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AFMADMW-1932364602-92398

Minutes

Meeting	Southern Eastern Scalefish and Shark Fishery Resource Assessment Group (SESSFRAG)		
Meeting	Data Meeting	Dates	26-27th August 2025
Location	Hobart/Online	Time	9am- 17:30pm 26th 9am – 17:45m 27th
Members	Dr Cathy Dichmont, Chair Ms Sally Weekes, Senior Manager, AFMA Dr Paul McShane, Scientific member / SERAG Chair Dr Rik Buckworth, Scientific member / SharkRAG Chair Mr Daniel Corrie, Senior Manager, AFMA (Acted as AFMA representative for the second day of the meeting in Sally Weekes' absence)		
Apologies	Dr Beth Fulton, Environment member, CSIRO Dr Ian Knuckey, Fishwell Consulting		
Invited Participants	Dr Geoff Tuck, CSIRO Dr Pia Bessell-Browne, CSIRO Dr Paul Burch, CSIRO Dr Miriana Sporcic, CSIRO Dr Robin Thomson, CSIRO Ms Franzis Althaus, CSIRO Dr Haris Kunnath, CSIRO Dr Caroline Sutton, CSIRO Dr Timothy Ryan, CSIRO Mr Keith Rowling, GABIA Mr Simon Boag, SETFIA / SSIA		

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	Mr Andrew Penney, Pisces Australis Dr Kyne Krusic-Golub, Fish Aging Services Dr David Smith Dr Jonathan Smart, SERAG Member
Observers	Mr Daniel Wright, ABARES Dr Timothy Emery, ABARES Ms Brooke D'Alberto, ABARES Dr Geoff Liggins, NSW DPI Ms Rikki Taylor, CSIRO & IMAS Ms Danielle Rice, CSIRO Mr Jack Knuckey, CSIRO
EO	Ms Jennifer Power-Geary

Agenda Item	Title/Topic/Issue	Notes, Action & Recommendations
1.	Preliminaries	1.1 Welcome and apologies The Chair, Cathy Dichmont, opened the meeting with an Acknowledgement of Country and welcomed participants. Meeting participants were informed that the meeting would be recorded for the purpose of assisting the preparation of meeting minutes. The Chair noted the recent AFMA Commission decision to merge the Great Australian Bight Resource Assessment Group (GABRAG) and South East Resource Assessment Group (SERAG) and hence the SESSFRAG membership would no longer include a GABRAG Chair and that the Terms of Reference (ToRs) would be amended, particularly with respect to a quorum, as soon as possible. 1.2 Declarations of interests The SESSFRAG noted, in line with Section 15 of *Fisheries Management Paper 1 – Consultative Committees* (FMP1), the requirement for all meeting participants to declare relevant interests, not limited to pecuniary gain, regarding all agenda items. Meeting participants discussed and agreed how declared interest would be managed. Declared interests and how they were managed at SESSFRAG Data Meeting 2025 are recorded in the register of interest at **Attachment B**. 1.3 Adoption of agenda The agenda was adopted as final (see **Attachment A**). 1.4 Minutes of previous meeting AFMA noted that the minutes from SESSFRAG Chairs' Meeting 2025 are approved with minor edits to be made and then will be uploaded to the AFMA website. 1.5 Actions arising from previous meetings Actions arising were reviewed noting that the action regarding the Interim Harvest Strategy which needed further clarification. The Action item 13 from the Chairs' Meeting was revised to be: *Action 13: SESSFRAG agreed in-principle to the revised interim Harvest Strategy for the SESSF but recommended the following work be undertaken before it could be considered for adoption:* • *AFMA to establish a writing team (David Smith, Dan Corrie, Paul Burch, Beth Fulton and potentially others) to develop a paper to address the proposed interim harvest strategy tiers (and their buffers) and present this at the 2026 SESSFRAG Chairs' meeting. SESSFRAG requested that the following points be addresses in the paper* • *Develop clear definitions of Tier 1 and 2 assessments including case studies of 'difficult species' including low recruitment, CKMR and Gummy shark.* • *Consider species potentially impacted by this decision and determine if there are unintended impacts SESSFRAG also recommended that as part of the MSHS project, that Tier 3 assessments be compared and contrasted with Tier 4 assessments (why is Tier 3 better than Tier 4), and the principle of risk catch*

		cost be considered. SESSFRAG noted the related action (agreed under Item 11) regarding the Interim Harvest Strategy, to provide advice on an MYRBC-setting method once the initial, agreed RBC period has elapsed (e.g., western Pink Ling) (outcome from item 11). A summary of actions and recommendations from SESSFRAG Chairs' Meeting 2025 are at **Attachment C**.
2	Update from the RAG Chairs and AFMA	SESSFRAG noted updates from AFMA and RAG Chairs regarding current management arrangements and activities in the SESSF. **AFMA Management update:** • The Commission has approved the implementation of Electronic Monitoring (EM) in the South East Trawl Fishery from 1 July 2026 in conjunction with an industry-led biological data collection program to be trialled in the western zones during 2025-26 with potential expansion mid-2026. • A working group will be formed to address challenges in estimating discards of quota species and broader bycatch composition. • The Commission decided to merge GABRAG into SERAG and the Great Australian Bight Management Advisory committee (GABMAC) into the South East Management Advisory Committee (SEMAC). • This affects SESSFRAG's Terms of Reference, which previously required a GABRAG scientific member for a quorum. • Updates to membership and quorum definitions are needed. **SERAG update:** • The SERAG Chair noted that there hadn't been a meeting since the last SESSFRAG meeting and so there was no update. **SharkRAG update:** • A meeting was held in July, and a summary of the previous school shark stock assessment was presented. • SharkRAG formally accepted that school shark has undergone a decline in productivity. This decline is attributed to coastal habitat degradation, particularly in nursery areas. The acceptance of this shift has significant implications for the reference points used to manage this fishery because they are now scientifically inappropriate as they rely on assumptions that populations can recover to historical unfished biomass levels. • Dr Pia Bessell-Browne presented work on developing and simulation-testing a Spawning Potential Ratio (SPR)-based Harvest Control Rule (HCR) given the absence s of an estimate of unfished biomass (B_0) for school shark that the existing SESSF HCR requires (to estimate current stock status).
3	Update to the TOR's for SESSFRAG	AFMA presented the current SESSFRAG TORs for consideration following the decision by the AFMA Commissions to merge GABRAG into SERAG. **Presentation highlights:** • Current quorum rules require a GABRAG scientific member, which is no longer applicable.

		• SESSFRAG noted the complications that arose in previous meetings in finding at short notice interim members. **SESSFRAG discussed the following:** • That there was a preference to replace and even add to the membership to enrich SESSFRAG's expertise as it covers a wide range of fisheries and assessment issues. • That there is an industry member on many other RAGs that provide valuable input. SESSFRAG noted that industry members do attend as invited participants and contribute to discussion. • The potential benefits of an independent scientist as a member who could broaden perspectives. • The complications that have arisen from a strict definition of what constitutes a quorum being every member, and that this could be re-determined during this meeting as well. • The potential adoption of a 2/3 majority quorum rule, with mandatory attendance of the Chair and AFMA member. **Action 1:** Once the new SESSFRAG ToR's have been drafted they are to be circulated to members. **Recommendations 1:** Recommendations regarding ToR's - to add at least one (preferably both) of the following to the existing (minus the GABRAG Chair) SESSFRAG membership: i. an independent scientist ii. one industry member **Recommendations 2:** Regarding quorum, that it be redefined to include the Chairperson and AFMA member as mandatory, and then 2/3 majority membership (or nearest integer) attendance (including the AFMA member).
4	Data collection programs a. ISMP annual report b. SIDaC annual report c. Fish ageing services annual report d. GABIA crew data collection	**a. ISMP annual report** • Most strata covered except Zone 20 trawl and Zone 10 offshore due to vessel preferences and limited options. • Danish seine coverage achieved; trawl coverage in Zone 20 gained as a byproduct of Zone 30 effort. • Priority species (e.g., redfish, silver warehou, pink ling) remain difficult to sample due to low encounter rates. • Port sampling used to supplement data. • Seasonal sampling gaps noted; quarter 3 sampling improved coverage. • Observer placement is increasingly challenging due to shifting fishing effort and vessel availability. • Sampling is constrained by budgeted sea days and vessel co-operation **SESSFRAG Discussed:** • The implications of imbalanced seasonal sampling on assessments.

		• Ongoing implications of low sample numbers for priority species.
		
		b. SIDaC annual report
		
		• Sampling Performance saw gummy shark targets met; school shark sampling declining due to fisher sampling fatigue and quota limitations.
		• There were challenges in maintaining fisher engagement over time and ensuring representative sampling across size classes and strata.
		• 2024 and 2025 targets met for the WORDaC program; sampling proportional to catch across zones.
		• No dogfish bycatch recorded in the Murray Dogfish Closure/
		
		SESSFRAG Discussed:
		
		• The importance of capturing bycatch numbers from vessels and if this could be added to reports.
		• The ongoing need to maintain motivation and compliance among fishers participating in the programs.
		
		c. Fish ageing services annual report
		
		• **Key Species Updates:**
		  ○ **Blue grenadier:** Consistent age structure; some unusual young cohorts noted.
		  ○ **John dory:** Stratified sampling across four years; ageing completed.
		  ○ **Eastern orange roughy:** Preliminary ageing shows older fish consistent with larger sizes observed in surveys.
		  ○ **Blue-eye trevalla:** Stratified sampling underway; ageing expected by October.
		
		SESSFRAG Discussed:
		• Concerns about unusual age distributions for blue grenadier (e.g. 2-year-olds in spawning fishery) and the need to check the samples have been allocated to the correct fishery (spawning versus non-spawning).
		• Planning for Western orange roughy ageing; 1,000 samples approved, with potential trade-off species discussed.
		
		d. GABIA crew data collection
		
		• Crew collection of deepwater flathead continues, and the method of collecting has been corrected.
		• There have been some vessel breakdowns resulting in limited fishing activity and data collection.
		• Ocean jacket samples are being collected, and some samples have been sent away for research.

		Action 2: CSIRO to report to SERAG 1 October 2025 if there is an impact (or not) of unbalanced seasonality in the ISMP sampling on quota species assessments, with the aim of informing future data collection programs. **Action 3:** SETFIA to add total landings of bycatch species to future WORDAC reports. **Action 4:** CSIRO to complete the analysis of catch and age assessment methods for data-limited orange roughy stocks and provide to SERAG 1. **Action 5:** SERAG 1 will then review the proposed assessment method for application to non-Eastern orange roughy stocks. **Action 6:** Prior to SERAG 1, CSIRO to review and summarise the available aged and unaged otoliths for Western Zone orange roughy so that, if SERAG 1 accepts the assessment method, they can determine if the otolith weight and or age data is acceptable for a 2025 assessment or if the assessment should be deferred until 2026. SERAG will determine if the ageing plan will need to be updated to reflect this change.
5	Blue grenadier acoustic biomass estimates and assessment	Dr Kunnath presented an update on the blue grenadier acoustic survey program, which provides a key index of abundance for Tier 1 stock assessments. **Presentation highlights:** • Acoustic surveys have been conducted since 2003, with a gap from 2010–2019. The second phase resumed in 2019. • The 2019 and 2022 surveys were affected by poor timing and unstable aggregations, leading to low biomass estimates. These years are considered unreliable due to availability issues. • Oceanographic variability (e.g., sea surface temperature, currents) affects fish availability and aggregation patterns. • Length data from 2023 and 2024 show variability, with potential biological implications. • Proposed future work includes the development of additional metrics (e.g., fish school area and density) to complement biomass estimates and better understand stock dynamics. **SESSFRAG Discussed the following:** • The variability in acoustic estimates and the potential causes of this variability. • Consensus was reached to exclude 2019 and 2022 acoustic data from the base case assessment, with sensitivity tests to explore their inclusion. • Supporting further exploration of environmental and fish school metrics to improve understanding of availability and survey reliability. **Recommendation 3:** SESSFRAG agreed that for the 2025 blue grenadier Tier 1 stock assessment the base case will include the historical acoustic biomass estimates (2003 - 2010) and the modern series (2019 - 2024) excluding the 2019 and 2022 estimates. Sensitivities to the base case will include (i) none of the modern acoustic series, and (ii) all of the modern series with (a) different error structures, and or (b) different catchability coefficients (q) between the modern and historical series.

6	Multi-Species Harvest Strategy Update	Mr Corrie provided an update on the Multi-Species Harvest Strategy project, focusing on Stage 1 deliverables and seeking feedback on proposed document structures.
		
		Presentation highlights:
		• The project has had input from CSIRO, AFMA, state agencies, and an expert advisory group.
		• **Stage 1 Deliverables:**
		  ○ **Fishery Profile Document:** Characterises the fishery across governance, operations, catch, biology, environment, socioeconomics, and data quality.
		  ○ **Concept Harvest Strategy Design:** Proposes a framework with core components, ancillary elements, adaptive strategies, and external drivers.
		• **Risk-Cost-Catch Triangle:** Proposed as a tool to visualise sector dynamics and guide harvest strategy design.
		• **Adaptive Strategies:** Emphasis on flexibility to respond to changes in species composition, fleet dynamics, climate impacts, and policy shifts.
		• **Consultation Plan:** Expert working group meetings and stakeholder workshops planned throughout the project.
		
		SESSFRAG discussed the following:
		• The proposed structure and approach in both documents were supported with suggestions such as the inclusion of:
		  ○ Mapping spatial closures.
		  ○ Including at-risk and ETP species in the fishery profile.
		  ○ Ensuring the harvest strategy is robust to future changes in policy and ecosystem dynamics.
		• The group emphasised the importance of future-proofing the strategy and maintaining alignment with evolving policy objectives.
		• A workshop is planned for mid-2026 to review and refine the concept harvest strategy.
		• The project team will incorporate feedback and continue stakeholder engagement.
		
		Recommendation 4: SESSFRAG agreed that the template documents for the MSHS Stage 1 deliverables are suitable, provided the following are included:
		
		i. Spatial distribution and spatial maps in terms of the fishery, biology and closures to provide a full understanding of these.
		
		ii. Implications for at-risk and ETP species, and how these are accounted for and captured under 'risk'.
		
		iii. Consideration of external influences and include strategies for how the harvest strategy can remain robust to these changes.

7	Interim Harvest Strategy	Dr Smith presented a proposed interim harvest strategy framework, including the reintroduction of the Tier 2 category, updates to Tier 3 definitions and associated buffers. **Presentation highlights:**

- **Tier 2 Definition:** For assessments with instability, conflicting signals, significant methodological changes, or retrospective patterns. Expert judgment required.
- **Species Classification:** Most species remain unaffected. Notable changes could include:
  - **Bight redfish:** Reclassified to Tier 2 due to conflicting signals; minimal impact on catch.
  - **Silver warehou:** Reclassified to Tier 2; low TAC means no practical impact.
- **Tier 3 Updates:** Inclusion of data-limited population dynamics models with some ageing data and simple surplus production models.
- Updates to the process would mean that RAGs will formally assess and assign tiers to stock assessments based on the revised framework.

SESSFRAG discussed:

- The definition for the Tier 2 and a need for further clarification regarding the treatment of new assessments and the role of expert judgment.
- The responsibility for allocating tiers should be the relevant RAGS for which that species is associated.
- That tier changes should be tracked over time and that this should be well documented so that RAGs can understand why changes have been made, or if a species should change tiers. Members also believed this would support transparency.
- Ensuring buffers are applied consistently across species and years to maintain transparency and comparability.

Action 7: Dr Cathy Dichmont, Dr David Smith and Mr Daniel Corrie to review the wording for the dot point in the interim Harvest Strategy for Tier 2 relating to “New or unproven assessments” to ensure new assessments are not automatically made a Tier 2.

Action 8: The Chairs of individual RAGS to record details of the tier to which an assessment is allocated, in the annual species summary document, including any criteria used to make tier level changes. This should then be captured in a stock assessment history document (like the *SESSF history timeline*) and presented at the SESSFRAG Chairs’ meeting each year.

Recommendation 5: SESSFRAG agreed that a Tier 2 should be included into the interim Harvest Strategy framework with minor wording changes

i. Dot points 1 and 4 need to be combined
ii. The “New or unproven method” dot point refined wording be included (as per Action item 5).

Recommendation 6: For the section describing Tier 3, point “Data-limited Stock Synthesis models with some ageing data; and” be replaced with “data limited population dynamics”.

Recommendation 7: SESSFRAG agreed to the interim Harvest Strategy Framework with amendments.

8	Eastern Zone Orange roughy Acoustic Optical Survey (AOS) results	Dr Kunnath presented the outcomes of the 2024 AOS, which aimed to estimate biomass at St Helens Hill and St Patrick's Head grounds using multi-frequency acoustic methods. **Presentation highlights:** • The survey was conducted over 30 days using CSIRO's AOS system. Seven survey replicates were completed (4 at St Helens Hill, 3 at St Patrick's Head). • There were some technical difficulties. The 38 kHz transducer failed during two surveys, which coincided with the highest biomass estimates. The 120 kHz data was used as a proxy, with increased CVs to account for uncertainty. • Maximum biomass was ~30,000 tonnes; mean biomass ~20,000 tonnes. Both locations held significant aggregations, with St Patricks Head holding the largest aggregations since 1999. • The 2024 survey showed a significant increase in biomass compared to 2019, with fish more evenly distributed across both grounds. • A new modular AOS system has been developed to reduce risk of gear loss and therefore cost. It allows for future surveys to be conducted by skippers without scientists onboard, enabling more frequent monitoring.
9	Eastern Zone Orange roughy assessment	Dr Burch and Dr Sutton presented updates on the Eastern Zone orange roughy stock assessment, focusing on biological data trends and implications for the 2025 assessment. **Presentation highlights:** • The 2024 survey used a larger vessel than in previous surveys, enabling sampling from denser parts of aggregations. Twenty shots were conducted across St Helens Hill and St Patrick's Head, with over 2000 fish measured, and 910 otoliths collected. • Ninety per cent of sampled fish were spawning or were spent, confirming survey timing aligned with peak spawning. • Average fish length has increased by ~2 cm since 1987 and ~1 cm since 2019, suggesting post-fishing recruitment and possible density-dependent growth. • The average age has remained relatively stable, indicating ongoing recruitment. • There was no significant change observed in the length-weight relationship compared to historical models (1990, 2019, 2024- noting data was collected by industry in 2024). • The age at maturity has decreased from ~30 years to ~28 years, suggesting earlier entry into the spawning population based on data up to 2010. **SESSFRAG Discussed:** • Potential drivers of biological changes, including reduced competition, improved environmental conditions, and density-dependent effects. • The implications of changing biological parameters on productivity and recruitment were considered. • The group agreed to update growth, maturity, and selectivity parameters for the upcoming assessment and review age data weighting between surveys.

		• The biological changes are significant and warrant updates to growth and maturity parameters. • No changes were proposed to natural mortality or stock structure assumptions. **Recommendation 8:** SESSFRAG agreed that the preliminary base case for eastern zone orange roughy assessments as proposed by CSIRO be considered at SERAG.
10	FishSOOP program	• The presentation by Moninya Roughan was cancelled due to time constraints.

11	Data limited Orange roughy Assessments	Dr Burch presented simulation modelling work aimed at assessing data-limited orange roughy stocks that lack consistent spawning aggregations.
		
		Presentation highlights:
		• The modelling evaluated how robust the Stock Synthesis assessment is when abundance indices are removed, using bootstrapped datasets to examine the extent to which age-composition data alone can inform biomass estimates. Key scenarios tested included:
		  ○ Varying years and timing of age data collection.
		  ○ Stock status (moderate vs. lightly exploited).
		  ○ Use of otolith weight as a proxy for age.
		  ○ Sensitivity to fixed parameters (natural mortality, steepness).
		• Preliminary results showed:
		  ○ Moderate exploitation scenarios had ~20% overestimation bias.
		  ○ Lightly exploited stocks showed high variability but less bias.
		  ○ Otolith weight as a proxy for age introduced underestimation bias but was more precautionary.
		  ○ Year of sampling was a strong covariate in otolith weight-age relationships.
		
		SESSFRAG Discussed:
		• The implications of bias and variability in stock status estimates.
		• The usefulness of age data declines with lower exploitation due to reduced contrast.
		• Otolith weight showed promise but required annual age calibration.
		• Suggestions included exploring cumulative environmental effects and using depth as an additional covariate.
		• Potential for machine learning approaches (e.g., neural networks) to estimate age was discussed but deemed currently unsuitable for long-lived species like orange roughy.
		• SESSFRAG noted that the options SERAG would consider for the Western Zone assessment will be:
		  1. Accept the method and proceed with otolith weight-based assessment in 2025.
		  2. Defer to 2026 to allow for more aging data (and therefore) more robust data.
		  3. Reject the method and require further development.
		• The method shows promise but requires further validation.
		• Inter-sessional advice may be needed regarding the use of otolith weight in assessments.

		Action 9: SERAG to consider whether there is merit in a project to improve the estimates of age from an otolith morphometric and biometric approach for orange roughy.
12	Catch History Report	Dr Burch provided an update on the Catch History Project, which aims to document historical catch time series used in assessments over the past 20–30 years. The project does not reconstruct catches but collates existing series and identifies inconsistencies. **Presentation highlights:** • The catch histories have been complied for several species. • Issues include duplicate reporting, unrecorded discards, and species-level misreporting. • The report will assist RAGs in selecting appropriate catch histories for future assessments. • The final report will be circulated later in the year. **SESSFRAG Discussed:** • The importance of documenting accepted catch histories to avoid confusion and ensure consistency. • The accepted series are those used in the most recent assessments and are now being incorporated into AFMA's catch reports. • The report will be updated as new assessments occur. • Data are stored in long format with fleet-level resolution.

13	Royal Red Prawn assessment update	Dr Penney provided an update on the development of a Royal Red Prawn stock assessment, commissioned by industry to meet MSC Certification (Condition 2). The presentation focused on data preparation, CPUE standardisation, and proposed model runs using the JABBA surplus production model.
		
		Presentation highlights:
		
		• **Catch History Compilation:** Historical catch data were revised in collaboration with NSW DPI and CSIRO. Adjustments included:
		  ○ Removal of potential double-reporting in NSW catches.
		  ○ Extension of discard estimates using nearest available years.
		  ○ Use of logbook data from 1986–1991 and State catch estimates from 1979–1985.
		• **Depth Corrections:** Depth reporting errors were identified, including:
		  ○ Use of fathoms instead of meters.
		  ○ Position errors in logbook data.
		  ○ Corrections applied using GIS bathymetry and vessel-specific averages.
		• **CPUE Standardisation:**
		  ○ Multiple software packages were used.
		  ○ Depth corrections improved fit to historical CPUE trends.
		  ○ Vessel and depth were the most influential factors.
		  ○ 2021 and 2022 CPUE values were low and recommended for exclusion.
		  ○ 2024 data showed a spike due to increased targeting by a dominant vessel.

		• **Targeting Fleet Definition:** Proposed exclusion of tows with CPUE <10 kg/hr to improve model fit. This removed 15% of tows but only 1% of catch.
		• **Model Specifications:**
		  ○ Base case: Full catch history (1979–2024), R prior of 0.41, discards included.
		  ○ Sensitivities: Exclusion of discards, shorter time series, alternative R priors, inclusion of 2021–2022 CPUE.
		  ○ Ensemble modelling discussed but not adopted; base case preferred.
		• **Software and Methodology:** JABBA selected for assessment due to its pedigree and flexibility. Priors working group endorsed proposed specifications.
		
		Discussion Summary:
		• That the Royal Red Prawn Priors Working Group supported the historical catch and discards table. SESSFRAG supported the table as it provided a consistent and transparent historical record of removals, improving the accuracy of total removals used to inform the stock assessment.
		• The use of the En10 CPUE standardisation (unfiltered, with 2021–2022 excluded) over alternative indices due to its statistical robustness and alignment with previous assessments.
		• Concerns about the influence of sparse data and vessel effects on CPUE trends. SESSFRAG reviewed multiple CPUE series and data edits applied to RRP logbook data. The standardised CPUE series was supported, but the version filtered by catch rates was not. Concerns were raised that filtering by catch rates could introduce bias or remove valid low-catch observations, potentially misrepresenting stock trends. The approved series was considered more robust and consistent with standard assessment practices.
		• SESSFRAG discussed whether vessels with very small catches were targeting RRP and requested that the net type be investigated and that future assessments separate the CPUE of vessels using prawn nets from those using other forms of trawl gear.
		• Suggestions included future use of gear type to identify targeting behaviour and consideration of GAMs for smoothing.
		
		Action 10: Dr Andrew Penney to provide AFMA with the corrected depth data for AFMA to update in the logbook database.

		Recommendation 9: SESSFRAG approved the agreed historical catch and discards table developed and agreed by the Royal Red Prawn Priors Working Group. **Recommendation 10:** SESSFRAG approved the data edits and CPUE series applied to Royal Red Prawn but not the CPUE series filtered by catch rates for the assessment of the southeastern Australian Royal Red Prawn stock. **Recommendation 11:** SESSFRAG approved the standardised En10 CPUE index to be used in the RRP assessment. **Recommendation 12:** SESSFRAG approved using the base case and the proposed list of assessment sensitivity runs, specifications and priors, as developed and agreed by the Royal Red Prawn Priors Working Group.

14	Review of SESSF species data summary report (using PowerBI)	Ms Henriksen presented on the data summary report generated in PowerBI.
		
		Presentation highlights:
		
		• This purpose of the report is largely to replace the previous static summaries produced by CSIRO.
		• The report now includes State catches from dashboards provided last year.
		• Future improvements will include a live dashboard link which is being developed for direct access for members.
		• Collaboration with IT and data teams is ongoing to enhance reporting.
		
		SESSFRAG Discussed:
		• **State Catch Data:**
		  ○ Some species (e.g. royal red prawn, sawsharks, elephant fish) lacked state catch splits.
		  ○ Members requested inclusion of East/West splits, especially for species like jackass morwong.
		• **Recreational Catch Data:**
		  ○ Not updated this year due to the shift away from the catch report format.
		  ○ Members requested recreational catch estimates be included in future summaries for context and management decisions.
		
		Action 11: CSIRO, with permission from the states, to share state data with ABARES of total catch data of quota species.
		Recommendation 13: SESSFRAG agreed there is a need to have recreational catches represented in the data summary document.

15	MYTAC and data summary review	**Presentation highlights:**
		• No MYTAC meeting was held this year due to resource constraints and overlapping assessments.
		• AFMA undertook an initial review of the information, which left pink ling (east and west) and blue-eye trevalla slope stocks that need to be discussed:
		  ○ Pink ling: Eastern catch is at 85% of notional limit; combined catch relative to TAC at ~60%. Age and length data is consistent; no deviation from RBC recommended.
		  ○ Blue-eye trevalla: Data to be reviewed.
		SESSFRAG Discussed:

		• Data Quality Concerns:
		  ○ Power BI plots lacked 2024 data and had scaling issues due to outliers.
		  ○ Members requested:
		  ▪ Rescaling of plots.
		  ▪ Inclusion of 2024 data.
		  ▪ Consistent formatting across years.
		  ▪ Addition of reference lines for comparison.
		  ○ SESSFRAG recommended that, rather than making decisions based on incomplete or skewed data,:
		  ▪ The MYTAC working group convene before SERAG 1 to review pink ling and blue-eye trevalla data.
		  ▪ If no issues are found, MYTAC recommendations proceed.
		  ▪ If issues are identified, they be referred to SERAG for further consideration.
		
		Action 12: AFMA to investigate the Pink Ling 5m fish length outlier in the observer data summary report.
		Action 13: Prior to SERAG 1, the MYTAC working group will meet to consider the data for blue-eye trevalla slope and pink ling (east and west) stocks in the context of the MYTAC process and report to SERAG 1.
		
		Recommendation 14: SESSFRAG recommended the following changes for the data summary reports regarding the length and age frequencies:
		i. to switch the length/age to the x-axis in the summary report.
		ii. to insert a reference line in each of the species observer graphs in the data summary report.
		iii. AFMA should investigate outliers in length/age data summaries for ease of analysis.

16	Application of an SPR approach for school shark	Dr Bessell-Browne provided an update on the development of a harvest control rule (HCR) for school shark, following recommendations from the May 2025 SESSFRAG Chairs Meeting and SharkRAG 1.
		
		Presentation highlights:
		
		• **Productivity Decline Evidence:**
		  ○ school shark productivity has declined since the 1990s due to degradation of nursery habitats (e.g. Port Phillip Bay, Western Port, Georges Bay).
		  ○ A full recovery to the initial B_0 is unlikely due to a decline in productivity and ongoing anthropogenic pressures.
		  ○ SharkRAG 1 agreed that historical reference points (e.g. B_o) are no longer appropriate.
		• **SPR-Based HCR:**
		  ○ Spawning Potential Ratio (SPR) is a globally accepted biological indicator.
		  ○ SPR-based HCRs have been successfully applied to similar species, especially groundfish.
		  ○ For larger elasmobranchs and school shark, higher SPR targets (e.g. 70%) may be needed due to lower productivity.

		○ SPR approach aligns with the Commonwealth Harvest Strategy Policy. • **Stock Status Estimation:** ○ A new method for estimating relative stock status under changed productivity is being developed. ○ Determining whether the stock is above the Limit Reference Point (LRP) is critical for management flexibility. • **MSE Testing Requirement:** ○ Both the SPR-based HCR and the new stock status estimation method require Management Strategy Evaluation (MSE) testing before formal adoption. ○ MSE testing is expected to be time-consuming and costly; funding is yet to be secured. • **Policy Engagement:** ○ AFMA will need to engage with the Department of Agriculture, Fisheries and Forestry to ensure the SPR-based approach is acceptable under current policy frameworks. **SESSFRAG Discussed:** • The need for a formal document compiling the evidence of a productivity decline. • The group emphasised the importance of MSE testing before using the SPR method to set TACs. • The interim TAC setting process will continue to use the CKMR-based abundance estimate and logbook-derived mortality estimates. • The process must be robust given school shark's conservation-dependent status and implications for the gummy shark fishery.
17	CKMR scoping study for the SESSF	Dr Thomson presented the results of a design study to estimate sample sizes required for Close-Kin Mark Recapture (CKMR) assessments across a range of SESSF species, including both quota and non-quota stocks. The study was initiated in response to concerns about the reliability of CPUE-based indices in depleted or environmentally impacted stocks. **Presentation highlights:** • CKMR has been successfully applied to school shark due to lack of reliable CPUE and environmental degradation of nursery grounds. • Climate change and management measures (e.g. closures, buybacks) are increasingly compromising CPUE for other species. • CKMR provides absolute abundance estimates and can disentangle natural and fishing mortality when catch data are included. • Sample size estimates were calculated for two scenarios: ○ Stocks with existing Tier 1 assessments (using SS model outputs). ○ Stocks without Tier 1 assessments (using a "target design" assuming B40 depletion). • Sampling strategies compared: ○ Equal sampling across age classes (ideal but often unrealistic). ○ Sampling proportional to catch (more feasible but less precise). • CV targets of 20% and 25% were used to estimate required sample sizes. • Findings:

		○ Sample size requirements vary widely by species and stock structure. ○ Some species (e.g. School shark, Redfish) require relatively low sample sizes. ○ Others (e.g. blue-eye trevalla, Eastern jackass morwong) require very high sample sizes, raising feasibility concerns. ○ Sample size estimates are annual; total samples over five years would be 5× the annual figure. ○ Sampling from younger age classes improves precision but is often difficult in practice. • Caveats: ○ An error in unit scaling (e.g. tonnes vs. kilograms) affected earlier estimates for blue-eye trevalla; revised estimates are higher. ○ Gummy shark estimates are based on simplified assumptions due to model limitations. ○ Further work is required to assess how sample size requirements change with repeated CKMR studies and evaluate utility of CKMR data with higher CVs (e.g. 30%) in Tier 1 assessments. **SESSFRAG Discussed:** • CKMR's value, especially for species with poor CPUE or conservation concerns. • Exploring CKMR integration into Tier 1 assessments, particularly for species like redfish and gemfish. • Concerns were raised about cost and feasibility for species requiring large sample sizes. • Members supported further work to: ○ Refine sample size estimates. ○ Explore cost-benefit trade-offs. ○ Assess CKMR's contribution to existing assessment frameworks. **Additional Discussion: Alternative Genetic Methods** • AFMA raised the emergence of a new genetic method proposed by external researchers. • Concerns were expressed about the lack of direct linkage to census population size and that there was an unclear applicability to fisheries management (e.g. TAC setting). • Members agreed the method should be reviewed formally and that AFMA should consider bringing the method to RAGs for a structured evaluation. **Action 14:** Dr Robin Thomson to review the close kin sample size needed for each quota species to obtain specific CV's, then to provide this information to AFMA so that the SESSF Data Plan can be updated to reflect sampling targets for appropriate species.

		Action 15: AFMA to include an agenda item in a future RAG meeting to discuss the genetic effective population size approach for potential use in the SESSF fisheries.

18	**SESSF Data and ISMP plans**	Mark Grubert provided an update on the SESSF Data Plan, noting that while the final version is not yet complete and would be sent out after gaining some advice from SESSFRAG.
		
		Presentation highlights:
		
		• Document Revisions included the preamble sections updated to reflect the implementation of Electronic Monitoring (EM). References to GABRAG and GABMAC were removed following their merger into SERAG and SEMAC.
		• **SIDaC Sampling Tables:**
		  ○ Updated in consultation with CSIRO to reflect the targets in the new SIDaC contract.
		  ○ Sampling targets revised for several species:
		  ▪ **Blue-eye trevalla**: Increased sampling in zones 70, 83, and 84 to support CKMR assessment.
		  ▪ **Gummy shark**: Sampling targets remain unchanged; current coverage is satisfactory.
		  ▪ **Pink Ling**: Increased sampling in zones 83 and 84.
		  ▪ **School shark**: Reduced sampling targets (from ~1500 to 720 per year) due to collection challenges and spatial shifts in fishing effort.
		  ▪ CSIRO supports the revised targets.
		• **Future Updates:**
		  ○ Document will be further revised to reflect changes in assessment tiers based on the interim Harvest Strategy (e.g. inclusion of Tier 2).
		  ○ Final version to be reviewed by SERAG and SharkRAG, and ratified by SESSFRAG at the May 2026 Chairs Meeting.
		SESSFRAG:
		• Supported the revised sampling targets and agreed they align with current operational realities and scientific needs.
		
		Action 16: AFMA to make changes to the data plan, specifically, to include the new tier scales to reflect the revised interim harvest strategy (once it has been approved by the Commission).

19	**SEA-MES voyage update**	Dr Little provided an update on the fourth and final voyage of the SEA-MES (Southeast Australian Marine Ecosystem Survey) program, which aims to assess ecosystem changes in the South-East Marine Region by comparing current data with the 1990s CEPS (Commonwealth Environment Protection Survey) baseline.
		Presentation highlights:
		• **Voyage Overview:**
		  ○ Nearly 1,000 operations conducted using demersal trawls, deep-towed cameras, CTDs, and plankton nets.
		  ○ Seal interactions were a concern; three seal captures occurred despite mitigation protocols.
		  ○ Night trawls were introduced for the first time to assess diel variation in species distribution.

		• **Spatial and Depth Coverage:**
		  ○ Survey extended from Freycinet Marine Park (TAS) to southern NSW.
		  ○ Strong coverage across shelf and upper slope depths (0–500 m), comparable to CEPS baseline.
		• **Environmental Context:**
		  ○ Sea surface temperatures during SEA-MES voyages were significantly warmer than in the 1990s.
		  ○ Eddy activity (variability in sea surface height) has increased, particularly off NE Tasmania, indicating stronger oceanographic mixing.
		• **Biological Sampling:**
		  ○ Over 30,000 biological samples collected across 400+ species.
		  ○ Included 9,000 muscle tissue samples, 14,000 stomachs, 5,000 gonads, and 5,000 otoliths.
		  ○ Three species encountered that had not been recorded in previous surveys: snook, threadfin leatherjacket, and blue-eye trevalla.
		• **Species-Specific Observations:**
		  ○ **Jack mackerel**: High catch rates, especially on shelf break; more abundant than in 1990s.
		  ○ **Gemfish**: Strong catch rates in Voyage 4 (July), likely due to spawning; much higher than CEPS.
		  ○ **Redfish**: Larger individuals observed but catch rates still much lower than 1990s.
		  ○ **School whiting**: Low catch rates, possibly due to fewer shallow trawls.
		  ○ **Jackass morwong**: Strong catch rates, comparable to CEPS in some areas.
		• **Ecosystem Change Hypotheses:**
		  ○ Four patterns of change were proposed:
		  ▪ No change.
		  ▪ Spatial population structure.
		  ▪ Spatial shift (e.g. ocean jacket).
		  ▪ Novel ecosystem (e.g. redfish, blue warehou).
		  ○ Community composition analyses suggest greater similarity between SEA-MES and CEPS in the south than in the north.
		• **Trophic Structure Changes:**
		  ○ Stable isotope analysis (C13 and N15) shows:
		  ▪ Narrower trophic range in SEA-MES compared to CEPS.
		  ▪ Upward shifts in trophic level for several species (e.g. redfish, jackass morwong).
		  ▪ Some species (e.g. gemfish) showed downward shifts, possibly due to size structure changes.
		• A model-based index is planned to account for covariates and improve comparability.
		• That further work is needed to:
		  ○ Age otoliths.
		  ○ Analyse stomachs, gonads, and isotopes.
		  ○ Secure funding for a public symposium and future research.
		
		SESSFRAG discussed:

		• Interest in integrating SEA-MES data into stock assessments (e.g. redfish, gemfish, blue warehou). • The potential for spatial shifts and climate-driven changes was acknowledged.
20	2025 Chairs' meeting dates	• SESFRAG agreed to the proposed SESSFRAG Chairs' Meeting dates as the 12th-14th of May 2026 and the SESSFRAG Data Meeting proposed dates as the 25th-27th August 2026.
21	Other Business 20.1 CSIRO EM/AI Industry PhD proposal 20.2 School shark Project proposal	This agenda item focused on finalising the 2025–26 research priorities for submission to AFMA's ARC and FRDC funding processes. The discussion revisited previously agreed priorities and considered three new proposals that had been identified since SESSFRAG met in May 2025 and raised under "Other Business": • **School shark Project Proposal** – to determine stock status and develop a harvest control rule (HCR). • **Detection and estimation of discards and bycatch mitigation using AI-enabled Electronic Monitoring project** – to automate catch composition and discard estimation using artificial intelligence. • **Calibration of the Modular Acoustic Optical Survey (M-AOS) unit** – a new, modular, AOS unit requires calibration before use in future orange roughy surveys **New Proposals Discussed:** **1. School shark MSE Project** • **Rationale:** ○ School shark is listed as conservation dependent under the EPBC Act. ○ The rebuilding strategy is in place until 2074. ○ CKMR results alone cannot confirm whether the stock is above the Limit Reference Point (LRP). ○ Confirming stock status would allow greater flexibility in management and potentially ease constraints on the Gummy shark fishery. • **Implications:** ○ High priority for AFMA and industry. ○ Potential to inform broader policy on assessing conservation-dependent species. ○ MSE testing would be tailored to School shark but could have wider applicability. **2. Detection and estimation of discards and bycatch mitigation using AI-enabled Electronic Monitoring project:** • **Rationale:** ○ Builds on existing CSIRO AI work in tuna and subantarctic fisheries. ○ Proposed as an Industry PhD (IPHD) project with a piggyback CSIRO support component. ○ Aims to automate identification of discards, catch composition, and TIPS (target/non-target species). • **Funding Structure:** ○ IPHD student: $50K over 4 years. ○ CSIRO support: $200K over 4 years. ○ Total: $250K.

		• **Potential Impact:**
		  ○ Could reduce EM review costs significantly.
		  ○ Applicable across multiple fisheries (GAB, CTS).
		  ○ Considered a strong candidate for FRDC funding.
		3. **M-AOS Calibration:**
		  ○ New, smaller unit developed by CSIRO.
		  ○ Requires testing in 2026 to enable full survey in 2028.
		  ○ Estimated cost: $100K.
		  ○ Considered medium priority; not essential.
		
		Other Projects Reviewed:
		
		• **60-Mile Dogfish Closure Survey:**
		  ○ Proposed follow-up to earlier survey work.
		  ○ Estimated cost: $200K.
		  ○ Debate over priority due to limited benefit across broader fisheries.
		  ○ GAB stakeholders strongly support; others view as medium priority.
		• **Tier 1 Assessment Review:**
		  ○ Deferred to next funding cycle.
		  ○ No Tier 1 assessments scheduled for 2027.
		• **Future Proposal (not rated):**
		  ○ Acoustic survey of Western orange roughy aggregation using industry vessels.
		  ○ To be considered in next year's cycle.
		
		Dissenting views regarding the 60-Mile Dogfish Survey:
		• Several members questioned the broader value of the survey, noting that it primarily benefits the GAB sector.
		• Some members questioned the urgency of the survey, suggesting that it could be deferred without losing scientific value. Others argued that the survey's relevance would diminish over time, but dissenters felt this was not a strong enough reason to prioritise it over other projects.
		• There was scepticism about whether the survey would lead to meaningful changes in conservation status or management.
		• Alternatively, the GAB representatives viewed the 60 Mile Dogfish Closure Survey as a strategically timed, scientifically necessary, and management-relevant project that builds on prior investment and supports regional fisheries access and policy compliance.
		
		Process Concerns:
		• Members expressed discomfort with late additions to the research priority list.
		• Chair noted that future research priorities should be finalised at the May meeting and not reopened unless through a formal out-of-session process.
		
		Recommendation 15: SESSFRAG supported the proposed three projects to be considered in the ARC 2026-27 process and restructured the prioritisation as follows:

		i. Ageing of SESSF quota species for three years (ending 30 June 2029)- Essential ii. Stock assessments and data services for SESSF species for three years (ending 30 June 2029)- Essential iii. Ecological Risk Assessments (ERAs) for selected SESSF sectors/gears- Essential iv. MSE testing of a novel SPR based approach to determine stock status and set the bycatch TAC for school shark- High v. Survey of protected dogfishes in the 60-mile dogfish closure- Medium vi. Calibration of the Modular Acoustic Optical Survey (M-AOS) unit for future orange roughy surveys- Low **Recommendation 16:** SESSFRAG recommended that the *Detection and estimation of discards and bycatch mitigation using AI-enabled Electronic Monitoring* project be referred to FRDC for funding as a high priority. **Recommendation 17:** SESSFRAG agreed that in general, no research scopes should be brought to the RAG after the research plan has been prioritised and finalised at the Chairs' meeting.
Close of meeting		The Chair closed the meeting at 16:04pm

Attachment A – Adopted agenda

SESSFRAG Data meeting (26-27 August 2025)

Day 1: 26 August 2025 / 09:00 to 17:30

Time	Item	Purpose	Presenter
0900	1. Preliminaries a. Acknowledgement of Country, welcome and apologies Declarations of interest b. Adoption of Agenda c. Declarations of Interest d. Minutes from previous meetings e. Actions arising from previous meetings	For Noting	Chair/ EO (30 mins)
0930	2. Updates from AFMA & RAG Chairs	For Noting	AFMA/ RAG Chairs (30 mins)
1000	3. Update to the TOR's for SESSFRAG	For Advice	AFMA (15 mins)
1015	4. Data collection programs a. ISMP annual report b. SIDaC annual report c. Fish ageing services annual report d. GABIA crew data collection	For Noting	a. AFMA b. Henry Oak c. Simon Boag d. Kyne Krusic-Golub e. Keith Rowling (30 mins)
1045	*Morning Tea – 15 mins*		
1100	Data collection programs (continued)	For Noting	a. AFMA b. Henry Oak c. Simon Boag d. Kyne Krusic-Golub e. Keith Rowling (45 mins)
1145	5. Blue grenadier acoustic biomass estimates and assessment	For Advice	Haris Kunnath/Geoff Tuck (45 mins)
1230	*Lunch – 45 mins*		
1315	6. Multi-Species Harvest Strategy	For Advice	Danial Corrie (45 mins)
1400	7. Interim Harvest Strategy	For Advice	David Smith (45 mins)
1445	8. Eastern Zone Orange roughy Acoustic Optical Survey results	For Noting	Haris Kunnath (30 mins)
1515	*Afternoon Tea – 15 mins*		
1530	9. Eastern Zone Orange roughy assessment	For Advice	Paul Burch

			(45 mins)
1615	**10. FishSOOP program**	For Noting	Moninya Roughan (45 mins)
1700	**Collation and review of the day's action items and advice**		Chair / EO (30 min)
1730	***End of Day 1***		

Day 2: 27 August 2025 / 09:00 to 17:45

Time	Item	Purpose	Presenter
0900	**11. Data limited Orange roughy Assessments**	For Advice	Paul Burch (45 mins)
0945	**12. Catch History Report**	For Noting	Paul Burch (30 mins)
1015	***Morning Tea–15 min***		
1030	**13. Royal Red Prawn assessment update**	For Advice	Andrew Penney (45 mins)
1115	**14. Review of SESSF species data summary report (using PowerBI)**	For Noting	Michelle Henriksen (30 mins)
1145	**15. MYTAC and data summary review**	For Advice	AFMA (45 mins)
1230	***Lunch –45 mins***		
1315	**16. Application of an SPR approach for school shark**	For Noting	Lianos Triantafillos / Pia Bessell-Browne (30 mins)
1345	**17. CKMR scoping study for the SESSF**	For Noting	Robin Thompson (45 mins)
1430	**18. SESSF Data and ISMP plans**	For Advice	AFMA (45 mins)
1515	***Afternoon tea – 15 mins***		
1530	**19. SEA-MES voyage update**	For Noting	Rich Little (45 mins)
1615	**20. 2025 Chairs' meeting dates**	For Advice	AFMA (15 mins)
1630	**21. Other Business:** **20.1 CSIRO EM/AI Industry PhD proposal** **20.2 School shark Project proposal**	For Advice/ Noting	Lianos Triantafillos Geoff Tuck (45 mins)
1715	**Collation and review of the day's action items and advice**		Chair / EO (30 min)
1745	***End of Day 2***		

Attachment B – Register of interests

Name	RAG/MAC Position/Organisation	Declared interest
Dr Cathy Dichmont	Cathy Dichmont Consulting	Director of Cathy Dichmont Consulting. Chair of ComRAC (FRDC) Chair of NSW and QLD RAC Contracted by various state and Commonwealth agencies to undertake various reviews and consultancies not related to SESSF. FRDC 2021-002 PI – Investing in our future stock assessment and next generation. FRDC 2019-118 – Drawing strength from each other: simulation testing of Australia's abalone harvest strategies. No pecuniary interest in the SESSF.
Dr Paul McShane	Global Marine Resource Management	Chair of SERAG and a member of SEMAC and SESSFRAG. No pecuniary interest in the SESSF. Principal of Global Marine Resource Management Pty Ltd. Adjunct Professor (Fisheries and Aquaculture) College of Science and Engineering, James Cook University
Rik Buckworth	SharkRAG Chair	Chair of SharkRAG. Director of Sea Sense Australia Pty Ltd Scientific Member – NPRAG Member – Data Working Group for the GABTF

		Adjunct Professor – Charles Darwin University Current or anticipated projects with government agencies, CDU and fishing industry for projects in the NT, Qld and Commonwealth fisheries. Researcher involved particularly in stock assessment research. No pecuniary or other interest in the SESSF shark fishery.
Dr Beth Fulton	CSIRO	Ecosystem and climate scientist, Portfolio Leader for Integrated Marine Management. Adjunct with the University of Tasmania (Deputy Director for the Centre of Marine Socioecology). Acquiring funding for research purposes Lead researcher for the CSIRO sub-contracted component of the Futures of Seafood project led by Seafood Industry Australia and Blue Economy CRC (FRDC and government funded)
Dr Sarah Jennings	Independent economics consultant	Adjunct Senior Researcher, TSBE Economics member of SERAG Economic member of SEMAC Member of AFMA EWG Independent economics consultant No pecuniary or other interest in the SESSF.
Mr Simon Boag	SETFIA (trawl) SSIA (sharks)	EO SETFIA (trawl) EO SSIA (sharks) Industry member on both SERAG and SEMAC. SSIA is engaged by AFMA to collect shark industry biological data SETFIA is a contributor to the Blue grenadier Surveys being undertaken by CSIRO. SETFIA is the PI on the orange roughy east AOS and ORS Cascade survey SETFIA is engaged by participants within the W ORS research fishery to collect biological samples

		SETFIA is engaged by AFMA under co-management to undertake a variety of tasks including snapper management, ling management and consultation SETFIA is the PI on the grenadier survey
Keith Rowling	GABIA	Industry member representing GABIA.
Dr Paul Burch	CSIRO	Employed by CSIRO, assessment scientist. Acquiring funding for research purposes. Principle investigator on the SESSF stock assessment project.
Dr Pia Bessell-Browne	CSIRO	CSIRO assessment scientist. Acquiring funding for research purposes. 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 Franzis Althaus	CSIRO	Employed by CSIRO, Assessment scientist. Acquiring funding for research purposes. Leading the data component of the SESSF stock assessment project. CSIRO representative on the Fisheries Statistics and Information Working Group.
Dr Caroline Sutton	CSIRO	Employed by CSIRO
Dr Haris Kunnath	CSIRO	Employed by CSIRO
Dr Miriana Sporcic	CSIRO	Assessment scientist. Acquiring funding for research purposes Project Leader CSIRO Ecological Risk Assessments
Dr Robin Thomson	CSIRO	Assessment scientist. Acquiring funding for research purposes PI on close kin project for school shark.

		PI on blue-eye trevalla close kin scoping project
Dr Geoff Tuck	CSIRO	Involved in Stock assessments. Interest in obtaining funding for future research. Project leader CSIRO Marine Visual Technologies project team on automated catch detection and species identification
Dr Kyne Krusic-Golub	Fish Ageing Services	Director – Fish Ageing Services Pty Ltd No pecuniary or financial interest in the fishery other than securing funds for potential projects related to age and growth studies. Current Related Projects Project collaborator on FRDC 2019-030. An updated understanding of Eastern School Whiting stock structure and improved stock assessment for cross-jurisdictional management Currently the service provider for supplying the age data for the SESSF Project 2022-0812.
Dr Jonothan Smart	SERAG Member	Independent fisheries scientist operating as Smarter Fisheries Scientific Consulting Affiliate Associate Professor - Flinders University Adjunct Senior Research Fellow - James Cook University Scientific member - SERAG Scientific member - PZJA HCRAG Researcher involved with stock assessment research, often in collaboration with State and Territory Governments Independent scientific advisor to Western Australian Pilbara Demersal Scalefish Resource (PDSR) Stakeholders No pecuniary interest in the SESSF
Mr Daniel Wright	ABARES	Employed by ABARES. No pecuniary interest in the fishery. Any future interests in projects or research will be declared as required.

Mr Timothy Emery	ABARES	Employed by ABARES. No pecuniary interest in the fishery. Any future interests in projects or research will be declared as required.
Ms Brooke D'Alberto	ABARES	Employed by ABARES. No pecuniary interest in the fishery. Any future interests in projects or research will be declared as required.
Ms Sally Weekes	AFMA	Employed by AFMA, no interest, pecuniary or otherwise
Mr Daniel Corrie	AFMA	Employed by AFMA, no interest, pecuniary or otherwise
Dr Mark Grubert	AFMA	Employed by AFMA, no interest, pecuniary or otherwise
Dr Lianos Triantafillos	AFMA	Employed by AFMA, no interest, pecuniary or otherwise
Ms Jennifer Power-Geary	AFMA	Employed by AFMA, no interest, pecuniary or otherwise
Miss Audrey Kent	AFMA	Employed by AFMA, no interest, pecuniary or otherwise

Attachment C - Summary of Actions and Recommendations

Agenda Item	No.	Action	Responsible entity	Timeframe
3	1	Once the new SESSFRAG ToR's have been drafted they are to be circulated to members.	AFMA	As soon as possible
4	2	CSIRO to report to SERAG 1 October 2025 if there is an impact (or not) of unbalanced seasonality in the ISMP sampling on quota species assessments, with the aim of informing future data collection programs.	CSIRO	SERAG 1 2025
4	3	SETFIA to add total landings of bycatch species to future WORDAC reports.	SETFIA	SESSFRAG Data Meeting 2026
4	4	CSIRO to complete the analysis of catch and age assessment methods for data-limited orange roughy stocks and provide to SERAG 1.	CSIRO	SERAG 1 2025
4	5	SERAG 1 will then review the proposed assessment method for application to non-Eastern orange roughy stocks.	SERAG 1	SERAG 1 2025
4	6	Prior to SERAG 1, CSIRO to review and summarise the available aged and unaged otoliths for Western Zone orange roughy so that, if SERAG 1 accepts the assessment method, they can determine if the otolith weight and or age data is acceptable for a 2025 assessment or if the assessment should be deferred until 2026. SERAG will determine if the ageing plan will need to be updated to reflect this change.	CSIRO	SERAG 1 2025
7	7	Dr Cathy Dichmont, Dr David Smith and Mr Daniel Corrie to review the wording for the dot point in the interim Harvest Strategy for Tier 2 relating to "New or unproven assessments" to ensure new assessments are not automatically made a Tier 2.	Working group	SESSFRAG Chairs' Meeting 2026
7	8	The Chairs of individual RAGS to record details of which tier to which an assessment is allocated, in the annual species summary document, including any criteria used to make tier level changes. This should	RAG Chairs	Annually

		then be captured in a stock assessment history document (like the SESSF history timeline) and presented at the SESSFRAG Chairs meeting each year.		
11	9	SERAG to consider whether there is merit in a project to improve the estimates of age from an otolith morphometric and biometric approach for orange roughy.	SERAG	SERAG 1 2025
13	10	Dr Andrew Penney to provide AFMA with the corrected depth data for AFMA to update in the logbook data base.	Dr Andrew Penney	As soon as possible
14	11	CSIRO, with permission from the states, to share state data with ABARES of total catch data of quota species.	CSIRO	As soon as possible
15	12	AFMA to investigate the pink ling 5m fish length outlier in the observer data summary report.	AFMA	As soon as possible
15	13	Prior to SERAG 1, the MYTAC working group will meet to consider the data for blue-eye trevalla and pink ling in the context of the MYTAC process and report to SERAG 1.	MYTAC working group	SERAG 1 2025
17	14	Dr Robin Thomson to review the close kin sample size needed for each quota species to obtain specific CV's, then to provide this information to AFMA so that the SESSF Data Plan can be updated to reflect sampling targets for appropriate species.	CSIRO	As soon as possible
17	15	AFMA to include an agenda item in a future RAG meeting to discuss the genetic effective population size approach for potential use in the SESSF fisheries.	AFMA	SESSFRAG Chairs' Meeting 2026
18	16	AFMA to make changes to the data plan, specifically, to include the new tier scales to reflect the revised interim harvest strategy (once it has been approved by the Commission).	AFMA	As soon as possible

Agenda Item	No.	Recommendation
3	1	Recommendations regarding ToR's - to add at least one (preferably both) of the following to the existing (minus the GABRAG Chair) SESSFRAG membership: iii. an independent scientist iv. one industry member
3	2	Regarding quorum, that it be redefined to include the Chairperson and AFMA member as mandatory, and then 2/3 majority membership (or nearest integer) attendance (including the AFMA member).
5	3	SESSFRAG agreed that for the 2025 blue grenadier Tier 1 stock assessment the base case will include the historical acoustic biomass estimates (2003 - 2010) and the modern series (2019 - 2024) excluding the 2019 and 2022 estimates. Sensitivities to the base case will include (i) none of the modern acoustic series, and (ii) all of the modern series with (a) different error structures, and or (b) different catchability coefficients (q) between the modern and historical series.
6	4	SESSFRAG agreed that the template documents for the MSHS Stage 1 deliverables are suitable, provided the following are included: i. Spatial distribution and spatial maps in terms of the fishery, biology and closures to provide a full understanding of these. ii. Implications for at-risk and ETP species, and how these are accounted for and captured under 'risk'. iii. Consideration of external influences and include strategies for how the harvest strategy can remain robust to these changes.
7	5	SESSFRAG agreed that a Tier 2 should be included into the interim Harvest Strategy framework with minor wording changes iii. Dot points 1 and 4 need to be combined iv. The "New or unproven method" dot point refined wording be included (as per Action item 5).
7	6	For the section describing Tier 3, point "Data-limited stock synthesis models with some ageing data; and" be replaced with "data limited population dynamics".
7	7	SESSFRAG agreed to the interim Harvest Strategy Framework with amendments.
9	8	SESSFRAG agreed that the preliminary base case for eastern zone orange roughy assessments be considered at SERAG.
13	9	Approved the agreed catch and discards history table developed and agreed by the Royal Red Prawn Priors Working Group.

13	10	SESSFRAG approved the data edits and CPUE series applied to royal red prawn but not the CPUE series filtered by catch rates for the assessment of the southeastern Australian royal red prawn stock.
13	11	SESSFRAG approved the standardised En10 CPUE index to be used in the RRP assessment.
13	12	SESSFRAG approved using the base case and the proposed list of assessment sensitivity runs, specifications and priors, as developed and agreed by the royal red prawn Priors Working Group
14	13	SESSFRAG agreed there is a need to have recreational catches represented in the data summary document.
15	14	SESSFRAG recommended the following changes for the data summary reports regarding the length and age frequencies: iv. to switch the length/age to the X axis in the summary report. v. to insert a reference line in each of the species observer graphs in the data summary report. vi. AFMA should investigate outliers in length/age data summaries for ease of analysis
21	15	SESSFRAG supported the proposed three projects to be considered in the ARC 2026-27 process and restructured the prioritisation as follows: i. Ageing of SESSF quota species for three years (ending 30 June 2029)- Essential ii. Stock assessments and data services for SESSF species for three years (ending 30 June 2029)- Essential iii. Ecological Risk Assessments (ERAs) for selected SESSF sectors/gears- Essential iv. MSE testing of a novel SPR based approach to determine stock status and set the bycatch TAC for school shark- High v. Survey of protected dogfishes in the 60-mile dogfish closure- Medium vi. Calibration of the Modular Acoustic Optical Survey (M-AOS) unit for future Orange roughy surveys- Low
21	16	SESSFRAG recommended that the *Detection and estimation of discards and bycatch mitigation using AI-enabled Electronic Monitoring* project be referred to FRDC for funding as a high priority.
21	17	SESSFRAG agreed that in general, no research scopes should be brought to the RAG after the research plan has been prioritised and finalised at the Chairs' meeting.