



Australian Government

Australian Fisheries Management Authority

Bass Strait Central Zone Scallop Fishery Management Advisory Committee (ScallopMAC) Meeting 37

Meeting minutes

9 June 2022

11:00-15:10

Microsoft Teams



Bass Strait Central Zone Scallop Fishery Management Advisory Committee (ScallopMAC)

Meeting 37 – 9 June 2022

Agenda

Time (AEDT): 10:00 – 15:10

Location: Microsoft Teams

Chair Name: Daryl McPhee

Approximate time	Item	Purpose	Lead presenter
11:00 (30 min)	Agenda Item 1. Preliminaries		
	1.1 Welcome and apologies	For action	Chair
	1.2 Declaration of interests	For action	Chair
	1.3 Adoption of agenda	For action	Chair
	1.4 Minutes from previous meeting	For noting	Chair
	1.5 Actions arising from previous meetings	For noting	Executive officer
11:30 (15 min)	Agenda Item 2. Fishery update		
	2.1 AFMA Management	For noting	AFMA member
	2.2 State fisheries	For noting	State observers
	2.3 Industry	For noting	Industry members
	2.4 Environment	For noting	Environment member
	2.5 Economic	For noting	Economic member
11:45 (45 min)	Agenda Item 3. 2022 pre-season survey 3.1 Biomass survey results 3.2 Bycatch species	For noting	Matt Koopman
12:30 (15min)	Agenda Item 4. ScallopRAG advice for the 2022 season	For noting	Scientific member
12:45 (30 min)	Lunch		
13:15 (15 min)	Agenda Item 5. Seismic schedule for 2022-23	For noting	AFMA member
13:30 (45 min)	Agenda Item 6. 2022 season recommendations <ul style="list-style-type: none">TAC (commercial and doughboy scallop)ClosuresSeason dates	For advice	AFMA member
14:15 (15 min)	Break		
14:30 (15 min)	Agenda Item 7. Co-Management Committee membership	For advice	AFMA member
14:45 (60 min)	Agenda Item 8. Research		
	8.1 Five year strategic research plan	For advice	AFMA member
	8.2 Annual research statement		
15:45 (15 min)	Agenda Item 9. Any other business	For advice	AFMA member
16:00	End of meeting		

The Chair opened the meeting at 10:00

Agenda Item 1. Preliminaries

1.1 Welcome and apologies

1. Dr Daryl McPhee, the Chair, welcomed members and observers to the meeting and made an Acknowledgement of Country paying our respects to this country's First People and Traditional Custodians of the land throughout Australia. Acknowledging Australia's Traditional Custodians of Country and recognising their continued connection to land, waters and community. Paying our respects to them and their cultures and to Elders past present and emerging.
2. The Scallop Management Advisory Committee (the MAC) members noted the Acknowledgement of Country, that the meeting was being recorded and commenced proceedings.

3. Membership

Daryl McPhee	Chair
Brendan Kelaher	Scientific member
Julian Morison	Economic member
Sylvia Zukowski	Environment member
Peter Mellios	Industry member
Debbie Wisby	Industry member
Andrew Watts	Industry member
Stuart Richey	Industry member
John Hammond	Industry member
John Cull	Industry member
Heather Johnston	AFMA member
Haydn Titterton	Executive officer

4. Invited Participants

Andrew Sullivan	Industry
Bob Lister	Industry
Matt Koopman	Fishwell Consulting
Michelle Wenner	VFA

5. Observers

Dan Corrie	AFMA Management
Lara Ainley	AFMA Management

6. Apologies

Andrew Watts	Industry member
John Hammond	Industry member

1.2 Declarations of interest

7. The MAC members followed the conflict of interest declarations as outlined in [Fisheries Management Paper 1 – Management Advisory Committees](#). Members and participants reviewed and updated the Declarations of Interest included at [Attachment A](#).
8. Stuart Richey, Debbie Wisby, Bob Lister and Andrew Sullivan declared a potential conflict with Agenda Item 6 '2022 season recommendations'. The members and invited participants with the potential conflict left the meeting while the MAC considered their interest and how it should be managed.
9. The MAC agreed that Stuart Richey, Debbie Wisby, Bob Lister and Andrew Sullivan could be part of the discussion but should not participate in the forming of the MAC recommendation for Agenda Item 6.
10. Julian Morison and Matt Koopman declared a potential conflict of interest with Agenda item 8.2 'Annual research statement'. The members and invited participants with the potential conflict left the meeting while the MAC considered their interest and how it should be managed.
11. The MAC agreed that Julian Morison and Matt Koopman could be part of the discussion. The MAC agreed that the members and invited participants with potential conflicts of interest with Agenda item 8.2 could be present whilst recommendations were being made, unless a clear conflict of interest became apparent.

1.2 Adoption of agenda

12. The MAC adopted the [agenda](#) as final.

1.3 Minutes of previous meeting

13. The AFMA member apologised for the delay in publishing the Minutes from the ScallopMAC 36 meeting on 4 March 2022 and noted that they will be available on the AFMA website as soon as possible.

1.4 Actions arising from previous meetings

14. The MAC noted that there were no action items from previous meetings.

Agenda Item 2 – Fishery update

15. The Chair introduced the Agenda Item and asked the MAC to note the AFMA Management, state fishery, industry, environment and economic updates for the Bass Strait Central Zone Scallop Fishery (BSCZSF).

2.1 AFMA Management

16. The AFMA member provided an update on matters relevant to the management of the BSCZSF:
 - Haydn Titterton is the new Senior Management Officer for the BSCZSF, Southern Squid Jig Fishery (SSJF) and Small Pelagic Fishery (SPF), and the Executive Officer for ScallopRAG and ScallopMAC.
 - Heather Johnston has accepted a new role at the Department of Agriculture, Fisheries and Forestry, and will be finishing at AFMA on 1 July 2022.
 - The AFMA Commission will be writing to ScallopRAG and ScallopMAC Chairs regarding the Commission decision to discontinue the use of the Fishery Gross Margin (FGM) model as an economic indicator for managing the BSCZSF. The decision was due in part to the limited provision

of economic data from industry, and the challenges this posed to the development of a representative economic model. The potential of the FGM model to influence other factors such as market value was also a consideration, which the Commission considered to be beyond the scope of AFMA's objectives.

- AFMA is mandating the use of electronic logbooks (elogs) and electronic catch disposal records (eCDRs) across Commonwealth fisheries. Vendors are in the process of developing software and it is anticipated to be available in for the BSCZSF in 2022. eCDRs may also be available in the 2022 fishing season and can be used in parallel to the elogs.

2.2 State fisheries

17. The Victorian Fisheries Authority (VFA) Invited Participant provided an update on the Victorian scallop (ocean) fishery:

- Michelle Wenner is the new manager for the Victorian scallop fishery.
- A research levy has recently been reintroduced to the fishery, which has allowed for pre-season biomass surveys to be funded. The most recent biomass survey was undertaken in December 2021, which showed positive indications of recruitment.
- In accordance with the draft Victorian Scallop Fishery Harvest Strategy and aligning with the [BSCZSF Harvest Strategy](#), a TAC of 979 t has been set for the 2022/23 season.
- VFA is working with the Commonwealth to get export approval for Victorian scallops.
- VFA is currently working on making the quota units in the fishery permanently transferable.

18. The Invited Participant from the Department of Natural Resources and Environment (NRE) provided an update on the Tasmanian scallop fishery:

- Scallop surveys commenced in early April 2022. Targeted surveys were conducted for White Rock and Marion Bay on the East coast as potential beds for opening to commercial fishing this year.
- The Scallop Fishery Advisory Committee (ScallopFAC) met on 2 June to make recommendations regarding the 2022 Tasmanian scallop fishery season.
- ScallopFAC recommended opening an area between Tasman Island to Schuten Island, which contained the areas surveyed at White Rock and Marion Bay. A TAC of 3,500 t was set for the season.
- ScallopFAC also supported another targeted survey in the North-West, where significant quantities of scallop were identified through the exploratory survey process.
- ScallopFAC recommended that the Tasmanian scallop fishery open on 24 June 2022, and close on 31 December 2022.

2.3 Industry

19. The industry members provided an update on matters relevant to the BSCZSF:

- The Before-After, Control-Impact (BACI) survey conducted by Fishwell Consulting has now been completed. The survey aimed to identify potential impacts to scallops in the BSCZSF resulting from Beach Energy's seismic survey in late 2021. The BACI study identified no discernible

impact to scallop beds resulting from the seismic activity in the study area, both inside and outside of the seismic gun impact zone.

- Domestic markets for Bass Strait commercial scallops are strong. Demand is high, partly due to the Queensland scallop fishery being closed.
- The rising cost of fuel and other expenses is a significant economic concern for industry.
- The Tasmanian scallop fishery will offer an appealing opportunity to industry this year due to reduced steaming time, presuming that scallop quality is good and the fishery can remain free from paralytic shellfish toxins (PST) and other toxins.
- Research Catch Allowance is being made available to be caught in-season, when a TAC has been set.

2.4 Environment

20. The MAC environment member provided an overview of research undertaken on matters relevant to the BSCZSF and scallops:

- Carroll, J.M., Tettelbach, S.T., Jackson, L.L., Kulp, R.E., McCoy, E. and Peterson, B.J., 2022. Variability in site characteristics linked to bay scallop abundance but not tethered survival: Implications for restoration. *Journal of Experimental Marine Biology and Ecology*, 546, p.151663.
- Enever, R., Doherty, P.D., Ashworth, J., Duffy, M., Kibel, P., Parker, M., Stewart, B.D. and Godley, B.J., 2022. Scallop potting with lights: A novel, low impact method for catching European king scallop (*Pecten maximus*). *Fisheries Research*, 252, p.106334.
- Roman, S., Rudders, D., Mann, R.L. and Clark, K.R., 2021. The Effect of Density on Growth, Yield, and Reproduction of the Sea Scallop, *Placopecten magellanicus*.

2.5 Economic

21. The MAC economic member provided an update on economic matters relevant to the BSCZSF:

- More detail from the AFMA Commission regarding their decision to discontinue the use of the FGM model as an economic indicator for managing the BSCZSF would be useful.

Agenda Item 3 – 2022 pre-season survey

22. The AFMA member introduced the Agenda Item and asked the MAC to note the results of the 2022 pre-season biomass survey presented. Dr Koopman thanked the owners and crew of the boats that participated noting their valuable contribution.

23. The MAC noted the following background:

- In accordance with the BSCZSF Harvest Strategy, the Total Allowable Catch (TAC) for commercial scallops will not be increased above 150 t unless a biomass estimate, as determined by the biomass survey, is able to identify an area or scallop bed containing at least 1,500 t biomass of high density scallops with a minimum size of 85 mm.
- The objectives of the annual biomass survey are to:
 - coordinate a fishery survey to measure the size distribution and calculate biomass estimates to assess the potential for commercial catch rates in the BSCZSF; and
 - inform the assessment of fishery impacts on bycatch.

- The identification of the 2022 survey beds was done in consultation with industry and Fishwell Consulting, with consideration given to previous survey beds, recent commercial catch and exploratory marks provided by industry.
- The Industry Co-Management Committee and the RAG provided advice on the prioritisation of the survey beds, with the final survey plan including 11 beds, which were a mix of known beds and exploratory marks across the regions of the fishery.
- In March 2022 AFMA wrote to all concession holders and active operators seeking expressions of interest to participate in the 2022 survey. Four boats were selected by an independent panel based on the terms set out in the call for expression of interest, however due to operational reasons only two boats participated in the survey.

24. Dr Koopman presented the 2022 pre-season biomass survey results:

- The 2022 pre-season biomass survey was conducted during May 2022 and aimed to estimate the commercial scallop biomass, discard rate, number of meats per kg, size frequency distribution, density of scallops and bycatch of 10 beds near Flinders Island, King Island and Apollo Bay.
- One new exploratory bed was also surveyed near Flinders Island, noting that due to operational issues only one dredge tow was carried out for this bed.
- Stratified random surveys were conducted for each of the 10 beds.
- For each random tow, the following were recorded:
 - The weight of all catch (including dead shell)
 - The length of at least 35 scallops (where available)
 - Tow details
- For every 5 tows, 10 samples were taken for:
 - gonad staging
 - meat weights
 - length-weight
- For analysis an assumed dredge efficiency of 33 percent was applied to scale density estimates.
- The 33 percent dredge efficiency comes from the *2008 Commonwealth Bass Strait Central Zone Scallop Fishery Survey*, which considered previous dredge efficiency studies with 33 percent being the best average estimate.
- The summary of data collected for each of the beds surveyed during the 2022 BSCZSF annual biomass survey is presented in Attachment A. This includes estimates of biomass (t), percent weight greater than 85mm, estimated biomass of scallops > 85mm, density of individuals per square metre, mean size and meat weight per kg.

25. The MAC noted the following background:

- Three of the four species classified as threatened, endangered or protected (TEP) were identified during biomass survey sampling;
 - Southern blue-ringed octopus
 - Black and white seastar

- King Island thickshell clam
- Whilst these species are classified as Protected species, this is not necessarily due to a lack of abundance, but rather the lack of available data on their distribution and abundance.
- Habitat forming species were also recorded throughout the survey sites. High rates of ascidians were sampled in the Flinders Island region.
- The biomass survey, including the bycatch and habitat species components, do not simulate the impacts of commercial fishing in the BSCZSF. Some scallop beds targeted in the biomass survey will be avoided by industry, due to industry knowledge of these areas and their efficiency.
- A summary table of the biomass survey results are available at [Attachment B](#).

Agenda Item 3.2 – Bycatch species

26. The AFMA member introduced the Agenda Item and the MAC were asked to note the results of bycatch and habitat components of the 2022 pre-season biomass survey, and provide relevant advice for the management of the BSCZSF.
27. The AFMA member noted the following background:
- There are four high-risk species for the fishery that were identified in the 2009 ecological risk assessment (ERA). Three of these species were identified during the 2022 biomass survey.
 - ScallopRAG considered the risk to these species to be low, due to the low interaction rates.
 - ScallopRAG considered that the bycatch rates seen in the biomass survey are not indicative of the rates seen in commercial fishing settings, as the biomass survey is a stratified random survey, and under commercial conditions industry would avoid areas with high rates of bycatch and debris.
 - Under the Harvest Strategy review for the BSCZSF, the bycatch and discarding workplan needs to be reviewed. The biomass survey will assist informing the new bycatch and discard workplan.

Agenda Item 4 – ScallopMAC advice for the 2022 fishing season

28. The MAC scientific member introduced the Agenda Item and asked the MAC to note the RAGs advice regarding the TACs, closures and season dates for the BSCZSF 2022 fishing season from their 7 June 2022 meeting.
29. The MAC noted the key points made by the RAG regarding the 2022 biomass survey:
- Although two less sites were surveyed in this year's biomass survey, there did appear to be an overall decline in biomass from the previous year.
 - Fewer recruits were seen in the Flinders Island region, and there is some uncertainty regarding recruitment for this region.
 - The Flinders Island region is likely to be targeted by industry in the upcoming season, due to the high meat weights.
 - The TAC was under-caught last fishing season, with 2,334 t caught from a 4,000 t TAC.
 - With both the Tasmanian and Victorian scallop fisheries open this season, effort will likely be predominantly targeted in state waters this season.

- ScallopRAG recommended rolling over the 2021 season TAC of 4,000 t, on the basis that no compelling argument was made to justify any change to the TAC for the upcoming season. This recommendation was based on the following;
 - Maintaining the TAC at 4,000 t would provide industry with stability
 - The TAC was under-caught last season, and there will be a reduced capacity for industry to catch the TAC this season due to the opening of the Tasmanian and Victorian scallop fisheries.
- The principles document recommends that closures are implemented across the Flinders Island, King Island and Apollo Bay sites.
- The following areas were recommended for closure by ScallopRAG on the basis of the 2022 biomass survey data;
 - King Island 9, due to an appropriate level of biomass, high levels of density and the high levels of expected recruitment.
 - Apollo Bay East, due to reasonable density, and the eastern side of the bed had the most recruits.
 - Flinders Island North of Babel South, due to unique genetics characteristics.
 - Flinders Island The Wreck A North.
- An additional consideration in selecting the beds for closure was their proximity to port and the likelihood that industry would have an interest in fishing these areas, in an effort to maximise fishing opportunities for industry.
- The requirement to close 3,000 t has been met, as well as the requirement of the principles document to capture closures in all three regions.
- ScallopRAG recommended that the season should open as soon as possible, with 12 July 2022 being preferred. It was recommended that the season close on 31 December 2022.
- Last year's under-caught TAC does not reflect that there are any issues with the fishery and maintaining the TAC at 4,000 t for the 2022 season will demonstrate that the fishery is well-managed and that there are no sustainability issues in the BSCZSF, and there is a healthy biomass of scallops for industry to utilise sustainably.

Agenda Item 5 – Seismic schedule for 2022-23

30. The AFMA member introduced the Agenda Item and asked the RAG to note the schedule of planned seismic activity for 2022-23. The RAG was not being asked to provide any advice in relation to seismic activities.
31. There are no planned seismic activities in waters relevant to the BSCZSF for 2022-23.
32. A Senate inquiry has been completed and a summary of the recommendations arising from the inquiry was provided to the RAG.
33. Dr Matt Koopman provided an update on the results of the Before-After, Control-Impact (BACI) survey in the BSCZSF:
 - The BACI survey ran from 8 November 2021 to 11 December 2021.
 - 8 impact sites were selected.

- Seismic activity did not result in increased mortality of scallops in the study area.
- The density of scallops increased in the 'after' phase of the BACI in both the control site and the impact site.
- The increase in scallop weight in the 'After' survey was partially attributable to the somatic growth of scallops over the summer period.
- The increase in scallop number was partially attributable to the growth of smaller scallops making them more available to the selectivity of the dredge.
- The study does not provide insight into potentially unknown impacts, such as impacts to reproduction and recruitment of scallops.

34. The MAC noted the following:

- Beach Energy has worked cooperatively with industry throughout the BACI process undertaken earlier in the year. Industry would appreciate consultation of this nature for any proposed seismic activities in waters relevant to the BSCZSF.
- The result that no discernible impact was identified in the BACI survey was surprising to industry.
- There are numerous variables in seismic activities, including the size of the noise, depth, and seabed characteristics, which will likely influence the level of impact seen in such activities.
- This study investigated an area with a low density of scallops. Inferences cannot be assumed for high density beds.
- The Institute for Marine and Antarctic Studies (IMAS) are currently undertaking research relating to the variability in physiology in Bass Strait scallops. This research will be valuable for the BSCZSF and interpreting the results seen in the BACI study.
- A 2017 study has demonstrated physiological impacts to scallops arising after seismic activities.

Agenda Item 6 – 2022 fishing season recommendations

35. The AFMA member introduced the Agenda Item and asked the MAC to consider the results of the 2022 biomass survey ([Agenda Item 3.1](#)) and the RAG advice ([Agenda Item 4](#)) and provide advice to the AFMA Commission on TACs, closures and season dates for the BSCZSF 2022 fishing season.

36. The MAC noted the following overview of the management framework:

- The [Commonwealth Harvest Strategy Policy 2018](#) (Harvest Strategy Policy) provides a framework for applying an evidence based, precautionary and transparent approach to setting harvest levels in Commonwealth fisheries.
- The objective of the Harvest Strategy Policy is the ecologically sustainable and profitable use of Australia's Commonwealth commercial fisheries resources (where ecological sustainability takes priority) through implementation of the harvest strategies.
- The BSCZSF Harvest Strategy achieves this by implementing a tiered approach to setting TACs and closures based on the results of the pre-season biomass survey.
- The intent of the BSCZSF Harvest Strategy is to maintain the stock at sustainable levels by closing sufficient areas of the fishery that contain a high density of spawning size scallops (greater than 85 mm) to promote recruitment, and allows for the remaining areas to be fished within a TAC that represents a sustainable harvest.

- The biomass estimates from the biomass survey will determine whether the fishery can open, either under a Tier 1 or a Tier 2, or remain closed.
- Research Catch Allowance will be subtracted from the 2022 TAC recommendation

2022 commercial scallop TAC

37. The MAC noted the following background:

- The recommendations made by the RAG were appropriate and widely agreed with, on the basis that the Tasmanian and Victorian scallop fisheries are open, and that it provides an indication of stability.
- A 4,000 t TAC would represent approximately 13% of the estimated biomass of scallops > 85mm.

2022 area closures

38. The MAC noted the following background:

- In order for an area/scallop bed to be closed under the Harvest Strategy it must have been surveyed during the biomass survey, with any beds that are closed, are closed for the entire fishing season.
- Beds fished that exceed a discard rate of 20 per cent of scallops less than 85 mm will be closed under a voluntary arrangement applied by industry via the Industry Co-Management Committee.

39. In formulating its advice, the MAC noted the following:

- The following closures were recommended by the RAG;
 - King Island 9
 - Apollo Bay Hill East
 - Flinders Island North of Babel South
 - Flinders Island The Wreck A North.
- These closures align with the requirements of both the Harvest Strategy in terms of biomass, and the principle document in terms of spatial coverage.
- King Island 9 provides a high level of biomass that meets the closure requirements of the Harvest Strategy on its own.
- The Apollo Bay Hill East closure provides good recruitment levels.
- Flinders Island North of Babel A contains critical genetics, which are unique from other beds.
- Industry will likely have an interest in fishing the Flinders Island region.
- The Flinders Island The Wreck A North site was designed to maximise opportunities to industry, whilst closing an appropriate level of biomass.
- The RAGs closure recommendations incorporate a total biomass of 9,843 t, which represents 31% of the estimated biomass of scallops >85mm.
- The MAC adopted the RAG's closure recommendations.

2022 fishing season dates

40. The MAC noted the following background:

- In recent years, the season has commenced in July, after the pre-season survey, and closes on 31 December to protect settling or newly settled scallop spat.
 - The [Bass Strait Central Zone Scallop Fishery Management Plan 2002](#) defines the fishing season to be 'a period determined by AFMA'.
 - Given that the season opened on 12 July last season, industry is broadly planning towards this date for the season opening.
 - It is unlikely that industry will seek to fish in the BSCZSF immediately, given that the Tasmanian scallop fishery will be open.
41. Those members and invited participants with declared a potential conflicts of interest left the meeting while the recommendation was being formed.

Recommendations for 2022 fishing season

42. Noting the advice above, the MAC supported the RAG recommendations of:
- the commercial scallop TAC be set at 4,000 t (less research catch allowance)
 - the doughboy scallop be set at 100 t
 - the following areas be closed:
 - Apollo Bay The Hill East (estimated biomass > 85 mm - 4,587 t)
 - King Island 9 (estimated biomass >85mm – 4,007 t)
 - Flinders Island North of Babel A (estimated biomass – 352 t)
 - Flinders Island The Wreck A North (estimated biomass – 897 t)
 - the 2022 fishing season open on or as soon thereafter 12 of July 2022 and closed on 31 December 2022.
43. The members and invited participants who declared a potential conflict returned to the meeting.

Agenda Item 7 – Co-management committee membership

44. The AFMA member introduced the Agenda item and asked the MAC to provide advice on the membership of the Co-management committee.
45. The Co-Management Committee ordinarily consists of:
- A chairperson
 - Two industry representatives from Tasmania
 - Two industry representatives from Victoria
46. The Harvest Strategy allows for the Co-Management Committee to recommend fishing start and end dates within determined season dates, the order and timing of harvesting within open areas and the protection of juvenile or local spawning biomass within open beds as appropriate. However, the main function of the Co-Management Committee in recent seasons has been to provide advice on:
- whether to open the fishery with the default TAC of 150 t or proceed directly to a pre-season biomass survey; and
 - prioritising beds to be surveyed in the pre-season biomass survey.

47. The following industry members formed last year's Co-Management committee membership;

- Johnathan Hammond, Chair and Tasmanian representative
- Dusty Cull, Victorian representative
- Jake Watts, Victorian representative
- John Richey, Tasmanian representative
- Andrew Sullivan (Bass Strait Scallop Industry Association observer)
- Bob Lister (Scallop Fisherman's Association of Tasmania observer)

48. The MAC recommended maintaining the above Co-Management Committee membership for the 2022 season.

Agenda Item 8 – Research

Agenda Item 8.1 – Five-year strategic research plan

49. The AFMA member introduced the Agenda item. The MAC was asked to note the five-year strategic research plan expires this year. The MAC was asked to note the comments from ScallopRAG and ScallopMAC at their respective meetings in March 2022 that have been incorporated in the draft five-year strategic research plan. The MAC was asked to provide advice on the amendments to the five-year strategic research plan, and to provide endorsement of the draft as final.

50. The AFMA member noted the changes made to the 'Fishery stocks, biology and the marine environment' section of the research plan. The MAC had no additional comments and endorsed the changes.

51. The AFMA member noted the changes made to the 'Climate change and adaptive management' section of the research plan. The RAG had no additional comments and endorsed the changes.

52. The AFMA member noted the changes made to the 'Gear and technology' section of the research plan, noting the addition of 'bycatch reduction and handling' to potential gear technology improvements.

53. The AFMA member noted the changes made to the 'Economic and social' section of the research plan. The RAG had no additional comments and endorsed the changes.

54. The MAC noted the following:

- The broadness of the Five-year strategic research plan provides enough scope for future research projects as they are identified.
- In relation to the 'economic and social' section of the research plan, the rationale for removing social drivers was that there is a low social dynamic in the fishery, and therefore it is not a high priority for the BSCZSF. Given this, social drivers are a low priority for the fishery.

Recommendations

55. The MAC unanimously supported all changes to the five-year strategic research plan.

Agenda Item 8.2 – 2023-24 Annual Research Statement

56. The AFMA member introduced the Agenda item and noted that the MAC was being asked to provide advice on research priorities for the 2023-24 financial year, to be included in the 2023-24 BSCZSF Annual Research Statement.

57. The MAC was asked to note the research priorities outlined in research statement, and the scoping documents for the associated research projects.
58. The MAC was asked to provide advice on the Harvest Control Rule framework project, noting that there was funding available to include this project in the 2022-23 research year, rather than 2023-24. The RAG noted that this project should be undertaken by an external research provider.
59. The MAC was also asked to provide advice on any additional research priorities to be included in the 2023-24 annual research statement.
60. ScallopRAG recommended the following research priorities for consideration of AFMA funding in 2023-24, with the corresponding cost, priority, and feasibility:
- Annual biomass survey including reference to bycatch data; low cost, essential priority, and high feasibility.
 - Population dynamics of scallops: Growth, recruitment, morphology, and bed structures; low cost, high priority, and high feasibility.
61. ScallopRAG also endorsed the changes made to the scoping documents for the following research projects:
- Annual biomass survey including target species and bycatch
 - Harvest Control Rule framework
62. The MAC noted the following:
- The rationale for the newly identified research project on population dynamics is that the annual biomass survey has provided a time-series of valuable data that is already available and currently underutilised. This data could provide good insights into trends and changes seen in the BSCZSF over previous years. The data could be used for a project which retrospectively analyses this data to understand trends in growth and size distribution over time.
 - Projects with a budget of more than \$10,000 need to be advertised by AFMA through a call for research.
 - There is limited guidance in terms of identifying or prioritising economic research projects for 2023-24, given the AFMA Commission's recent decision to discontinue the use of the Fishery Gross Margin model as an indicator for managing the fishery.
 - The rationale for the Harvest Control Rule framework project is that the current Harvest Strategy does not provide clear guidance for setting a TAC when biomass levels are high. This project will inform the review of the Harvest Strategy.
 - Some dissenting views surrounded the length of time that the Harvest Strategy review has taken, and the additional time that the Harvest Control Rule project will take.
 - Economic information is very important, but not essential.
 - The biomass survey is fundamental to the management of the BSCZSF, and the fishery is not viable without it.
63. Members with a declared conflict of interest left the meeting whilst recommendations were made.

Recommendations

64. The MAC recommended the following research priorities for consideration of AFMA funding in 2023-24, with the corresponding cost, priority and feasibility:
- Annual biomass survey including reference to bycatch data; low cost, essential priority and high feasibility
 - Population dynamics of scallops: Growth, recruitment, morphology and bed structures; low cost, high priority and high feasibility
65. The changes made to the following research scoping documents were adopted by the RAG:
- Annual biomass survey including target species and bycatch
 - Harvest Control Rule framework

Agenda Item 9 – Any other business

66. The Chair introduced the Agenda item and asked the MAC if there were any other matters that they would like to discuss.
67. The AFMA member noted that a summary of the outcomes of the meeting will be circulated to members shortly and published on the AFMA website.
68. The MAC thanked the AFMA member for their contribution to the BSCZS and the MAC over the last 3 years.
69. The MAC welcomed the Executive Officer to the MAC and the fishery.

Close of meeting

70. The Chair thanked the MAC for their contribution to the meeting and wished industry all the best in the 2022 fishing season.
71. The meeting was closed at 15:10.

Attachment A- register of interest

Table 1 declared interests

Name	Membership	Declared interests
Daryl McPhee	Chair	No interest in the fishery pecuniary or otherwise.
Brendan Kelaher	Scientific Member	ScallopRAG Chair. No interest in the fishery pecuniary or otherwise;
Julian Morison	Economic member	Director, Kuti Co Pty Ltd – SA Pipi quota holder; Member, SA Marine Scalefish Fishery Management Advisory Committee (PIRSA); Economics member, Shark Resource Assessment Group (AFMA) and Scallop Resource Assessment Group; Member, Economics Working Group (AFMA), Member, Human Dimensions Research subprogram Steering Committee (FRDC); Economics member, Total Allowable Fishing Committee (NSW DPI); Economics Member, Spanner Crab Harvest Strategy Working Groups (NSW DPI)
Sylvia Zukowski	Environment Member	No interest in the fishery pecuniary or otherwise
Andrew Watts	Industry member	Holds Commonwealth and State concessions
Debbie Wisby	Industry member	Holds State concessions and leases Commonwealth quota.
John Cull	Industry member	Holds Commonwealth and State concessions
Peter Mellios	Industry member	Holds Commonwealth concession and a processor
Stuart Richey	Industry member	Holds Commonwealth and State concessions.
John Hammond	Industry member	Holds Commonwealth and State concessions.
Heather Johnston	AFMA member/ Executive Officer	AFMA employee. No interest in the fishery pecuniary or otherwise.
Matt Koopman	Invited participant, Fishwell Consulting	Fishwell Consulting. We have undertaken the BSCZSF survey since 2015. We also submit research funding applications and undertake research projects for Commonwealth, State and International fisheries agencies and other organisations including fishery associations and private companies. We are regularly engaged by

		SETFIA to report to numerous seismic exploration companies on fishing catch, effort and value that takes overlaps with the proposed seismic testing areas. This included catch and effort from the BSCZSF. Related projects are looking at the effects of the seismic survey off east Gippsland on Danish seine catches, and on scallop densities in Bass Strait. I have no interest in any commercial fisheries.
Andrew Sullivan	Invited participant, Industry	Executive Officer, Bass Strait Scallop Industry Association
Bob Lister	Invited participant, Industry	Executive Officer, Scallop Fishermen's Association of Tasmania
Dan Corrie	Observer, AFMA Management	AFMA employee. No interest in the fishery pecuniary or otherwise.
Lara Ainley	Observer, AFMA Management	AFMA employee. No interest in the fishery pecuniary or otherwise.
Helen Kroger	Observer, AFMA Commission	AFMA Commissioner. No interest in the fishery pecuniary or otherwise.
David Smith	Observer, AFMA Commission	AFMA Commissioner. No interest in the fishery pecuniary or otherwise.
Brett McCallum	Observer, AFMA Commission	AFMA Commissioner. No interest in the fishery pecuniary or otherwise.

Attachment B – Summary of information collected during the 2021 BSCZSF biomass survey

Table 2 summary of table of information collected for each of the beds surveyed during the 2022 BSCZSF annual biomass survey. AB = Apollo Bay, KI = King Island and FI = Flinders Island. Source: Fishwell Consulting.

Area	Bed	Estimated biomass (t)	% weight > 85 mm	Estimated biomass > 85 mm (t)	Density (ind/m ²)	Mean size	Meats/kg (>85 mm)
Apollo Bay	AB 5 Hours	1,037	97.8	1,014	0.43	97	98
	AB The Hill	14,601	82.5	12,050	2.39	93	158
	Sub total	15,638		13,064			
Flinders Island	FI North of Babel	1,578	97.8	1,544	0.34	101	54
	FI The Wreck A	1,856	99.1	1,839	0.43	100	52
	FI The Wreck B	1,632	99.4	1,622	0.36	105	48
	Sub total	5,066		5,005			
King Island	KI-10	3,860	82.3	3,178	2.06	95	70
	KI-7	313	46.9	147	0.14	83	91
	KI-9	10,482	38.2	4,007	1.17	87	108
	KI-BDSE	12,707	49.4	6,278	0.97	88	80
	KI-BDE	234	91.4	214	0.05	91	70
	Sub total	27,596		13,824			
Total		48,300		31,893			