Australian Government

Australian Fisheries Management Authority

*AFMADMW-1932364602-93457*

# Minutes

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| Meeting | South East Resource Assessment Group (SERAG) | | |
| Meeting | Meeting 1 | Dates | 15-16th October 2025 |
| Location | Hobart/Online | Time | 9am- 5pm Wednesday 15th<br>9am - 4pm Thursday 16th |
| Members | Dr Paul McShane, Chair<br>Ms Sally Weekes, Senior Manager, Interim AFMA Member<br>Mr Ross Winstanley, Recreational Member<br>Mr Daniel Hogan, Industry Member<br>Mr Simon Boag, Industry Member<br>Dr Jeremy Lyle, Scientific Member<br>Dr Ian Knuckey, Scientific Member<br>Mr Keith Rowling, Industry Member<br>Dr Steven Rust, Economics Member<br>Dr Paul Burch, CSIRO, Scientific Member<br>Dr Jonathan Smart, Scientific Member | | |
| Apologies | Dr Mark Grubert, AFMA Member<br>Mr Will Mure, Industry Member | | |
| Invited Participants | Dr Geoff Tuck, CSIRO<br>Dr Pia Bessell-Browne, CSIRO<br>Dr Miriana Sporcic, CSIRO | | |

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| | Ms Kristin Privitera-Johnson, CSIRO<br>Ms Rikki Taylor, CSIRO<br>Dr Robin Thomson, CSIRO<br>Dr Andrew Penney, Pisces Australis<br>Dr Moninya Roughan, UNSW<br>Ms Natalie Couchman, AFMA<br>Mr Dan Corrie, AFMA<br>Dr Lianos Triantafillos, AFMA<br>Ms Jennifer Power-Geary<br>Mr Anthony Coggan, AFMA<br>Ms Michelle Henriksen, AFMA<br>Ms Anna Willock, Deputy CEO AFMA |
| Observers | Dr Daniel Wright, ABARES<br>Dr Tim Emery, ABARES<br>Mr Ross Bromley, ATLANTIS |
| EO | Ms Audrey Kent |

| Item | Title/Topic/Issue | Notes, Action & Recommendations |
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| 1. | Preliminaries | 1.1 Welcome and apologies<br><br>The Chair, Paul McShane, opened the meeting with an Acknowledgement of Country and welcomed participants. The Chair also facilitated the introduction of meeting participants and noted apologies, which is recorded in the table above. Meeting participants were informed that the meeting would be recorded for the purpose of assisting the preparation of meeting minutes.<br><br>1.2 Declarations of interests<br><br>The RAG followed the procedure outlined in Fisheries Administration Paper 12 for managing potential conflicts of interest, with the declarations in relation to specific agenda items, and the RAGs decision regarding the relevant member's participation, outlined in Attachment B.<br><br>1.3 Adoption of agenda<br><br>The agenda was adopted as final (see **Attachment A**).<br><br>1.4 Minutes of previous meeting<br><br>AFMA noted that the minutes from SERAG meeting held in November 2024 were distributed to SERAG members for feedback prior to finalisation and are available on the AFMA website.<br><br>1.5 Actions arising from previous meetings<br><br>The minutes from previous meetings were endorsed, and actions arising were reviewed. Key updates regarding actions included:<br><br>- AFMA now using AI to assist in the production of minutes and propose that the video recording of these meetings to be deleted 90 days after each meeting. |
| 2 | Government Priorities and Ministerial Expectations | Presentation Highlights:<br><br>• AFMA presented two key pieces of government correspondence: a letter from the Treasurer and Finance Minister seeking regulatory reform opportunities to support productivity growth, and the Ministerial Statement of Expectations.<br>• AFMA's response outlined recent initiatives and proposed actions aimed at improving operational efficiency, reducing regulatory duplication, and leveraging technology.<br>• The Ministerial Statement reinforces AFMA's priorities and aligns with the broader productivity agenda.<br>• Members were encouraged to consider opportunities for productivity improvements when developing management advice.<br><br>Discussion:<br><br>• Members asked if AFMA's response would include detailed timelines and project management or remain at a high-level exchange of letters.<br>• Discussion highlighted the importance of concrete, tangible actions within existing resources, as stipulated by government.<br>• Suggestions included leveraging the expected arrival of EM in some fisheries to achieve simplifying jurisdictional (OCS) arrangements and addressing operational inefficiencies.<br>• Members noted that initiatives like digital and data capability improvements and recalibration of management settings intersect with ongoing projects such as the multi-species harvest strategy. |

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| | | • The group discussed the Commonwealth Harvest Strategy Policy review and its potential to reduce regulatory burden and accommodate climate-impacted stocks.<br><br>Recommendations:<br><br>• Members are encouraged to identify and communicate opportunities for productivity improvements relevant to resource assessment processes.<br>• SERAG recommended that a timeline and action plan regarding an AFMA response to Government priorities and ministerial expectations be discussed by SEMAC. |
| 3 | Climate and Ecosystem Status Report | Presentation Highlights:<br>• AFMA provided an overview of its Climate Adaptation Program, highlighting measures to integrate climate change considerations into fisheries management decisions.<br>• The Climate Risk Framework (CRF) was recently endorsed by the AFMA Commission and offers a streamlined process to assess climate risks and mitigation options.<br>• CSIRO presented the draft 2025 Climate and Ecosystem Status Report for the SESSF, summarising environmental indicators such as sea surface and bottom temperature anomalies, chlorophyll-a concentrations, and ecosystem productivity trends.<br>• Key observations included record-high global sea surface temperatures, persistent marine heatwaves, and a harmful algal bloom in South Australian gulfs.<br>• Industry observations and FishSOOP data were incorporated to validate model outputs and improve understanding of temperature-depth profiles and ecosystem changes.<br><br>Discussion:<br>• Members emphasised the importance of linking FishSOOP temperature data with catch rates to validate model predictions and improve decision-making.<br>• Concerns were raised about the practicality of collecting anecdotal observations, with suggestions to leverage automated data systems rather than manual reporting.<br>• Discussion noted the value of industry observations for identifying abnormal events, such as shifts in species distribution and recruitment patterns potentially linked to climate change.<br>• The harmful algal bloom in South Australia was discussed, including its localised nature and potential ecosystem impacts, with members noting the need for ongoing monitoring and validation of satellite chlorophyll data.<br>• Future projections indicate continued anomalously warm conditions across the area of the SESSF, reinforcing the need for adaptive management strategies.<br><br>Industry observations from the GABTF in relation to the climate report included:<br>• Warmer bottom temperatures compared to sea surface temperature at the start of the season.<br>• Bight Redfish catch has been caught more broadly spatially and across the season.<br>• Greater fishing in the west of the GAB due to higher catch rates. |

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| | | Recommendations:<br>• SERAG noted the draft Climate and Ecosystem Status Report and its role in informing stock assessments and TAC recommendations.<br>• Members to provide any additional climate or ecosystem observations for inclusion in the final report, particularly regarding recent harmful algal bloom impacts and temperature anomalies.<br>• AFMA and CSIRO to continue integrating FishSOOP data with catch records and progress research under the Futures of Seafood project.<br>• Maintain engagement with industry to capture relevant observations and explore automated systems for improved data collection.<br>• Final Climate and Ecosystem Status Report to incorporate SERAG feedback before publication. |
| 4 | Climate Risk Framework overview and species profile | Presentation highlights:<br><br>• AFMA presented the Climate Risk Framework (CRF), endorsed by the AFMA Commission in September 2025, following a three-year trial and development process.<br>• The CRF integrates climate considerations into fisheries management decisions through a four-step process: risk evaluation, identification of adaptation measures, residual risk assessment, and advice to the Commission.<br>• Species assessments reviewed included orange roughy (East), Bight redfish, blue-eye trevalla (slope), jackass morwong (East), John dory, and royal red prawn.<br>• The framework aims to ensure climate impacts are explicitly considered in TAC/TAE advice and broader management strategies, with staged implementation timelines for adaptation measures.<br><br>Discussion and Recommendations:<br><br>**Orange roughy (East)**<br><br>Noting the species assessment is to be updated with the latest stock assessment results (expected at SERAG 2 in November 2025), SERAG supported the Step 1 climate risk assessment of very low risk. Regarding Step 4, SERAG noted that climate change is not expected to have long-term impact on orange roughy (East) and agreed that no response, beyond ongoing data collection and monitoring, is required.<br><br>SERAG noted that there is uncertainty regarding the impact of climate change on spawning aggregations and consider that bottom temperature data that is captured by the AOS could be used to assess this in the future, should it be required.<br><br>**Bight redfish**<br><br>SERAG supported the Step 1 climate risk assessment of low risk. Regarding Step 4, SERAG noted that climate change is not expected to have an immediate impact on Bight redfish and agreed that no immediate response, beyond periodic review of existing data collection and monitoring programs, is required.<br><br>The RAG noted that uncertainty in the current stock assessment is expected to be addressed shortly through an update to the assessment as well as the implementation of the Interim SESSF HS that will provide an additional option (via |

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| | | the re-introduction of Tier 2 and associated discount factor) to account for assessment uncertainty if required.<br><br>**Blue-eye trevalla (slope)**<br><br>SERAG supported the Step 1 climate risk assessment of low risk. Regarding Step 4, SERAG noted that climate change is not expected to have an immediate impact on blue-eye trevalla (slope) and agreed that no immediate response, beyond periodic review of existing data collection and monitoring programs, is required.<br><br>**Jackass morwong (East)**<br><br>SERAG supported the Step 1 climate risk assessment of extreme risk. Regarding Step 2, SERAG noted that extensive adaptation measures have been implemented in recent years (bycatch TAC, spatial closures, companion species TAC, gear modifications, structural adjustment), and others will be implemented over the coming 12 months, including:<br>• EM in the CTS from 1 July 2026 which will improve estimates of discard mortality.<br>• Implementation of the Trawl Industry Data Collection program that includes the collection of jackass morwong samples in trawl closures to support a future stock assessment.<br><br>Regarding Step 3, SERAG noted that jackass morwong (East) has and will continue to be significantly impacted by climate change. While extensive adaptation measures have been implemented in recent years and others are to be implemented over the coming 12 months, there is insufficient information to assess the impact of these measures on total mortality and the future biomass trajectory of the stock. There is also uncertainty as to the level of discarding, noting the implementation of EM in the CTS in 2026 will support the collection of more accurate data on discards. It was noted that it will take some time for the impacts of adaptation measures to be detected in stock indicators. Given this SERAG, recommended the extreme risk score be maintained at Step 3.<br><br>Regarding Step 4, SERAG supported the ongoing fine tuning of the rebuilding strategy for this species. As part of the process, SERAG recommended all available information be compiled on the drivers impacting on the distribution, abundance, phenology and physiology of jackass morwong (East), including climate change impacts and evidence of a regime shift. This will provide a more holistic picture to inform the rebuilding strategy, including the formulation of reference periods, rebuilding timeframes and subsequent management approaches. SERAG also recommended that understanding the reasons for increased State (NSW) catch of jackass morwong (East) in recent years will be important for the rebuilding strategy.<br><br>**John dory**<br><br>SERAG supported the Step 1 climate risk assessment of extreme risk. Regarding Step 2, SERAG noted that adaptation measures which have been implemented in recent years to support the rebuilding of jackass morwong (East) (spatial closures, companion species TAC, gear modifications, structural adjustment) were also intended to have positive impacts for John dory. In addition, John dory has been managed under a bycatch TAC since 2021-22 and a number of other measures will be implemented over the coming 12 months, including:<br>• EM in the CTS from 1 July 2026 which will improve estimates of discard mortality. |

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| | | • Implementation of the Trawl Industry Data Collection program that includes the collection of biological samples in trawl closures to support assessment.<br><br>Regarding Step 3, SERAG noted that John dory is highly vulnerable to climate change. While extensive adaptation measures have been implemented in recent years and others are to be implemented over the coming 12 months, there is insufficient information to assess the impact of these measures on total mortality and the future biomass trajectory of the stock. It was noted that it will take some time for the impacts of adaptation measures to be detected in stock indicators. Given this SERAG recommended the extreme risk score be maintained at Step 3.<br><br>Regarding Step 4, SERAG supported the development of a formal rebuilding strategy for this species. As part of the process, SERAG recommended that all available information be compiled on the drivers impacting on the distribution, abundance, phenology and physiology of John dory, including climate change impacts and evidence of a regime shift. This will provide a more holistic picture to inform the rebuilding strategy, including the formulation of reference periods, rebuilding timeframes and subsequent management approaches.<br><br>**Royal red prawn**<br><br>Taking into account the updated stock assessment considered at this meeting, SERAG supported the Step 1 climate risk assessment of high (positive) risk, meaning the stock is expected to benefit from climate change. Regarding Step 3, SERAG noted that regardless of which TAC option SEMAC choose, full utilisation of the RBC is not expected to move the stock towards the TRP quickly. On that basis, SERAG agreed there was no basis to revise the residual risk score at Step 3. Regarding Step 4, pending SEMAC advice, SERAG agreed that no response, beyond ongoing data collection, monitoring and periodic updates to the stock assessment, is required. |
| 5 | Blue Grenadier – Tier 1 base case | Presentation Highlights:<br><br>• Dr Tuck presented the preliminary Tier 1 stock assessment for blue grenadier, outlining the base case configuration and bridging steps from the previous assessment.<br>• The preliminary base case has been updated with the inclusion of data up to the end of either 2023 (CPUE, discard mass, length composition data), or 2024 (acoustic surveys, catch and age data). The final year of data available was determined by whether the data had been processed. Recruitment patterns were highlighted, noting a strong estimated year class in 2019.<br>• Analyses were undertaken to test the model's sensitivity to the inclusion or exclusion of various data sources or model structure assumptions, such as removing cohort dependent growth, removing the egg surveys, varying the standard deviation of recruitment, removing the non-spawning CPUE and including the 2019 and 2022 acoustic survey values.<br>• Projections under the preliminary base case indicate the stock remains above the target reference point, with projected 2026 spawning stock biomass being 99.5% of virgin female spawning biomass.<br><br>Discussion:<br><br>• Members queried the rationale for selecting the base case, noting consistency with previous assessments and improvements in model diagnostics.<br>• Discussion focused on bridging steps from the previous assessment. |

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| | | • The final year of recruitment estimation was considered, with diagnostics indicating the final year should be 2019.<br>• Industry representatives sought clarification on discard estimates and their treatment in the model, particularly given changes in monitoring coverage.<br>• The group discussed issues with the fits to the CPUE of the non-spawning fleet and the role of acoustic survey data in validating biomass estimates.<br>• SERAG noted an anomaly in the 2022 on-board non-spawning discard length composition data showing a spike in fish below 40 cm. Members queried whether this was a data error or a genuine observation. CSIRO advised that initial checks confirmed the records exist but agreed to review the data and report findings at SERAG 2.<br>• SERAG agreed that the bridging steps were appropriate and supported the use of the proposed base case for RBC calculations.<br><br>Recommendations:<br><br>SERAG supported the use of the tuned base case model for the Tier 1 assessment for Blue Grenadier.<br><br>**ACTION:** CSIRO to review the Blue Grenadier length composition data for on-board, non-spawning fleet discards in 2022 that is showing a spike in fish below 40 cm and confirm if this was an error. Report outcome to SERAG 2 2025. |
| 6 | Orange Roughy East – Tier 1 base case | Presentation Highlights:<br>• Dr Paul Burch presented the preliminary Tier 1 base case assessment for Eastern Orange Roughy using updated data to the end of 2024.<br>• Bridging steps included updating software, incorporating revised catches, acoustic biomass indices, age composition data, and ageing error structures.<br>• Preliminary base case estimates stock status at approximately 36.5% $B_o$ in 2026, up from 32.4% in 2021, indicating a positive rebuilding trajectory.<br>• Discussion of alternative models considered sex-specific growth and time-varying growth scenarios, with consensus to retain sex-specific, time-invariant growth in the base case.<br>• Acoustic survey revisions and implications for biomass trends were highlighted, alongside sensitivity runs for steepness and selectivity assumptions.<br><br>Discussion:<br>• Participants queried the cyclical pattern in recruitment deviations and its role in fitting extremely high catches at the beginning of the fishery, noting implications for model flexibility.<br>• Concerns were raised about reliance on recruitment deviations to fit to historical catches and whether alternative structural assumptions could improve realism.<br>• Industry representatives sought clarification on fits to the survey data and the role of acoustic survey data in validating biomass estimates.<br>• Debate on growth changes: evidence of increasing mean length since 2015 prompted discussion on whether changes were environmentally driven or a density-dependent response.<br>• Consensus reached to include sex-specific growth as time-invariant in the base case, noting time-varying growth scenarios will be retained as sensitivities. |

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| | | • During review of age composition data linked to towed-body abundance indices (e.g., 2006, 2013), members noted missing or inconsistent age data. SERAG requested CSIRO to investigate these age data and report findings at SERAG 2.<br>• Industry raised the need for constant catch projections in addition to the projections from the harvest control rule. SERAG agreed that industry should propose a range of constant catch scenarios for the next eight years to AFMA for CSIRO to model.<br><br>The RAG discussed a series of sensitivities to be included in the Orange Roughy East Tier 1 assessment:<br>• Not estimating recruitment deviations prior to 1980 – raised due to unrealistic early deviations and their influence on historical catch fit.<br>• Estimate natural mortality (M) without a prior – prompted by tension between age data favoring higher M and acoustic indices favoring lower M.<br>• Investigate different specifications for recruitment deviations – suggested to reduce cyclical patterns and improve model realism.<br>• Investigate incorporation of skip spawning – noted evidence of non-spawning mature fish and variability in spawning participation affecting survey catchability.<br>• Acknowledging the potential bias in on-board measurements, apply the length-weight relationship from on-board measurements to test the robustness of the assessment to the length-weight relationships.<br>• Use maturity estimated from transition zone data – endorsed to improve accuracy of age-at-maturity assumptions given limitations of samples obtained from the spawning aggregations.<br><br>Recommendations:<br>SERAG supported the use of the base case using the Time Invariant Sex Specific Growth model for the Tier 1 assessment for Orange Roughy East with the following sensitivities:<br>• Do not estimate recruitment deviations prior to 1980<br>• Estimate M without a prior<br>• Investigate using different specification on recruitment deviations<br>• Investigate the incorporation of skip spawning<br>• Different length-weight relationships<br>• Use maturity estimated from the transition zone data.<br><br>**ACTION:** CSIRO to investigate age data following towed body abundance indices and report findings to SERAG 2 2025.<br>**ACTION:** Industry to propose a range of constant catch scenarios for Eastern Orange Roughy to AFMA and CSIRO for the next 8 years. |
| 7 | Multi Species Harvest Strategy project update | Presentation Highlights:<br><br>• AFMA provided an update on the Multi-Species Harvest Strategy (MSHS) project, noting progress through Stage 1 including fishery profiling and concept harvest strategy development.<br>• Governance structure established: Expert Advisory Group, Steering Committee, and AFMA Commission oversight.<br>• Concept harvest strategy will adopt a modular design with three pillars: Foundational components (objectives, reference points, decision rules), Operational components (MYTACs, TAC-setting processes, closures), and Adaptive components (thresholds for review based on environmental or economic changes). |

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| | | • Key concepts under consideration include PGMSY (Pretty Good Multi-Species Yield), métier-based management, indicator species approach, and trigger species approach.<br>• Stage 1 deliverables: Fishery Profile Report and Concept Harvest Strategy Paper to inform May 2026 stakeholder workshop.<br>• Emphasis on integrating climate change impacts, rebuilding timeframes, and cost-effectiveness into the strategy design.<br><br>Discussion:<br><br>• Members supported the modular approach and noted the importance of policy alignment with revised Commonwealth Harvest Strategy Policy.<br>• Climate change considerations must be explicit in the design, including dynamic reference points and adaptive rules.<br>• Industry raised concerns about shrinking fleet capacity and levy burden; project aims to deliver cost-effective strategies.<br>• Discussion on closures: need clarity on how spatial closures interact with harvest strategy targets and whether targets apply only to open areas.<br>• Exceptional circumstances provisions highlighted as critical, including defining response protocols for unforeseen events such as major data gaps or sudden mortality changes.<br>• Suggested testing scenarios in MSE (e.g., 20% mortality increase, two years without data) to ensure robustness of the strategy.<br>• Members stressed the need for meta-rules to guide decisions when operating outside tested scenarios.<br>• Steering Committee engagement will include Commonwealth Environment Department to ensure alignment with WTO conditions and rebuilding strategies.<br>• Project will explore species categorisation (key commercial, byproduct, bycatch) and associated reference points.<br>• Métier-based management considered a nuanced way to constrain effort in specific areas rather than uniform TAC reductions.<br>• Indicator and trigger species approaches noted as useful for reducing assessment burden but require careful validation.<br>• Adaptive mechanisms such as environmental response rules and performance monitoring will be central to strategy resilience.<br>• Stakeholder workshop scheduled for May 2026 to refine concept strategies. |
| 8 | Hagfish – Non-Quota TAC Advice | Presentation Highlights:<br><br>• Hagfish fishery commenced in 2015; managed as a non-quota species in the GHAT sector.<br>• Current precautionary TAC is 80 tonnes, based on peak catches in 2018–19 and 2019–20.<br>• Annual landed catch since TAC introduction (2020–21) has ranged from 20–68 tonnes (~60% of TAC).<br>• Industry requested TAC increase; AFMA considers data insufficient to support change.<br>• An escape hole trial was completed over a year ago; e-log development is underway but delayed.<br>• Industry has not yet provided the trial data; AFMA proposes maintaining TAC at 80 tonnes for 2026–27. |

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| | | Discussion:<br><br>• SERAG noted limited progress on data provision and e-log implementation, constraining capacity to review TAC settings.<br>• Catch trends indicate initial peak followed by decline due to operational factors; recent improvement observed as operators refine their practices.<br>• SERAG agreed that the TAC should remain unchanged until robust data is available and highlighted risk of basing decisions on exploratory catches. The RAG discussed the potential need in the future to lower the TAC due to lack of data.<br>• Observer coverage remains at ~10%; request made for summary reporting to improve transparency.<br>• Escape hole standards discussed (NZ ~18 mm vs AU ~16 mm); regulatory adjustment contingent on trial data and working group review.<br>• The Group emphasised the need for timely provision of trial results and improved effort data to support sustainability assessment.<br><br>Recommendations:<br><br>The RAG recommended maintaining the 80 t TAC for Hagfish during the 2026-27 SESSF season on the basis that there is no new information to warrant a change in the TAC. The RAG also **strongly** urged Industry to forward any new data, including the results of the escape hole trial, as soon as possible or there may be a risk of a lower TAC in future years due to increased uncertainty. |
| 12 | Outcomes of the MYTAC working group meeting | Presentation Highlights:<br><br>• MYTAC Working Group met on 1 October 2025 to review data for Blue-eye trevalla (slope stock) and Pink ling (West and East stocks).<br>• Purpose: confirm whether previously recommended RBCs remain appropriate for the 2026–27 fishing season.<br>• Blue-eye trevalla (slope): Dynamic Tier 4 assessment (2024) estimated stock at 0.36 $B_o$, below TRP (0.48 $B_o$); RBC of 296 t endorsed for 2025–26 and 2026–27.<br>• 2024–25 TAC under-caught (88% taken); CPUE declined to lowest level in a decade; new assessment scheduled for 2026 (Tier 1 or Dynamic Tier 4).<br>• Pink ling (West): Tier 1 assessment (2021) estimated stock at 0.91 $B_o$, well above TRP; RBC of 964 t adopted for 2025–26 and 2026–27; TAC under-caught; CPUE declined but remains above long-term average; next assessment in 2028.<br>• Pink ling (East): Tier 1 assessment (2024) estimated stock at 0.43 $B_o$, improved from 0.34 $B_o$ but still below TRP; RBC of 661 t recommended for 2025–26; TAC set at 588 t; next assessment in 2028.<br><br>Discussion:<br><br>• SERAG noted limited new data since the last assessment; agreed risk remains low for all three stocks under proposed RBCs.<br>• Concerns were raised about increasing uncertainty under multi-year TAC arrangements, particularly for Pink ling West given long interval before next assessment.<br>• Emphasis on maintaining industry data collection standards, especially length frequency sampling for Pink ling West.<br>• MYTAC reviews provide limited scope for change in non-data processing years but remain useful for monitoring trends. |

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| | | • SERAG confirmed comfort with current RBCs, noting precautionary step-down provisions and low fishing pressure on Pink ling West.<br>• Forward planning required for 2028 assessments; SERAG to revisit TAC/RBC advice annually to ensure adequate data availability to support robust advice.<br><br>Recommendations:<br><br>SERAG supported the recommendations made by the MYTAC Working Group that the RBC/TACs be maintained for the 2026-27 SESSF season:<br><br>i. Blue-eye trevalla – slope stock at 296 tonnes.<br><br>ii. Pink ling – West stock at 964 tonnes.<br><br>iii. Pink ling – East stock at 661 tonnes<br><br>SERAG noted that, because 2025 was a non-data processing year, the MYTAC Working Group did not have access to plots of standardised CPUE and other indicator data when reviewing the TACs for these stocks. |
| 9 | Orange Roughy West and Albany and Esperance assessment updates | Presentation Highlights:<br><br>Western Orange Roughy (OR West)<br><br>• Dr Sporcic presented preliminary data review including historical and recent annual catches (1985–2023), CPUE trends, length frequency data from Observer and WORDAC programs, and ageing samples.<br>• Discussion focused on developing a standardised CPUE series, prioritising samples for ageing through Fish Ageing Services (FAS), and using WORDAC samples to estimate maturity and length-weight parameters.<br>• The need to differentiate between targeting and non-targeting behaviour in the fishery (to guide assessment assumptions) was also highlighted.<br><br>Albany & Esperance<br><br>• AFMA and CSIRO noted intermittent catches and limited recent data; historical biological data exist but ageing and length data coverage is insufficient for assessment.<br>• Industry sampling continues under research permits, but fishery logistics constrain data collection.<br><br>Discussion:<br><br>• Members agreed that OR West offers a viable pathway for a Tier 3 assessment given consistent CPUE, length, and ageing data.<br>• For Albany & Esperance: current data insufficient for assessment; ageing backlog and limited recent samples are key constraints.<br>• Recommended continued opportunistic sampling and review of historical datasets.<br>• Emphasised importance of WORDAC program for biological sampling and parameter estimation.<br>• There is a need for collaboration between CSIRO, AFMA, SETFIA, and industry to refine targeting definitions and sampling priorities. |

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| | | Recommendations:<br><br>SERAG recommended the following work to progress the development of a Tier 3 assessment for Orange Roughy West:<br><br>1. Develop a standardised CPUE series for potential use in an assessment.<br>2. Work with FAS to identify the priority samples for ageing.<br>3. Develop maturity estimate using WORDAC samples, if possible, for potential use in an assessment.<br>4. Further discussion between CSIRO, SETFIA and Jeremy Lyle on Orange Roughy West regarding the identification of targeting and non-targeting behaviours in the fishery to guide assessment parameters.<br><br>SERAG Recommended that the WORDAC program continue in 2026-27.<br><br>**ACTION:** AFMA to engage SETFIA to see if the WORDaC program can provide sample fish weights to CSIRO to enable the development of updated estimated Length and Weight parameters.<br><br>**ACTION:** Ian Knuckey and Jeremy Lyle to provide available Historical OR West and Albany and Esperance catch and biological data to CSIRO. |
| 10 | Update on the development of a Blue-eye Trevalla assessment | Presentation Highlights:<br><br>• Ms Privitera-Johnson provided an update on progress toward transitioning Blue-eye Trevalla from a Dynamic Tier 4 assessment to an integrated stock assessment (Tier 1 approach).<br>• Historical attempts at Tier 1 assessments (early 2000s) faced challenges such as sensitivity to steepness assumptions and selectivity bias.<br>• Technical issues included limited and inconsistent data, spatial and temporal variability, and correlation between growth and selectivity parameters.<br>• Recent improvements: expanded datasets, new age data expected shortly, and advanced modelling tools (Stock Synthesis 3).<br>• Next steps: assign catch data to fleets, incorporate discards, explore Dome-shaped selectivity and multi-fleet modelling options, and present preliminary concepts at SERAG 2 in November 2025.<br>• SERAG to consider at its next meeting whether to continue the development of an integrated assessment for Blue-eye Trevalla to permit a full Tier 1 assessment to be undertaken in 2026.<br><br>Discussion:<br><br>• Members acknowledged historical difficulties in assessing Blue-eye Trevalla and its high economic value.<br>• Concerns raised about dome-shaped selectivity, availability bias, and implications for modelling age and length progression.<br>• Suggestions included using conditional age-at-length data, spatial structure options in Stock Synthesis, and leveraging international developments (e.g., New Zealand's custom model work).<br>• SERAG emphasised that the incoming 1,500–2,000 age samples will significantly improve growth parameter estimation and allow better tracking of cohorts over time. Age data will help reduce uncertainty in selectivity assumptions and improve model robustness, particularly for Dome-shaped selectivity scenarios. |

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| | | • Discussion highlighted the need to correctly allocate historical catches to gear types (drop line, auto line, gillnet) to accurately model selectivity and effort dynamics. Members suggested using vessel names and historical reports to resolve miscoding and jurisdictional differences between state and Commonwealth data. A pragmatic approach was proposed: assume dominant gear types for early periods and refine as more detailed data becomes available.<br>• Members agreed that Stock Synthesis 3 offers flexibility to test multiple scenarios, including multi-fleet frameworks and Dome-shaped selectivity. Preliminary models should include sensitivity analyses for steepness, selectivity, and cryptic biomass assumptions. Diagnostics such as likelihood profiles, retrospective analyses, and parameter correlation checks were recommended to identify remaining challenges before committing to a full Tier 1 assessment.<br>• Consensus that recent advances in modelling and expanded datasets justify revisiting a Tier 1 assessment for this stock. |
| 11 | JABBA assessment of Royal Red Prawn | Presentation Highlights:<br><br>• Andrew Penney presented the JABBA Bayesian surplus production model assessment for Royal Red Prawn, developed to meet MSC certification requirements and improve robustness compared to the empirical Tier 4 (i.e. the CPUE-ratio approach).<br>• Key preparatory steps included correction of logbook depth and position errors, merging vessel names, and re-standardisation of CPUE to 2024.<br>• An agreed historical catch and discard series (1979–2024) was developed, and priors were specified through an intersessional working group.<br>• Base case model used full catch series (1979–2024) including discards, excluded anomalously low CPUE years (2021–2022), and applied priors of r = 0.41 and psi = 0.9.<br>• Estimated current biomass at 4,141 t, well above BMSY and TRP, with strong diagnostics (RMSE ~2.3%).<br>• Sensitivity runs explored excluding discards, truncating catch series, alternative r priors, and inclusion of low CPUE years; results were consistent across runs.<br>• Projections under the SESSF Harvest Control Rule produced two RBC options: long-term average (573.4 t) and MYRBC (5-year average, 804.3 t).<br>• Climate risk assessment maintained Royal Red Prawn at High (Positive) residual risk, reflecting high stock status and medium climate exposure.<br><br>Discussion:<br><br>• Members acknowledged the comprehensive nature of the assessment and strong diagnostics supporting the base case.<br>• SERAG agreed the base case was appropriate, noting good model fit and convergence diagnostics. Sensitivity analyses confirmed robustness, with biomass consistently above TRP and harvest rates well below HMSY.<br>• Debate focused on balancing precaution with industry needs and MSC certification requirements. The long-term RBC (573.4 t) was considered conservative and aligned with managing the stock as a trigger species. The MYRBC (804.3 t) was seen as suitable if managed as a MYTAC species, noting the need for annual monitoring and triggers. Both options were deemed sustainable, but members highlighted that either figure is significantly higher than historical catches, reducing immediate risk. |

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| | | • SERAG discussed the targeting behavior and whether vessels using regular trawl nets were included with vessels using prawn nets in the CPUE standardisation.<br>• SERAG requested that future assessments investigate the gear type of vessels catching RRP and separate regular trawling from prawn trawling in the standardised CPUE series.<br>• SERAG agreed the JABBA assessment is Tier 4-like (data-limited, CPUE-based) and recommended applying a 15% discount to RBC advice. Discounting provides an additional precautionary buffer, given uncertainties in CPUE and targeting behavior.<br>• SERAG supported maintaining High (Positive) residual risk, consistent with updated biomass estimates and climate exposure.<br>• Future considerations: Investigate targeting vs non-targeting operations and potential efficiency changes in CPUE standardization. Consider alternative assessment approaches (e.g., delay-difference models) if more biological data becomes available. Ensure alignment with MSC audit requirements when determining assessment frequency and management category (trigger vs MYTAC).<br><br>Recommendations:<br><br>SERAG accepted the base case JABBA assessment for Royal Red Prawn that estimated the median estimated current biomass (4,141.0 t) to be above the TRP (2,042.4 t).<br><br>SERAG recommended the following two RBC options, noting that both were sustainable:<br>1. The Annual long-term average of 573.4 t<br>2. The MYRBC '5-year' of 804.3 t<br><br>SERAG noted that managing the stock as a Trigger Species (which would be supported by the long-term average RBC) or a MYRBC/TAC species, was a MAC discussion and that both RBCs are considerably higher than current catch levels.<br><br>SERAG agreed the JABBA assessment fits into the Tier 4 category with similarity to the Dynamic Tier 4 assessment, in that both are data limited assessments fitting to CPUE. On this basis, the RAG also recommended that a discount factor of 15% should be applied to the RBC.<br><br>SERAG supported the climate risk assessment for Royal Red Prawn in light of the updated assessment results and recommend it be maintained at High (Positive) residual risk. |
| 13 | Catch History Report update | Presentation Highlights:<br><br>• Ms Rice and Dr Burch provided an update on progress with the Catch History Report for SESSF species.<br>• The report aims to document agreed and candidate catch histories for quota species and explain differences between AFMA database records and assessment catch histories.<br>• Updates include review of Tier 1 species (generally well documented) and addition of approximately a dozen species this year with support from CSIRO and contractors.<br>• Examples discussed included Deepwater Flathead, Blue Grenadier, and other species with consistent historical catches across assessments. |

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| | | • Issues causing discrepancies: duplicate reporting (dual-endorsed vessels), burst bags leading to discards, and lack of species-level recording in early years.<br><br>Discussion:<br><br>• Members welcomed the consolidation of catch history information, noting it will improve transparency and reduce confusion during assessments.<br>• Agreed that documenting both AFMA database catches and those used in assessments is essential for consistency.<br>• Clarified that the report should present potential catch histories rather than prescribe base-case selections, leaving assessment-specific decisions to future RAG meetings.<br>• Noted that updated catch histories will support assessments scheduled for 2026 and provide confidence in data integrity. |
| 14 | Results from SEA-MES voyages | Presentation highlights:<br><br>• Dr Little presented preliminary results from the SEA-MES program, comprising four research voyages (2023–2025) using the RV Investigator to survey demersal fish communities and benthic habitats.<br>• Operational statistics: ~966 operations across four voyages, including trawls, CTD casts, deep-towed camera deployments, and plankton sampling.<br>• Final voyage (June 2025): 33 days, ~200 operations, 25 tonnes of fish, 159 species, and >500 kg of invertebrates.<br>• Biological sampling included >25,000 length measurements, >9,000 muscle tissue samples, >14,000 stomachs for diet analysis, and >5,000 otoliths.<br>• New baseline established through paired day/night trawls to assess diel differences in catch composition.<br>• Preliminary findings: small pelagic species dominated catches; increases in Ocean Jackets and Blue Mackerel; declines in Redfish, Blue Warehou, and Silver Warehou compared to 1990s SEFES baseline.<br>• Operational challenges: animal ethics constraints required seal observation protocols; four seal interactions recorded on final voyage; future surveys will require seal-excluder devices.<br><br>Discussion:<br><br>• Members acknowledged the scale and complexity of the SEA-MES program and its value in providing fishery-independent data for ecosystem assessments.<br>• On ecosystem change: Results indicate significant shifts in species composition and abundance over 30 years, with some species stable (e.g., John Dory) and others exhibiting spatial or temporal changes (e.g., Tiger Flathead, Ocean Jackets). Declines in key quota species align with trends from stock assessments.<br>• On operational issues: Extensive discussion on seal interactions and ethics compliance; noted implications for future survey design and need for paired catchability studies with and without seal-excluder devices.<br>• On future directions: Interest in continuing surveys to monitor ecosystem change, incorporating environmental DNA and camera-based methods to reduce bycatch risk. Members highlighted the importance of linking SEA-MES findings to management strategies, climate risk assessments, and spatial planning. |

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| 15 | FishSOOP Program | Presentations Highlights:<br><br>• UNSW presented the IMOS Fishing Vessels as Ships of Opportunity Program (FishSOOP), which uses commercial fishing vessels to collect high-quality subsurface ocean temperature data.<br>• FishSOOP trial began in 2023, co-funded by AFMA, FRDC, IMOS, UNSW, and Fishwell.<br>• Nine SESSF vessels have contributed, collecting over 4,000 profiles; six remain active, providing 1,799 sets in the past 12 months from surface to >1,000 m depth.<br>• Data improves understanding of ocean warming, marine heatwaves, and East Australian Current dynamics, and feeds into IMOS and global systems for climate and ocean forecasting.<br>• Real-time data benefits fishers operationally (e.g., adjusting fishing strategies, improving live fish handling).<br><br>Discussion:<br><br>• Members acknowledged the program's success in delivering research-quality data and practical benefits to fishers.<br>• Highlighted strong engagement from industry and potential for broader integration into e-logbooks and dashboards.<br>• Discussion noted importance of scaling the program and embedding data into management frameworks.<br>• Opportunities for linking temperature profiles with catch composition under confidentiality agreements were discussed.<br>• Positive feedback from participating fishers on equipment reliability and ease of use. |
| 16 | PhD Project Update | Presentation Highlights:<br><br>• Rikki Taylor (CSIRO PhD candidate) provided an update on her project: Identifying and assessing emerging fish stocks in a rapidly warming ecosystem.<br>• Analysis of SESSF eastern trawl logbook data (1986–2022) revealed declines in historically targeted species (e.g., Redfish, Gemfish, Jackass Morwong) and emergence of species such as Ocean Jacket and School Whiting.<br>• Flathead now dominates shelf catches; generalist Target Mix strategies increasing as specialist métiers contract.<br>• Spatial analysis showed significant southward movement of most métiers, averaging 2–5 km/year for key species.<br>• Next steps include updating biological parameters for emergent species, developing stock assessments, and conducting management strategy evaluation.<br><br>Discussion:<br><br>• Members commended the analysis for providing clear insights into long-term shifts in fishing strategies and species composition.<br>• Observed contraction in métier diversity and reliance on fewer dominant strategies, with Flathead increasingly important for economic viability.<br>• Suggestions included using language reflecting shifts in fishing intention rather than implying abundance increases and considering separation of continental shelf and slope Target Mix métiers for clarity. |

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| | | • Members noted strong alignment with ecosystem changes discussed in previous agenda items and emphasised integrating findings into adaptive management frameworks. |
| 17 | Other Business | 17 (i) Impact of Season on Length Frequencies of SESSF Quota Species<br><br>Presentation Highlights:<br><br>• Dr Burch presented findings from Thomson & Burch (2019) on the influence of month, depth, and zone on length frequencies for SESSF quota species.<br>• Month effects were generally weak for most species, quarterly or annual categories are likely sufficient.<br>• Depth effects were significant for nearly all species (larger fish generally deeper), except blue grenadier, Danish seine-caught flathead, and hook-caught pink ling.<br>• Zone effects were significant for all species, reinforcing the need for disaggregation when constructing annual length frequencies.<br><br>Discussion:<br><br>• Members agreed that seasonal effects are minor, but sampling should be spread across seasons to avoid bias.<br>• Emphasised avoiding concentration of sampling in short periods or single locations.<br>• Link samples to fishing operations and maintain proportional sampling to catch.<br>• Market sampling was considered practical and must account for grading and traceability.<br><br>17 (ii) Stock Structure Assumptions for Western Gemfish<br><br>Presentation Highlights:<br><br>• Discussion revisited previous genetic and spatial studies indicating Western Zone and Great Australian Bight Zone Gemfish likely represent a single stock.<br>• Current management treats zones separately; assessments only include zone 50.<br>• Proposal to combine GAB catches with Western zone data for consistency in next Tier 4 assessment.<br><br>Discussion:<br><br>• Members acknowledged that genetic evidence supports a single stock but noted demographic differences may also exist.<br>• Members agreed that any change to stock boundary assumptions has implications for trigger species management and harvest strategy rules.<br>• Consensus to defer decision until composition data and demographic evidence are reviewed.<br>• Highlighted need for clear advice at SERAG 2 before any boundary changes are considered. |

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| | | 17(iii) National Seafood Industry Leadership Program<br><br>• AFMA EO provided an overview of the program: six-month leadership course bringing together ~60 participants from diverse seafood sectors.<br>• Developed shared mission: 'Seafood for everyone, everywhere, forever.'<br>• Project initiatives include media campaigns promoting seafood cooking tips and recipes via social platforms (TikTok, Instagram).<br>• Early success: >8,000 views on Industry user-generated content.<br><br>**ACTION:** Paul Burch to gather composition data for Gemfish West to share with SERAG 2 2025 to inform a decision regarding stock structure assumptions for Gemfish West noting it is a Trigger Species and stock boundary assumptions have implications for the trigger.<br><br>**ACTION:** Regarding the advice on the stock boundary of Gemfish West, SERAG recommends that Andy Moore (ABARES) provide advice on the outcomes of the composition data and note any demographic differences presented to SERAG 2 2025. |
| Close of meeting | | The Chair closed the meeting at 4.44pm |

# Attachment A – Adopted agenda

## SERAG 1 Meeting (15–16 October 2025)

### Day 1: Wednesday 15th October 2025

| Start (Duration) | Item | Purpose | Presenter/s |
|---|---|---|---|
| 9:00 (30 min) | **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 | AFMA |
| 9:30 (15 min) | 2. Government priorities and Ministerial expectations | For NOTING | AFMA |
| 9:45 (45 min) | 3. Climate and Ecosystem Status Report | For NOTING | Steph Brodie |
| 10:30 (15 min) | **Morning Tea** | | |
| 10:45 (1.5 hr) | 4. Climate Risk Framework overview & species profiles | For ADVICE | Natalie Couchman |
| 12:15 (45 min) | **Lunch** | | |
| 13:00 (1.5 hr) | 5. Blue Grenadier – Tier 1 base case | For ADVICE | Geoff Tuck |
| 14:30 (30 min) | 6. Orange Roughy East – Tier 1 base case | For ADVICE | Paul Burch |
| 15:00 (15 min) | **Afternoon Tea** | | |
| 15:15 (1 hr) | 6. Orange Roughy East – Tier 1 base case (cont.) | For ADVICE | Paul Burch |
| 16:15 (30 min) | 7. Multi Species Harvest Strategy project update | For NOTING | Dan Corrie |
| 16:45 (15 min) | 8. Hagfish non-quota TAC advice | For ADVICE | Lianos Triantafillos |
| **17:00** | **End of Day 1** | | |

## Day 2: Thursday 16th October 2025

| Start (Duration) | Item | Purpose | Presenter/s |
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| 9:00 (45 min) | 9. Orange Roughy West and A&E assessment updates | For NOTING and ADVICE | Paul Burch/ Miriana Sporcic |
| 9:45 (45 min) | 10. Update on the development of a Blue-eye Trevalla assessment | For NOTING | Kristin Privitera-Johnson |
| 10:30 (15 min) | **Morning Tea** | | |
| 10:45 (1 hr) | 11. JABBA assessment of Royal Red Prawn | For ADVICE | Andrew Penney |
| 11:45 (30 min) | 12. Outcomes of the MYTAC working group meeting | For ADVICE | Lianos Triantafillos |
| 12:15 (45 min) | **Lunch** | | |
| 13:00 (30 min) | 13. Catch History Report update | For NOTING | Paul Burch/Danielle |
| 13:30 (45 min) | 14. Results from SEA-MES voyages | For NOTING | Rich Little |
| 14:15 (45 min) | 15. FishSOOP Project | For NOTING | Moninya Roughan |
| 15:00 (15 min) | **Afternoon Tea** | | |
| 15:15 (30 min) | 16. PhD Project update | For NOTING | Rikki Taylor |
| 15:45 (15 min) | 17. Other Business<br>(i) Impact of season on length frequencies of SESSF quota species<br>(ii) Stock structure assumptions for Gemfish West<br>(iii) National Seafood Industry Leadership Program project overview | (i) For NOTING<br>(ii) For ADVICE<br>(iii) For NOTING | AFMA/CSIRO |
| **16:00** | **Meeting close** | | |

# Attachment B – Register of interests

| Name | RAG/MAC position / organisation | Declared interests |
|---|---|---|
| Dr Paul McShane | Chair | Chair of SERAG and member of SEMAC and SESSFRAG.<br>No pecuniary interest in the SESSF.<br>Principal of Global Marine Resource Management Pty Ltd.<br>Adjunct Professor (Fisheries and Aquaculture) College of Science and Engineering, James Cook University |
| Ms Sally Weekes | Interim AFMA Member | Employed by AFMA, Senior Manager of the Demersal and Midwater. No pecuniary or other interest. |
| Dr Steven Rust | Economics Member | No interest in the fishery pecuniary or otherwise.<br>Employed as a Marine Resource Economist with the Institute of Marine and Antarctic Studies at the University of Tasmania. |
| Dr Paul Burch | Scientific Member | Employed by CSIRO, assessment scientist. Acquiring funding for research purposes.<br>Principle investigator on the SESSF stock assessment project. |
| Dr Ian Knuckey | Scientific Member | Positions:<br>Director Fishwell Pty Ltd<br>Director Olrac Australia (Electronic logbooks)<br>Chair Northern Prawn Fishery Resource Assessment Group<br>Chair Tropical Rock Lobster Resource Assessment Group<br>Chair Victorian Rock Lobster and Giant Crab Assessment Group |

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| | | Chair Gulf of St Vincent's Prawn Fishery MAC Research Scientific Committee<br>Chair Spencer Gulf & West Coast Prawn Association Inc. Economic Optimisation Sub-committee<br>Scientific Member Northern Prawn Management Advisory Committee<br>Scientific Member Gulf of St Vincent's Prawn Fishery Management Advisory Committee<br>Scientific Member Tropical Tuna Resource Assessment Group<br>Scientific Member SESSF Resource Assessment Group<br>Member The Geelong Agri Collective<br><u>Current Projects:</u><br>AFMA - Annual monitoring, reporting and assessment of the Small Pelagic Fishery<br>AFMA - Bass Strait Scallop Fishery surveys – 2025-2028<br>AFMA - Torres Strait Tropical Rock Lobster – surveys, assessments and catch determination 2025-2028<br>Traffic International - Shark Product Traceability<br>QLD Sea Cucumber Ass. - Design and implementation of various sea cucumber dive surveys<br>QLD QCCFG-2023-033 - Dive logger trials<br>QLD QCCFG-2025 - Spanner Crab fishery – industry data collection<br>Tasmanian Seafoods - Design and implementation of NT Sandfish sea cucumber dive surveys<br>Australia Bay Seafoods - Queensland Gulf of Carpentaria Developmental Fin Fish Trawl Fishery EM Observing and on-board observing, scientific advice<br>IMOS / SIMS - FishSOOP Ocean Monitoring Program<br>Seafood Industry SA - Benchmarking of SARDI science delivery |

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| | | Seafood Industry Victoria - Qualitative assessment of the potential impacts of seismic survey activity on Victorian managed fisheries of commercial and recreational importance. |
| Dr Jeremy Lyle | Scientific Member | Adjunct Associate Professor (Institute for Marine and Antarctic Studies)<br>Steering Committee Chair, RecFishing Research Coordination Program (FRDC)<br>Scientific Board Member for the Tasmanian Association for Recreational Fishing (TARFish) - peak body for recreational fishing in Tasmania. |
| Mr Ross Winstanley | Recreational Member | No pecuniary interest in the SESSF. |
| Mr Daniel Hogan | Industry Member | Owner operator of trawler Zeehaan out of Portland, Vic. Commonwealth Trawl Sector boat and quota SFR holder.<br>Industry member on SEMAC<br>Non-beneficiary director of SETFIA, and a director Toberfish PTY LTD |
| Mr Will Mure | Industry Member | Sole Director of Mures Fishing P/L<br>Commonwealth fish receiver permit<br>Tasmania fish processing licence<br>Scalefish hook boat SFR, SEQ Quota Holding Permits, Auto longline fishing permit<br>High Seas permit<br>Blue eye trevalla SFRs, Ling SFRs, Ribaldo ITP<br>Mixed species Individual Transferable Quotas (ITQs) and SFRs |

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| | | Member of various fishing related associations including Seafood Industry Australia (SIA), South East Trawl Fishing Industry Association (SETFIA), Southern Shark Industry Alliance (SSIA), Tasmanian Seafood Industry Council (TSIC) |
| Mr Simon Boag | Industry Member | EO SETFIA (trawl)<br>EO SSIA (sharks)<br>EO SPFIA (SPF)<br>Industry member on both SERAG and SEMAC.<br>SSIA is engaged by AFMA to collect shark industry biological data.<br>Atlantis undertakes work to assist shared marine space developers (wind, oil etc) understand the fishing industry.<br>Atlantis undertakes other work within the fishing industry from time to time including on MSC assessments.<br>SETFIA is the PI on the orange roughy east AOS.<br>SETFIA is engaged by participants within the W ORS research fishery to collect biological samples.<br>SETFIA is engaged by AFMA under co-management to undertake a variety of tasks including snapper management, ling management, industry data collection and consultation.<br>Investment committee member of a large fund that owns fishing rights including SBT, ling and flathead. |
| Mr Keith Rowling | Industry Member | Owner – Bluefin Consulting<br>Associate – NMAC(SA) Pty Ltd<br>Executive support of Great Australian Bight Industry Association (GABIA)<br>Executive officer of Charter Boat Association of South Australia (CBASA)<br>Executive officer of Southern Fishermen's Association (SFA)<br>Executive support of Saint Vincent Gulf Prawn Boat Owner's Association (SCGPBOA) |

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| | | Executive support of South Australian Professional Fishers Association (SAPFA)<br>Marine Scalefish Fishery Management Advisory Committee (MSFMAC) – CBASA member<br>Allocation Review Committee – Commercial fishing representative |
| Dr Jonathan Smart | Scientific Member | Independent fisheries scientist operating as Smarter Fisheries Scientific Consulting<br>Affiliate Associate Professor – Flinders University<br>Adjunct Senior Research Fellow – James Cook University<br>Scientific member PZJA HCRAG<br>Researcher involved with stock assessment research, often in collaboration with State and Territory Governments<br>Independent scientific advisor to Western Australian Pilbara Demersal Scalefish Resource (PDSR) Stakeholders<br>No pecuniary interest in the SESSF |
| Ms Audrey Kent | Executive Officer AFMA | Employed by AFMA, Senior Management Support Officer. Executive Officer (EO) of SERAG. No pecuniary or other interest. |
| Dr Robin Thomson | CSIRO | CSIRO Assessment Scientist. Acquiring funding for research purposes.<br>Principal Investigator (PI) for close kin project for school shark.<br>PI on close kin scoping study for blue-eye trevalla. |
| Dr Miriana Sporcic | CSIRO | CSIRO Assessment Scientist.<br>Acquiring funding for research purposes.<br>Project leader CSIRO Ecological Risk Assessments |

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| Dr Geoff Tuck | CSIRO | CSIRO Assessment Scientist.<br>Acquiring funding for research purposes.<br>Project leader CSIRO Marine Visual Technologies project team on automated catch detection and species identification. |
| Dr Pia Bessell-Browne | CSIRO | CSIRO Assessment Scientist.<br>Acquiring funding for research purposes.<br>PI on FRDC project: Developing a harvest control rule to use in situations where depletion can no longer be calculated relative to unfished levels. |
| Dr Rich Little | CSIRO | Employed by the CSIRO and through the organisation has in the past, and may in the future, receive funding for research related to the fishery. Assessment scientist.<br>Project leader CSIRO Marine Visual Technologies project team on<br>automated catch detection and species identification.<br>Project leader Southeast Australian Marine Ecosystem Survey (SEA-MES).<br>Principle Investigator for the Species Distribution project. |
| Ms Kristin Privitera-Johnson | CSIRO | CSIRO Assessment Scientist.<br>Acquiring funding for research purposes. |
| Ms Rikki Taylor | CSIRO / University of Tasmanian | PhD student through University of Tasmania and CSIRO.<br>No pecuniary or other interest.<br>Any future interests in projects or research will be declared as required. |
| Dr Moninya Roughan | UNSW | Professor and Group Leader, Coastal and Regional Oceanography Lab. Centre for Marine Science and Innovation, School of Biological Earth and Environmental Sciences. UNSW Sydney. |

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| | | No pecuniary or other interest. |
| Dr Andrew Penney | Pisces Australis Pty Ltd. | 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.<br>Deputy Scientific Member on the New South Wales Fisheries Total Allowable Fishing Committee Sep 2020 to Sep 2023.<br>No shareholding and hold no position relating to any other companies, including any fishing companies or industry associations. |
| Ms Danielle Rice | CSIRO | No pecuniary or other interest. |
| Dr Steph Brodie | CSIRO | No pecuniary or other interest. |
| Dr Lianos Triantafillos | AFMA | Employed by AFMA, no interest, pecuniary or otherwise |
| Ms Michelle Henriksen | AFMA | Employed by AFMA, no interest, pecuniary or otherwise |
| Ms Jennfier Power-Geary | AFMA | Employed by AFMA, no interest, pecuniary or otherwise |
| Ms Natalaie Couchman | AFMA | Employed by AFMA, no interest, pecuniary or otherwise |
| Mr Dan Corrie | AFMA | Employed by AFMA, no interest, pecuniary or otherwise |
| Mr Anthony Coggan | AFMA | Employed by AFMA, no interest, pecuniary or otherwise |
| Dr Tim Emery | ABARES | Employed by ABARES. No pecuniary interest in the fishery. Any future projects will be declared as required. |
| Dr Brooke D'Alberto | ABARES | Employed by ABARES. No pecuniary interest in the fishery. Any future projects will be declared as required. |

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| Mr Ross Bromley | Girella Fisheries | Girella Fisheries Services is currently engaged by Atlantis Advisory to assist clients with Marine Stewardship Council (MSC) accreditation and audits across several Commonwealth fisheries, including:<br>- The Eastern Orange Roughy Fishery<br>- The Royal Red Prawn Fishery<br>- The Winter Blue Grenadier Fishery<br>- The Small Pelagic Fishery<br>South-East Trawl Fishing Industry Association (SETFIA) to manage the Western Orange Roughy Data Collection program (WORDaC) and by Southern Shark Industry Alliance to manage the Shark Industry Data Collection program (SIDaC). |

## Attachment C – Actions and Recommendations from SERAG 2 2024

## Attachment D – Actions and Recommendations arising from this meeting

| Agenda Item | No. | Action | Agency/Person Responsible | Timeframe |
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| **5** | 1 | CSIRO to review the Blue Grenadier length composition data for on-board, non-spawning fleet discards in 2022 that is showing a spike in fish below 40 cm and confirm if this was an error. Report outcome to SERAG 2 2025. | Geoff Tuck | SERAG 2 2025 |
| **6** | 2 | CSIRO to investigate age data following towed body abundance indices and report findings to SERAG 2 2025. | Paul Burch | SERAG 2 2025 |
| **6** | 3 | Industry to propose range of constant catch scenarios for Eastern Orange Roughy to AFMA and CSIRO for the next 8 years. | SETFIA | ASAP |
| **9** | 4 | AFMA to engage SETFIA to see if the WORDAC program can provide sample fish weights to CSIRO to enable the development of updated estimated Length and Weight parameters. | AFMA/SETFIA | |
| **9** | 5 | Ian Knuckey and Jeremy Lyle to provide available Historical OR West and Albany and Esperance catch and biological data to CSIRO. | Ian Knuckey & Jeremy Lyle | ASAP |
| **17 (ii)** | 6 | Paul Burch to gather composition data for Gemfish West to share with SERAG 2 2025 to inform a decision regarding stock structure assumptions for Gemfish West noting it is a Trigger Species and stock boundary assumptions have implications for the trigger. | Paul Burch | SERAG 2 2025 |
| **17 (ii)** | 7 | Regarding the advice on the stock boundary of Gemfish West, SERAG recommends that Andy Moore provide advice on the outcomes of the composition data and note any demographic differences presented to SERAG 2 2025. | AFMA | SERAG 2 2025 |

| Agenda Item | No. | Recommendation |
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| 1 | 1, 2, 3 | SERAG adopted the agenda as final.<br>SERAG endorsed the minutes of the previous meeting.<br>SERAG endorsed the deletion of the video recordings of RAG meetings 90 days after the meeting. |
| 2 | 4 | SERAG recommended that a timeline and action plan regarding an AFMA response to Government priorities and ministerial expectations be discussed by SEMAC. |
| 3 | 5 | Industry observations from the GABTF in relation to the climate report included:<br>- Warmer bottom temperatures compared to sea surface temperature at the start of the season.<br>- Bight Redfish catch has been caught more broadly spatially and across the season.<br>- Greater fishing in the west of the GAB due to higher catch rates. |
| 4 | 6 | **Orange roughy (East)**<br>Noting the species assessment is to be updated with the latest stock assessment results (expected at SERAG 2 in November 2025), SERAG supported the Step 1 climate risk assessment of very low risk. Regarding Step 4, SERAG noted that climate change is not expected to have long-term impact on orange roughy (East) and agreed that no response, beyond ongoing data collection and monitoring, is required.<br><br>SERAG noted that there is uncertainty regarding the impact of climate change on spawning aggregations and consider that bottom temperature data that is captured by the AOS could be used to assess this in the future, should it be required. |
| 4 | 7 | **Bight redfish**<br>SERAG supported the Step 1 climate risk assessment of low risk. Regarding Step 4, SERAG noted that climate change is not expected to have an immediate impact on Bight redfish and agreed that no immediate response, beyond periodic review of existing data collection and monitoring programs, is required. |

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| | | The RAG noted that uncertainty in the current stock assessment is expected to be addressed shortly through an update to the assessment as well as the implementation of the Interim SESSF HS that will provide an additional option (via the re-introduction of T2 and associated discount factor) to account for assessment uncertainty if required. |
| 4 | 8 | **Blue-eye trevalla (slope)**<br>SERAG supported the Step 1 climate risk assessment of low risk. Regarding Step 4, SERAG noted that climate change is not expected to have an immediate impact on blue-eye trevalla (slope) and agreed that no immediate response, beyond periodic review of existing data collection and monitoring programs, is required. |
| 4 | 9 | **Jackass morwong (East)**<br>SERAG supported the Step 1 climate risk assessment of extreme risk. Regarding Step 2, SERAG noted that extensive adaptation measures have been implemented in recent years (bycatch TAC, spatial closures, companion species TAC, gear modifications, structural adjustment), and others will be implemented over the coming 12 months, including:<br>- EM in the CTS from 1 July 2026 which will assist to reduce the uncertainty in discard estimates and hence total mortality.<br>- Implementation of the Trawl Industry Data Collection program that includes the collection of jackass morwong samples in trawl closure areas to support a future stock assessment.<br><br>Regarding Step 3, SERAG noted that jackass morwong (East) has and will continue to be significantly impacted by climate change. While extensive adaptation measures have been implemented in recent years and others are to be implemented over the coming 12 months, there are insufficient data and information to assess the impact of these measures on total mortality and the future biomass trajectory of the stock. There is also uncertainty as to the level of discarding, noting the implementation of EM in the CTS in 2026 will support the collection of more accurate data on discards. It was noted that it will take some time for the impacts of adaptation measures to be detected in stock indicators. Given this SERAG, recommended the extreme risk score be maintained at Step 3.<br><br>Regarding Step 4, SERAG supported the ongoing fine tuning of the rebuilding strategy for this species. As part of the process, SERAG recommended all available information be compiled on the drivers impacting on the distribution, abundance, phenology and physiology of jackass morwong (East), including climate change impacts and evidence of a regime shift. This will provide a more holistic picture to inform the rebuilding strategy, including the formulation of reference periods, rebuilding timeframes and |

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| | | subsequent management approaches. SERAG also recommended that understanding the reasons for increased State (NSW) catch of jackass morwong (East) in recent years will be important for the rebuilding strategy. |
| 4 | 10 | **John dory**<br><br>SERAG supported the Step 1 climate risk assessment of extreme risk. Regarding Step 2, SERAG noted that adaptation measures which have been implemented in recent years to support the rebuilding of jackass morwong (East) (spatial closures, companion species TAC, gear modifications, structural adjustment) were also intended to have positive impacts for John dory. In addition, John dory has been managed under a bycatch TAC since 2021-22 and a number of other measures will be implemented over the coming 12 months, including:<br>- EM in the CTS from 1 July 2026 which will assist to reduce the uncertainty in discard estimates and hence total mortality.<br>- Implementation of the Trawl Industry Data Collection program that includes the collection of biological samples in trawl closure areas to support an assessment.<br><br>Regarding Step 3, SERAG noted that John dory is highly vulnerable to climate change. While extensive adaptation measures have been implemented in recent years and others are to be implemented over the coming 12 months, there are insufficient data and information to assess the impact of these measures on total mortality and the future biomass trajectory of the stock. It was noted that it will take some time for the impacts of adaptation measures to be detected in stock indicators. Given this SERAG recommended the extreme risk score be maintained at Step 3.<br><br>Regarding Step 4, SERAG supported the development of a formal rebuilding strategy for this species. As part of the process, SERAG recommended that all available information be compiled on the drivers impacting on the distribution, abundance, phenology and physiology of John dory, including climate change impacts and evidence of a regime shift. This will provide a more holistic picture to inform the rebuilding strategy, including the formulation of reference periods, rebuilding timeframes and subsequent management approaches. |
| 4 | 11 | **Royal red prawn**<br><br>Taking into account the updated stock assessment considered at this meeting, SERAG supported the Step 1 climate risk assessment of high (positive) risk, meaning the stock is expected to benefit from climate change. Regarding Step 3, SERAG noted that regardless |

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| | | of which TAC option SEMAC choose, full utilisation of the RBC is not expected to move the stock towards the TRP quickly. On that basis, SERAG agreed there was no basis to revise the residual risk score at Step 3. Regarding Step 4, pending SEMAC advice, SERAG agreed that no response, beyond ongoing data collection, monitoring and periodic updates to the stock assessment, is required. |
| 5 | 12 | SERAG supported the use of the Tuned base case model for the Tier 1 assessment for Blue Grenadier. |
| 6 | 13 | SERAG supported the use of the base case using the Time Invariant Sex Specific Growth model for the Tier 1 assessment for Orange Roughy East with the following sensitivities:<br>- Do not estimate recruitment deviations prior to 1980<br>- Estimate M without a prior<br>- Investigate using different specification on recruitment deviations<br>- Investigate the incorporation of skip spawning<br>- Different length-weight relationships<br>- Undertake a small number of fixed catch scenarios projecting 8 years into the future<br>- Use maturity estimated from the transition zone data |
| 8 | 14 | The RAG recommended maintaining the 80 t TAC for Hagfish during the 2026-27 SESSF season on the basis that there is no new information to warrant a change in the TAC. The RAG also **strongly** urged Industry to forward any new data, including the results of the escape hole trial, as soon as possible or there may be a risk of a lower TAC in future years due to increased uncertainty. |
| 12 | 15 | SERAG supported the recommendations made by the MYTAC Working Group that the RBC/TACs be maintained for the 2026-27 SESSF season:<br>i. blue-eye trevalla – slope stock at 296 tonnes.<br>ii. pink ling – West stock at 964 tonnes.<br>iii. pink ling – East stock at 661 tonnes<br>SERAG noted the MYTAC Working Group has fewer data to analyse these three stocks because it was a non-data processing year, increasing uncertainty. |
| 9 | 16 | SERAG recommended the following work to progress the development of a Tier 3 assessment for Orange Roughy West: |

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| | | 1. Develop a standardized CPUE series for potential use in an assessment<br>2. Work with FAS to identify the priority samples for ageing<br>3. Develop maturity estimate using WORDAC samples, if possible, for potential use in an assessment.<br>4. Further discussion between CSIRO, SETFIA and Jeremy Lyle on Orange Roughy West regarding the identification of targeting and non-targeting behaviours in the fishery to guide assessment parameters. |
| 9 | 17 | SERAG Recommended that the WORDaC program continue in 2026-27. |
| 11 | 18 | SERAG accepted the base case JABBA assessment for Royal Red Prawn that estimated the median estimated current biomass (4,141.0 t) to be above the TRP (2,042.4 t). |
| 11 | 19 | SERAG recommended the following two RBC options, noting that both were sustainable:<br>1. The Annual long-term average of 573.4 t<br>2. The MYRBC '5-year' of 804.3 t<br><br>SERAG noted that managing the stock as a Trigger Species (which would be supported by the long-term average RBC) or a MYRBC/TAC species, was a MAC discussion and that both RBCs are considerably higher than current catch levels.<br><br>SERAG agreed the JABBA assessment fits into the Tier 4 category with similarity to the Dynamic Tier 4 assessment, in that both are data limited assessments fitting to CPUE. On this basis, the RAG also recommended that a discount factor of 15% should be applied to the RBC. |
| 11 | 20 | SERAG supported the climate risk assessment for Royal Red Prawn in light of the updated assessment results and recommend it be maintained at High (Positive) residual risk. |