



**Australian Government**

**Australian Fisheries Management Authority**

# **Great Australian Bight Resource Assessment Group (GABRAG)**

## **Meeting 2**

**22 November 2023**

**Adelaide**

**Minutes**

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# Great Australian Bight Resource Assessment Group (GABRAG)

## 2023 Meeting 2 - 22 November

Mr Lance Lloyd (the Chair) opened the meeting at 09:00 ACDT.

### 1. Preliminaries

#### 1.1 Welcome and apologies

1. The Chair:
  - Welcomed members and observers to the meeting.
  - Made an Acknowledgement of Country paying respect to the Traditional Owners of the land and waters that the meeting was held on (the *Kaurna* people), and further paying respect to the *Mirning* people, whose sea country we fish and study in, and acknowledged all their Elders, past, present, and emerging.
2. GABRAG (the RAG) members noted the Acknowledgement of Country, that the meeting was being recorded, and commenced proceedings.
3. The RAG noted the current membership and invited participants attending the meeting ([Table 1](#)).

**Table 1 Meeting attendees**

Chair	Mr Lance Lloyd
GABRAG members	Dr Andrew Penney, Scientific Member Mr Anthony Moore, Scientific Member Mr Neil MacDonald, Industry Member Dr Mark Grubert, AFMA Member
Invited participants	Dr Geoff Tuck, CSIRO Dr Paul Burch, CSIRO Dr Stephanie Brodie, CSIRO Mr Euan Provost, AFMA Dr Miriana Sporcic, CSIRO
Observers	Dr Pia Bessell-Browne, CSIRO Dr Franzis Althaus, CSIRO
Exec. officer	Ms Rachel Downes, AFMA

Apologies: Eriko Hoshino, Marcia Valente and Jim Raptis

#### 1.2 Declarations of interest

4. The RAG members declared conflicts of interest as outlined in [Fisheries Administration Paper 12](#). Members and participants reviewed and updated the Declarations of Interest included at [Attachment A](#).
5. The Chair asked those present to disclose any conflicts of interest with particular items on the agenda.
6. The RAG noted a conflict of interest regarding Industry when discussing the Deepwater Flathead Tier 1 assessment and with CSIRO when discussing research priorities and funding.

7. The RAG agreed that members and participants with conflicts of interest can participate in discussions but must leave the room when recommendations are being made.
8. The RAG noted that recommendations were being asked of the RAG for Deepwater Flathead and research funding. The RAG agreed to discuss and address the potential conflicts independently for each item.

### 1.3 Adoption of agenda

9. The RAG adopted the agenda ([Attachment B](#)) as final.

### 1.4 Minutes of previous meeting

10. The RAG noted that the draft minutes of the GABRAG 1 meeting on 17 October 2023 will be circulated once complete.

### 1.5 Actions arising from previous meetings

11. The RAG noted the action items from previous meetings and the updates provided by the AFMA member at [Attachment C](#). The RAG noted the following items:

**Action Item 2: December 2022 - Agenda Item 7.0:** *CSIRO to investigate including Deepwater Flathead catch as a covariate for Bight Redfish in the CPUE standardisation (and vice versa) and generalised linear models (GLMs) during future analyses and sensitivities.*

- The RAG noted this action item is yet to start. CSIRO has advised that there might be cost implications with this request as it entails an extra model run in the CPUE report.

**Action Item 1: October 2023 – Agenda Item 1.5:** *AFMA to coordinate the development of a broader 'non-eastern' Orange Roughy data analysis strategy which (among other things) will identify ageing needs for GAB Orange Roughy*

- The RAG noted this action item is yet to start

**SharkRAG Action Item 4: October 2023:** *AFMA to seek advice from GABRAG regarding the depth distribution of gummy shark catches off South Australia.*

- The RAG noted a follow up at SharkRAG is scheduled for 4 December 2023
- Neil MacDonald agreed to seek advice from industry and to provide an update to GABMAC, scheduled for 30 November 2023.

**Action Item 1:** GABIA to collate information from fishers regarding any changes in the depth distribution of gummy shark catches and convey it to AFMA.

## 2. Electronic monitoring update

12. The RAG noted updates from Mark Grubert and Euan Provost regarding recent progress of the trial of Electronic Monitoring (EM) in the Great Australian Bight Trawl Sector (GABTS).
13. The RAG noted and discussed the following points:
  - The AFMA EM team have developed a project plan and visited Port Lincoln to inspect three of the four boats that will participate in the EM Trial.
  - Neil MacDonald requested more information on what data EM is trying to capture, noting that fishers have been asking. The trial is assessing if EM can be used as an independent monitoring

tool, to collect the same operational data as observers. AFMA noted the detailed project plan which will be circulated to industry soon.

- Industry wished to clarify data accessibility, in particular how data will be used as well as access and availability to boat operators and owners. AFMA explained that the data will be owned by AFMA but can be made available to Industry on request.
- Andrew Penney noted the benefits of working with industry to understand what each camera is recording (and why) and to emphasise the cost benefits of cameras over observers.
- AFMA noted that for the trial, all video footage will be stored for around 12 months, then deleted once AFMA is confident in the analysis. The analysis will compare EM vs observer data, as well as how the system performs under different conditions.
- AFMA noted that fishers are still required to record fish lengths of the main target species.

### 3. Deepwater Flathead Tier 1 assessment

14. Dr Geoff Tuck introduced the agenda item and thanked Pia Bessell-Browne and Paul Burch for their contribution to the report.
15. The RAG recalled the following:
  - The last Deepwater Flathead assessment was in 2019. The stock-status was estimated at 45% (against a target of 43%) and the RBC was 1253 t.
  - GABRAG 1 (October 2023) discussed and agreed on the base case, noting that the RAG agreed to include Danish seine as a separate fleet which means separate catches, selectivity, lengths and ages associated with this fleet. The Danish seine catch data are included from 2010 onward.
16. The RAG noted the following comments and results:
  - CPUE has been stable since 2005.
  - There are age data from both the otter trawl and Danish seine fleets, but primarily from the otter trawl fleet. More data from the Danish seine fleet would benefit the analyses.

#### Base Case

- Spawning biomass – has been at or near target since around 2010
- Selectivity – similar for all fleets (trawl, Danish seine and GABFIS)
- Fits to length data – by fleet, fits to length data fit well (fits by year available in report, p.37)
- Fits to age data – generally age fits are good (available in report, p, 45)
- Age and length tuning diagnostics – no issues to highlight (noting more Danish seine data would improve analysis)
- Retrospectives – apart from 2017, there are no issues, noting all years (except 2017) are consistent. There are no patterns to indicate model misspecification
- Likelihood profile (M) – Natural mortality (M) is well estimated at  $0.24 \text{ yr}^{-1}$ , with confidence intervals  $0.21\text{--}0.275 \text{ yr}^{-1}$ . The RAG noted there is some conflict in the data which is not unusual for these types of assessments.

- Jitter – sensitive dependence on initial conditions test gives confidence that the base case is a stable assessment
- Dynamic  $B_0$  – indicates that there has not been a strong influence of the environment on the stock
- Overall, the model is stable, noting concerns on recruitment deviations (below).

#### **Base Case assessment outcomes**

- The projected 2024–25 spawning stock biomass will be 44% of virgin biomass.
- The unexploited female spawning biomass is estimated at 9918 t.
- Recruitment shows a fluctuating pattern with a period of mostly below average recruitment since 2010.
- The 2024–25 RBC under the 20:35:43 harvest control rule is 1220 t. The long-term yield is 1199 t and the average RBC over four years from 2024–25 to 2027–28 is 1209 t.
- Sensitivities – standard sensitivities showed that the stock status was stable (varying between 0.40 and 0.49).
- 10-year average recruitment – a sensitivity test was requested by GABRAG 1 (October 2023) based on the observation that estimated recruitment deviations have been below average for eight of the past 10 years. Under a fixed catch scenario of 676 t (i.e. current catches), and maintaining the target at 43%, the RBC is estimated at 940 t.

#### 17. The RAG discussed the following points:

- The option to provide the RAG with two sets of advice to choose from, one based on long-term average recruitment and one if lower than average recruitment continues, noting there would be two RBCs for the MAC to choose from.
- There is low risk of the biomass declining to the limit in the near future under the base case (and its assumption of average recruitment). However, there is concern regarding the risk of consistent (possibly environmentally driven) low recruitment and infrequent stock assessment updates to monitor stock status.
- Andy Moore raised concerns around the apparent inconsistency between the base case assessment that suggests that the stock is approximately at the TRP, yet catches have remained around half of the RBC estimated by the base case assessment for the last decade. Additionally, he noted that recent average recruitment was estimated to be below average for 8 out of the last 10 years. Andy made the case for adopting the below average recruitment scenario of 940 t RBC advice, as it is the most defensible position compared to the 1209 t RBC base case. Additionally, it was suggested that given climate issues raised, the RBC being twice catch levels and the trend that low recruitment may not change, if the RAG chooses the base case, this needs to be accompanied with an explanation.
- Industry stressed that whilst an RBC of 940 t vs 1209 t makes no difference in terms of economics of the fishery, there is little risk to the stock whilst the stock is under caught relative to either amount.
- Andrew Penney supported the 1209 t base case advice and supported adding a second set of advice to the MAC if the RAG has serious concerns about recruitment decline.

- CSIRO made the point that using projections with most recent biological parameters (including recruitment) is considered best practice globally.
- The next Deepwater Flathead assessment is currently scheduled for 2028. The RAG considered that five years between assessments was too long and discussed options to bring the assessment forward or to apply a discount factor.
- Future work from CSIRO (led by Dr Pia Bessell-Browne) will provide management options when dealing with low recruitment. Ongoing work by CSIRO and Sandra Curin-Osorio is examining the application of a conservative buffer (i.e. a discount factor on the RBC) to account for the time since the last assessment. It was noted that this work will also assist the decision making process.
- The RAG discussed that the risk to recruitment is only realised when catches exceed 940 t and noted that a trigger might be an appropriate response. Industry explained that catches are low relative to the TAC due to the economics of the fishery. Industry does not believe that the economics will change in the next 3–5 years and that an increase in effort is unlikely. Industry noted there is a high level of conservation built into the capacity of the fleet.
- According to the model, given current catches, the risk to the stock is low. The RAG suggested that any future catches in excess of 1000 t should trigger consideration of an early stock assessment.
- Andy Moore acknowledged the RAG's position that the base case has low risk to the stock if fishing effort does not change. He reiterated his position that advising an RBC of 940 t is more appropriate as it better accounts for biological risk from potential climate driven changes to recruitment, does not change the impact on industry and is defensible given the data and length between assessments.
- Industry raised the issue that the Marine Stewardship Council (MSC) re-assessment would require another Deepwater Flathead assessment in 2027. CSIRO noted an assessment in 2027 would not have data processed for 2026 (due to the new SESSF assessment schedule). Therefore, an assessment in 2027 would not include CPUE data for 2026.

18. The industry member (Neil MacDonald) left the room for the decisions on recommendations.
19. The RAG, except for Andy Moore, agreed that the recommendation should be based on the base case. The RAG agreed that the recommendation should be made with additional information and actions if catches increase (i.e., consideration of earlier assessment if the 1000 t catch trigger is reached).
20. The RAG discussed the need to expedite the advice on discount factors and to apply discount factors as this is standard practice elsewhere.
21. The RAG cautioned against rejecting the base case without an appropriate reason or an alternative model. The RAG raised the option of presenting multiple options to the MAC for decision, noting there is no appropriate reason to reject the base case presented.
22. The RAG discussed appropriate MYTAC lengths. CSIRO noted a 3-year MYTAC is ideal, although 2026 is a busy assessment year. The RAG agreed that the MYTAC should be no longer than 4 years.
23. The RAG requested that AFMA discuss the timing of the next Deepwater Flathead assessment at the upcoming SESSF Chair's Meeting, noting the above discussion on assessment timeframes and risk.
24. The RAG recommended accepting the base case with an RBC of 1209 t.

25. The RAG recommended a 3-year MYTAC, noting that recruitment has been lower than average for eight of the past 10 years. The RAG acknowledged the sensitivity analyses and that if catches do approach 1200 t, the stock will be driven below the target, although this limit will not be reached for many decades under the 10-year average recruitment scenario. The RAG also acknowledged that indicator data for Deepwater Flathead will be reviewed in 2024 through the MYTAC Working Group.
26. The industry member re-joined the meeting, and the chair provided a summary of the agreed advice.

**Action Item 2:** AFMA to discuss the timing of the next Deepwater Flathead assessment with SESSFRAG.

## 4. Climate and ecosystem update

27. Dr Stephanie Brodie (CSIRO) introduced the agenda item. The RAG noted the update on climate adaptation work being undertaken by AFMA and the information provided regarding climate sensitivity of species. The RAG noted the draft Climate and Ecosystem Status Report for the Southern and Eastern Scalefish and Shark Fishery (SESSF).
28. The RAG noted the following regarding the climate and ecosystem status report for the SESSF:
- The status report shows historical data and the outlook for the coming months, including warming of the South East corner of Australia, extending into the GAB.
  - Throughout 2023, sea-surface and bottom temperatures have seen average conditions. Chlorophyll-a (surface variable used as a proxy for deeper conditions) has also remained average.
  - National Reference Stations show ecosystem changes around Tasmania and South Australia, particularly more ecosystem productivity around Kangaroo Island in South Australia.
  - Observations from SESSFRAG and the South East Resource Assessment Group (SERAG) shows species moving deeper, being more dispersed in upwelling events, greater variability between El Niño and La Niña, increasing winter temperatures and stronger currents.
  - The outlook for the coming year shows El Niño persisting until April, a weaker Leeuwin current (cooler GAB), raising thermocline, favouring negative South Annular Mode (SAM; increase storminess in southern Australian) and strengthening of the East Australian Current. Forecasts of Sea Surface Temperature (SST) anomalies show warmer conditions for the next few months.
  - Shorter term forecasts are publicly available, including the SAM (which varies over several weeks to a month), SST, identifying upwelled waters, eddies, and currents etc.,
29. GABRAG discussed the following points:
- Andrew Penney added that the key large-scale ocean environmental index driving the productivity of fish stocks is the Southern Oscillation Index (SOI), noting this affects Tasmania and South Australia to some extent. He noted his previous findings that SAM did not correlate with observed patterns in east coast fisheries. However, there is evidence that the El Niño SOI does correlate with catches. He recommended including the SOI in future climate advice; and
  - The benefit of receiving feedback from skippers regarding change in the environment and catches, particularly regarding species specific information before a species assessment.
  - CSIRO reports will be published annually. CSIRO noted it is important to hear what is happening on the water.



- Neil MacDonald commented that Deepwater Flathead catches had increased in September/October in the GAB, as these catch rates are not normally seen this time of year.
  - Industry asked if CSIRO have access to the data from Ian Knuckey's project gathering bottom temperature data from boats fishing in the GAB. CSIRO is yet to use this data but will be able to access it through the Australian Ocean Data Network.
  - CSIRO emphasised the importance of feedback from fishers, particularly regarding any unusual observations or catches, given the increased heat forecast for the coming months.
30. GABRAG requested that GABIA continue to seek information from fishers regarding any environmental changes in the GAB and pass it on to GABRAG.

**Action Item 3:** GABIA to collate information from fishers regarding any environmental changes in the GAB each year and convey it to GABRAG.

## 5. Research proposal for validating catch and age models and data sources for data-limited Orange Roughy stocks

31. Dr Paul Burch gave a presentation on the proposed research proposal to the RAG.
32. The RAG noted the following points:
- The research was requested at the August 2023 SESSFRAG Data Meeting.
  - The purpose of the research is to undertake sensitivities on the catch and age assessments implemented in Stock Synthesis by removing data from the eastern zone Orange Roughy assessment.
  - The hypothesis is that age data provides some information on the stock status of Orange Roughy.
  - SESSFRAG highlighted a need for more confidence in the assessments for data-limited Orange Roughy stocks and requested that the proposed work be considered by SERAG and GABRAG.
  - The work will involve a systematic data reduction of the eastern zone assessment and sensitivity testing of the method for application to the GAB, Cascade and (potentially) Western Zone Orange Roughy stocks.
  - Dr Burch noted there are three components to the work:
    - a. Validating catch and age models - identifying the appropriateness of the catch and age model, process for ageing the backlog of otoliths (particularly for GAB) to maximise effectiveness and sensitivity testing catches, natural mortality and steepness of the stock recruitment relationship;
    - b. Otolith weight data - to evaluate the benefit of using otolith weight derived age frequencies (less precise but cheaper); and
    - c. length data – to examine if stock status can be ascertained from length frequency data for the eastern stock (cheapest source of information for these stocks).
  - Dr Burch sought the RAG's feedback and advice, noting the work will be undertaken in 2024 if approved. The work is required to inform the Cascade and GAB Orange Roughy assessments scheduled for 2025.

33. The RAG supported the research proposal and requested that Dr Burch submit it to SESSFRAG when it next meets.

**Action Item 4:** Paul Burch to submit a proposal for validating catch and age models and data sources for data-limited Orange Roughy stocks to SESSFRAG.

## 6. Research proposals for 2024–25 and priorities for 2025–26

34. The RAG noted:

- No research priorities for the Great Australian Bight Trawl Sector (GABTS) were submitted to the AFMA Research Committee (ARC) for potential funding in 2024–25.
- The research proposal '*Evaluating contributing factors to catch per unit effort (CPUE) standardisation in the SESSF*' was developed by Dr Miriana Sporcic in response to a research priority identified by SESSFRAG to examine CPUE data from all SESSF sectors.
- The Marine Stewardship Council (MSC) certification for the GABTS (relating to Deepwater Flathead, Bight Redfish and Gummy Shark) expires on 22 August 2028 and that the next assessments for these species are currently scheduled for 2028, 2026 and 2026, respectively.
- The MSC Public Certification Report for the GABTS contains one condition and two recommendations.

35. The RAG deferred consideration of the timing of the next Deepwater Flathead assessment to SESSFRAG (following discussions at agenda item 3).

### Research proposals for 2024–25

36. The RAG heard a presentation from Dr Miriana Sporcic (CSIRO) on the research proposal '*Evaluating contributing factors to catch per unit effort (CPUE) standardisation in the SESSF*.' The RAG noted the objectives and proposal plan. CSIRO left the meeting, and the RAG discussed the following:

- The research plan aligns with the call for research, addresses the priorities in the fishery's research plan and has well defined and relevant objectives.
- The cost of the project and value for money. AFMA identified the project as a high priority and considers it value for money.
- The proposed project covers three species (to be decided during stage one of the project).
- The proposed project has been budgeted through the ARC process.

37. The RAG recommended supporting the project proposal '*Evaluating contributing factors to catch per unit effort (CPUE) standardisation in the SESSF*' developed by Dr Miriana Sporcic. The Chair will sign and date the project proposal.

### MSC certification and research priorities for 2025–26

38. AFMA noted that the MSC certification has one condition and two recommendations to be addressed over the next five years, adding that the RAG should monitor progress towards addressing these requirements/suggestions. The single condition states that '*By Year 2, demonstrate that information is adequate in the Danish Seine fishery to measure trends and support a strategy to manage impacts on Endangered Threatened and Protected (ETP) species.*'

39. The RAG discussed the following points:

- The upcoming EM trial should assist in addressing the condition.
  - There will be two further ISMP sampling years before the current certification lapses. This will provide additional information to respond to the condition.
  - An Ecological Risk Assessment (ERA) for the Danish seine fleet would also address this recommendation and should be considered as a research priority.
40. CSIRO suggested that if an ERA for the GAB Danish seine fleet is to be progressed, it should (in the interests of efficiency) be accompanied by an ERA for the GAB otter trawl fleet.
41. The RAG requested that AFMA discuss the timing of future ERAs for the otter trawl and Danish Seine fleets in the GAB with Dr Miriana Sporcic.
42. The RAG discussed the Great Australian Bight Fishery Independent Survey (GABFIS) and suggestions to replace it, noting that the GABFIS collected information on target and non-target species catches, biological data that inform stock assessments and indices of abundance for two main target species. CSIRO suggested that the GAB Data Working Group review the information collected by the GABFIS and identify ways that it could be collected by industry (acknowledging cost). The options proposed by the working group can then be considered by GABRAG.
43. Neil MacDonald noted that industry is interested in developing an assessment for Ocean Jackets and have had preliminary conversations with PIRSA and SARDI. Industry put forward the proposal for consideration by the RAG, noting that if approved, a formal proposal would be drafted for consideration by the ARC. Industry added that Ocean Jackets are shared with state fisheries and therefore the project should be developed and funded as a joint project. The RAG discussed the following:
- A PhD student will join CSIRO in February, to examine biological parameters and develop assessments for one or two emerging species. CSIRO suggested that this student could potentially work on Ocean Jackets.
  - Andy Moore noted the work by Marcus Miller on the basic biology and catch of Ocean Jackets in NSW, as well as Neil Klaer looking at historical data for Ocean Jackets. Paul Burch offered to circulate research papers on Ocean Jackets to GABRAG members.
  - The SARAC set aside funding each year for notional projects, noting this project may be of interest to them. The projects funded by the SARAC can flow across multiple jurisdictions.
  - The option to modify the scope of the PhD student research or to consider an additional project.
  - AFMA noted that there is a project by John Stewart on stock structure of [Silver Trevally and Ocean Jackets](#) which has been running for two years and is nearing completion. AFMA agreed to approach John Stewart to arrange a presentation.
44. The RAG supported industry's proposal to collate data to support an assessment for Ocean Jackets.
45. Industry asked AFMA for an update on the proposed research on Deepwater Dogfish. CSIRO noted Dr Franzis Althaus is working on the project. AFMA agreed to request an update on the status of the Deepwater Dogfish project from CSIRO. The RAG suggested that the update occur at the next SESSFRAG meeting.

**Action Item 5:** AFMA to discuss the timing of future ERAs for the otter trawl and Danish seine fleets in the GAB with Dr Miriana Sporicic.

**Action item 6:** The GAB Data Working Group to review the information collected through the GABFIS and identify ways that it could be collected by industry. The options proposed by the working group can then be considered by GABRAG.

**Action Item 7:** Paul Burch to circulate research papers on Ocean Jackets to GABRAG members.

**Action Item 8:** AFMA to approach John Stewart for a presentation on the stock structure of Silver Trevally and Ocean Jackets.

**Action Item 9:** AFMA to request an update on the status of the Deepwater Dogfish project, potentially in the form of a presentation at the next SESSFRAG meeting.

## 7. Other business and action items

46. The Chair noted the proceedings and asked the RAG if there were further items that it wished to discuss. The RAG made no further remarks or discussions.
47. The Executive Officer reviewed the action items that arose from the meeting and these were endorsed by the RAG (Table 2).

## 8. Future meeting schedule

48. The RAG noted that GABMAC is scheduled for 30 November 2023.
49. The RAG also noted that there are no assessments for GAB species scheduled for 2024. Therefore, only one GABRAG meeting will be required next year to discuss MYTACs, the Orange Roughy research catch allowance and future research proposals and priorities.

## 9. Close of meeting

50. The Chair thanked RAG members for their contributions and closed the meeting at 13:00 hr ACDT.

**Table 2 Action items arising from the meeting**

No.	Meeting & (agenda Item)	Action Item	Responsible entity	Timeframe
1	Nov 2023 (1.5)	GABIA to collate information from fishers regarding any changes in the depth distribution of gummy shark catches and convey it to AFMA.	GABIA	By 4 Dec 2023
2	Nov 2023 (3)	AFMA to discuss the timing of the next Deepwater Flathead assessment with SESSFRAG.	AFMA	SESSFRAG Chairs' meeting 2024
3	Nov 2023 (4)	GABIA to collate information from fishers regarding any environmental changes in	GABIA	GABRAG 2024

No.	Meeting & (agenda Item)	Action Item	Responsible entity	Timeframe
		the GAB each year and convey it to GABRAG.		
4	Nov 2023 (5)	Paul Burch to submit a proposal for validating catch and age models and data sources for data-limited Orange Roughy stocks to SESSFRAG.	Paul Burch	SESSFRAG Chairs' meeting 2024
5	Nov 2023 (5)	AFMA to discuss the timing of future ERAs for the otter trawl and Danish seine fleets in the GAB with Dr Miriana Sporcic.	AFMA	SESSFRAG Chairs' meeting 2024
6	Nov 2023 (5)	The GAB Data Working Group to review the information collected through the GABFIS and identify ways that it could be collected by industry. The options proposed by the working group can then be considered by GABRAG.	GAB Data Working Group	Prior to GABRAG 2024
7	Nov 2023 (5)	Paul Burch to circulate research papers on Ocean Jackets to GABRAG members.	Paul Burch (CSIRO)	Prior to GABRAG 2024
8	Nov 2023 (5)	AFMA to approach John Stewart for a presentation on the stock structure of Silver Trevally and Ocean Jackets.	AFMA	SESSFRAG Chairs' meeting 2024
9	Nov 2023 (5)	AFMA to request an update on the status of the Deepwater Dogfish project, potentially in the form of a presentation at the next SESSFRAG meeting.	AFMA	SESSFRAG Chairs' meeting 2024

## Attachment A – Register of Interests

Name	Membership	Declared interests
Lance Lloyd	Chair	<ul style="list-style-type: none"> <li>• No interest in the fishery pecuniary or otherwise</li> <li>• Member of GABMAC and SESSFRAG</li> <li>• Board Member, AwF – Aquaculture without Frontiers (Australia)</li> <li>• Director – Lloyd Environmental Pty Ltd.</li> <li>• Research Fellow – Federation University Australia</li> </ul>
Andy Moore	Scientific member	<ul style="list-style-type: none"> <li>• No personal pecuniary interest</li> <li>• Employed by ABARES – interest in sources of funding for research purposes</li> <li>• Senior Research Fellow – University of Queensland</li> <li>• Principal Investigator on the National Recreational Fishing survey</li> <li>• Co-investigator on school whiting stock structure and biology project</li> <li>• Scientific member on GABRAG</li> </ul>
Andrew Penney	Scientific member	<ul style="list-style-type: none"> <li>• Director of Pisces Australis Pty Ltd, an Australian registered marine/coastal research and management consultancy based in Canberra - interests in any opportunities in this regard.</li> <li>• Currently Principal Investigator on FRDC Projects Nos 2017-180: Design and implementation of an Australian National Bycatch Report: Phase 1 – Scoping; and 2019-036: Implementation of dynamic reference points and harvest strategies to account for environmentally-driven changes in productivity in Australian fisheries.</li> <li>• Independent scientific member on the AFMA South East RAG, the Tropical Rock Lobster RAG and the Small Pelagic Fishery RAG. Member of the AFMA ERA Technical Working Group.</li> <li>• Deputy Scientific Member on the New South Wales Fisheries Total Allowable Fishing Committee Sep 2020 to Sep 2023.</li> <li>• No shareholding and hold no positions relating to any other companies, including any fishing companies or industry associations.</li> </ul>
Jim Raptis	Industry member	<ul style="list-style-type: none"> <li>• GABRAG and GABMAC Industry Member</li> </ul>

		<ul style="list-style-type: none"> <li>• Operates two boats in the GABT Fishery and owns four GABT SFRs as well as quota in the SESSF</li> <li>• President of GABIA.</li> </ul>
Neil MacDonald	Industry member	<ul style="list-style-type: none"> <li>• Director NMAC (SA) P/L</li> <li>• Executive Officer of the Great Australian Bight Industry Association (GABIA)</li> <li>• Executive Officer of Charter Boat Association South Australia</li> <li>• Executive Officer Southern Fishermen's Association</li> <li>• Executive Officer of Saint Vincent Gulf Prawn Boat Owner's Association</li> <li>• Executive Officer of Marine Scale Net Fishers Association</li> <li>• Committee support services South Australian Rock Lobster Management Advisory Committee &amp; Research Sub-Committee</li> <li>• Support services South Australian Professional Fishers Association</li> <li>• GABMAC Industry Member</li> <li>• Gulf St Vincent Prawn Fishery Management Advisory Committee (SVGPBOA) Member</li> <li>• Gulf St Vincent Prawn Fishery Research Sub-Committee (SVGPBOA) Member</li> <li>• Lakes &amp; Coorong Fishery Management Advisory Committee (LCFMAC) Member</li> <li>• Director of the Australian Council of Prawn Fisheries</li> <li>• Seafood Industry Australia Wildcatch Working Group Member</li> </ul>
Mark Grubert	AFMA Member	<ul style="list-style-type: none"> <li>• Employed by AFMA. Trawl Manager,</li> <li>• No pecuniary or other interest.</li> </ul>
Rachel Downes	Executive Officer (EO)	<ul style="list-style-type: none"> <li>• Employed by AFMA, Senior Management Support Officer, EO of GABRAG. No pecuniary or other interest.</li> </ul>
Geoff Tuck	Invited Participant	<ul style="list-style-type: none"> <li>• Employed by CSIRO. Involved in stock assessments</li> <li>• Interest in obtaining funding for future research</li> <li>• Principal investigator (PI) on SESSF stock assessment project</li> </ul>

		<ul style="list-style-type: none"> <li>• Project leader CSIRO Marine Visual Technologies project team on automated catch detection and species identification</li> <li>• Scientific member of SERAG</li> </ul>
Paul Burch	Invited Participant	<ul style="list-style-type: none"> <li>• CSIRO Assessment Scientist</li> <li>• CSIRO representative on the Fisheries Statistics and Information Working Group.</li> </ul>
Stephanie Brodie	Invited Participant	<ul style="list-style-type: none"> <li>• CSIRO Research Scientist</li> </ul>
Euan Provost	Invited Participant	<ul style="list-style-type: none"> <li>• Employed by AFMA. No pecuniary or other interest.</li> </ul>
Miriana Sporcic	Invited Participant	<ul style="list-style-type: none"> <li>• CSIRO Assessment Scientist.</li> <li>• Acquiring funding for research purposes.</li> <li>• Project leader CSIRO Ecological Risk Assessments</li> </ul>
Pia Bessell-Browne	Observer	<ul style="list-style-type: none"> <li>• CSIRO Assessment Scientist.</li> <li>• PI on FRDC project: Developing a harvest control rule to use in situations where depletion can no longer be calculated relative to unfished levels.</li> <li>• Assessment scientist</li> </ul>
Franzis Althaus	Observer	<ul style="list-style-type: none"> <li>• Employed by CSIRO, Research scientist.</li> </ul>



## Attachment B – Agenda

Start time ACDT (duration)	Item	Purpose	Lead presenter/s
09:00 (20 min)	<b>1. Preliminaries</b>		
	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 and advice	Rachel Downes
09:20 (10 min)	<b>2. Electronic Monitoring update</b>	For noting	Mark Grubert
09:30 (1 hr)	<b>3. Deepwater Flathead Tier 1 assessment</b> Recommended Biological Catch for 2024–25	For advice	Geoff Tuck
10:30 (15 min)	<b>Morning tea</b>		
10:45 (30 min)	<b>4. Climate and ecosystem update</b>	For noting and advice	Stephanie Brodie
11:15 (15 min)	<b>5. Research proposal for validating catch and age models and data sources for data-limited Orange Roughy stocks</b>	For advice	Paul Burch
11:30 (75 min)	<b>6. Research Proposals for 2024–25 and Priorities for 2025–26</b>	For advice	Mark Grubert
12:45 (10 min)	<b>7. Other business and action items</b>	For advice	Rachel Downes
12:55 (5 min)	<b>8. Future meeting schedule</b>	For noting	Rachel Downes
13:00	<b>Close and lunch</b>		

## Attachment C – Progress of Action Items from Previous Meetings

Complete/Redundant	Underway	Yet to start	Advice required
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Table 3 Progress of action items from previous GABRAG meetings

	Meeting & (Agenda Item)	Action item #	Action Item	Responsible entity	Timeframe	Progress
	Dec 2022 (7.0)	2	CSIRO to investigate including Deepwater Flathead catch as a covariate for Bight Redfish in the CPUE standardisation (and vice versa) and generalised linear models (GLMs) during future analyses and sensitivities.	CSIRO	The year before the next Bight Redfish assessment (i.e., 2025)	The next Bight Redfish assessment has been deferred from 2025 to 2026 as part of a large program to re-cast the AFMA stock assessment and data analysis schedule. This change also includes a 4-year MYTAC for Bight Redfish.
	Oct 2023 (1.5)	1	AFMA to coordinate the development of a broader 'non-eastern' Orange Roughy data analysis strategy which (among other things) will identify ageing needs for GAB Orange Roughy	AFMA	Early 2025	The data analysis strategy will follow the work proposed by Dr Paul Burch on validating catch and age models and data sources for data-limited Orange Roughy stocks.

Table 4 Request from SharkRAG 1, 2023

	Meeting details (Agenda Item)	Action item #	Action Item	Entity Responsible	Timeframe	Progress
	SharkRAG	2	AFMA to seek advice from GABRAG regarding the depth distribution of gummy shark catches off South Australia. More specifically, are gummy sharks shifting into deeper waters off this state?	AFMA and GABRAG	As soon as possible	For advice at GABRAG 2, 22 November 2023.