot</i>	<i>Chair</i>	<i>No pecuniary or other interest</i>
<i>Tony Harman</i>	<i>DAWR</i>	<i>No pecuniary or other interest</i>
<i>Karen Evans</i>	<i>Scientific member</i>	<i>I have received funding from AFMA to support scientific research in the past.</i>
<i>Mike Double</i>	<i>DoEE</i>	<i>No conflicts of interest</i>
<i>Alice Mackay</i>	<i>Scientific member (SARDI)</i>	<i>No conflicts of interest</i>