Australian Government

Australian Fisheries Management Authority

Minutes

Meeting	Shark Resource Assessment Group (SharkRAG)		
Meeting Number	2 out of 3	Date	26-27 November 2025
Location	CSIRO, Hobart Tasmania/Microsoft Teams	Time	Day 1: 14:30 – 17:30 Day 2: 08:30 – 17:00
Members	Dr Rik Buckworth (Chair) Dr Robin Thomson (Scientific member) Dr Matias Braccini (Scientific member) Dr Charlie Huveneers (Scientific member) Dr Caleb Gardener (Economic member) Mr Kyriakos Toumazos (Industry member) Mr Jamie Papas (Industry member) Ms Anissa Lawrence (Conservation member) Dr Lianos Triantafillos (AFMA member) Ms Michelle Henriksen (Executive officer – AFMA)		
Apologies	Mr Anthony Harriss (Industry member)		
Invited Participants	Mr Ross Bromley (SSIA[1]) Dr Paul Burch (CSIRO[2]) Dr Miriana Sporcic (CSIRO) Dr Mark Bravington (Consultant)		
Observers	Mr James Woodhams (ABARES[3]) Ms Brooke D'Alberto (ABARES) Dr Rich Little (CSIRO) Mr Ian Dutton (AFMA Commissioner) Ms Anna Willock (AFMA) Ms Sally Weekes (AFMA) Mr Anthony Coggan (AFMA) Mr Dan Corrie (AFMA) Ms Natalie Couchman (AFMA)		

[1] Southern Shark Industry Association
[2] Commonwealth Scientific and Industrial Research Organisation
[3] Australian Bureau of Agricultural and Resource Economics and Sciences

Agenda Item	Title/Topic/Issue	Notes, Action & Recommendations
1.	Preliminaries	**1.1 Welcome and apologies** The Chair, Dr Rik Buckworth, opened the meeting with an Acknowledgement of Country and welcomed participants. The Chair also facilitated the introduction of meeting participants and noted apologies, which are 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. **1.2 Declarations of interests** The SharkRAG 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 proposed for SharkRAG. Declared interests are recorded in the register of interest at **Attachment A**. **1.3 Adoption of agenda** The agenda was adopted as final (see **Attachment B**). **1.4 Minutes of previous meeting** AFMA noted that the minutes from SharkRAG meeting held on 31 July 2025 were distributed to SharkRAG members for feedback prior to finalisation and are available on the AFMA website. **1.5 Actions arising from previous meetings** SharkRAG endorsed the status of all action items from previous meetings. A summary of actions and recommendations from SharkRAG are provided at **Attachment C**.
2	Fishery Updates	SharkRAG noted updates from AFMA and the membership regarding current management arrangements and activities in the Commonwealth Shark Fishery. **2.1 AFMA Management** a. The cumulative catch for school shark reported for the 2025-26 season (as of 13 November 2025) comprised 67 tonnes retained and 51 tonnes discarded. With discards nearly equivalent to retained catch, this highlights ongoing challenges in reducing non-retained interactions with this rebuilding stock. b. An automated baiting project has commenced to evaluate implications for TACs, stock assessment models, by-catch composition and benthic impacts. The project is scheduled for completion in early 2026. c. The SIDaC contract has been extended to 15 February 2028, ensuring continued biological sampling for key species including gummy shark, school shark, blue-eye trevalla and pink ling. d. AFMA proposed an amendment to the snapper possession limits for South Australian landings to strengthen compliance outcomes. e. The 4th and final Southeast Australian Marine Ecosystem Survey was completed in June 2025, with results now available online, providing insights into ecosystem changes over 25 years. f. AFMA noted that 5 endemic shark and ray species are under consideration for listing under the _Environment Protection and Biodiversity Conservation Act 1999_ (EPBC Act), and it continues to engage with the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and Threatened Species

Scientific Committee (TSSC) on implications for management and rebuilding targets. The timeframe for all five of the assessments has been extended by one year until 30 October 2026.

2.2 Industry update

    a.   Significant operational challenges have arisen due to the high school shark abundance, resulting in extended periods of fleet inactivity and spatial displacement of fishing effort to avoid school shark. The increased prevalence of school shark in eastern Bass Strait is particularly concerning because this is the core of the gummy shark fishery. Elevated school shark abundance in these waters may compel operators to relocate fishing effort away from prime gummy shark grounds to avoid interactions, potentially reducing operational efficiency and impacting the economic viability of the fishery.

2.3 Scientific update

    a.   When reviewing the paper '*Evidence for Ecosystem Productivity Decline in School Shark (Galeorhinus galeus): Implications for Stock Assessment Reference Points*' the scientific members discussed long-term impacts of seagrass loss, salinity changes and climate-driven shifts on stock recruitment and suggested potential relocation of pupping grounds to deeper or alternative habitats.

2.4 Economic update

    a.   The economics member highlighted a lack of comprehensive economic data and noted an upward trend in quota lease and sale values despite declining product prices.

    b.   The economic working group met on the 25 November 2025, work to improve economic work that would be brought to the Resource Assessment Groups (RAGs) such as lease price values, quota leasing and transfer values.

2.5 Conservation update

    c.   No updates were provided by the conservation member.

3	Close-kin Mark-Recapture analysis	An update on the close-kin mark-recapture (CKMR) analysis results was provided by Dr Robin Thomson (CSIRO).

3.1 SharkRAG noted:

    a.   Completion of the age-structured CKMR population model has been delayed until 2026, due to challenges associated with incorporating ageing data (see point d below) into the model.

    b.   AFMA proposes deferring the gummy shark assessment due in 2026 to allocate resources to updating the CKMR analysis.

    c.   The updated CKMR dataset now includes approximately 6,000 samples, combining the original 3,000 samples from 2018 with an additional 3,000 collected through the SIDaC program. Kin pair identification resulted in 8 parent-offspring pairs, 95 full-sibling pairs, and 204 half-sibling pairs significantly increasing the statistical power of the assessment.

    d.   Attempts to use epigenetic ageing were unsuccessful; however, CSIRO developed a new statistical method using full-sibling pairs to calibrate and improve age estimates derived from vertebral band counts and length measurements.

		e. Updated analyses of the CKMR dataset using two General Linear Models (GLMs) indicated a population growth rate of 4-7.5% per annum since 2006, with an 85% probability that it was >5% under the more sophisticated GLM that accounts for ageing error. f. This is substantially higher than the assumed 3% annual population growth rate and is considered more robust as it incorporates a broader range of cohorts. g. Informed by these findings, SharkRAG was asked to provide advice on a by-catch TAC for school shark under Agenda Item 5. SharkRAG discussed: a. Members acknowledged the positive indication of school shark stock recovery but noted that the growth rate estimates are based on simplified models and should be interpreted cautiously. b. Concerns were raised about potential biases in the GLM approach, including skip breeding, and changes in fecundity over time because these factors may lead to slight overestimation of the population growth rate. c. Scientific members discussed the importance of incorporating age structure, breeding cycles, and spatial distribution into the final age-structured CKMR model to improve robustness of outcomes. d. There was extensive discussion regarding the possibility that, with an estimated 5% annual growth rate since 2006, the school shark population may now have recovered to a level above the limit reference point (LRP). However, members agreed that this could not be demonstrated conclusively with the current data. e. The current School Shark Stock Rebuilding Strategy (SSRS) and stock status may need review if the updated age-structured CKMR population model confirms sustained recovery at a high population growth rate.
4	School shark spatial analysis	Ms Michelle Henriksen (AFMA) presented an analysis of spatial changes in school shark catches and discards for the period 2015 to 2024. SharkRAG noted: a. There was a clear spatial shift in gillnet fishing effort over time. In 2015, effort was broadly distributed across Bass Strait; by 2017, effort had intensified westward toward South Australian waters, before contracting eastward again by 2024. b. There was an increase in retained school shark catches around South Australia from 2021 onwards. c. A spatial footprint analysis (of the number of grid cells with catch or discard above thresholds of ≥100 kg and ≥1 tonnes), showed a steady increase from 2015 to 2024. This trend suggests an expansion of the spatial extent of school shark fishing grounds. d. The introduction of Electronic Monitoring (EM) in 2015 improved the reliability of discard reporting in gillnet/hook fisheries. e. The trawl discard congruence analysis is currently limited to the 2015-2019 period. SharkRAG discussed: a. Members noted the clear trend of increasing catch and discard footprint and suggested plotting these trends over time alongside effort and TAC to enhance interpretability.

		b. Industry confirmed operational experience aligns with observed patterns, particularly the difficulty in avoiding school shark. c. Concerns were raised about the reliance on logbook data for trawl discards beyond 2019 given the absence of congruence analysis for this period. EM coverage for trawl vessels will commence mid-2026, improving verification of discard reporting. d. Members agreed that spatial analysis provides useful evidence for informing management decisions but should be complemented with further work on catch ratios and congruence validation. SharkRAG recommended: a. AFMA to consider presenting the grid cell count data from the school shark spatial assessment (2015-2024) in a graph that overlays the TAC set and Southern Eastern Scalefish and Shark Fishery (SESSF) effort. This would enable clearer visual comparison of spatial footprint trends relative to management settings and fishing pressure.

5	School shark TAC advice	Dr Lianos Triantafillos (AFMA) member presented by-catch TAC advice for school shark for the next three SESSF fishing seasons (2026-27, 2027-28 and 2028-29).
		
		SharkRAG noted:
		a. The completion of the age-structured CKMR population model has been delayed until 2026, and subject to funding, a Management Strategy Evaluation (MSE) project to test options for determining stock status in 2027 and determine a Harvest Control Rule for future TAC determinations in 2028.
		b. School shark have been listed as conservation dependent (CD) under the EPBC Act since 2009 and are currently classified by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) as overfished and subject to overfishing.
		c. This species has been managed under the SSRS since 2008, which aims to rebuild the stock to above 20% of unfished biomass by 2074 (i.e. within three generations).
		d. Current management measures include an incidental by-catch TAC and a 5:1 gummy-to-school shark catch ratio to prevent targeting, along with gear restrictions, closures and mandatory live release.
		e. There is evidence that the SSRS is achieving its objectives and that the stock is on a rebuilding trajectory, including:
		   o GLMs indicate a population growth rate of between 4-7.5% per annum, with an 85% probability that it was above 5%.
		   o Trawl catch per unit effort (CPUE) was estimated to have increased at a rate of ~8% per annum between the mid-2000s and mid-2010s (Thomson et al 2020). This trend, which serves as an indirect index of abundance, also appears to have been maintained over the last decade.
		   o Logbook records indicate discards in 2024 and 2025 are the highest on record.
		   o Anecdotal reports from industry suggest that they find it increasingly difficult to avoid interactions with school sharks.
		f. In the absence of updated TAC projections, TACs for the past three fishing seasons have been determined using a largely consistent, logbook based methodology (the logbook method). This method accounts for the minimum unavoidable by-catch of the Commonwealth

gummy shark fishery, associated discards and state catch, while incorporating an assumed 3% annual population growth rate (derived from Thomson et al 2020) applied over a two-year projection period.

g. Given that the GLMs cannot generate forward projections, AFMA proposed a multi-year by-catch TAC of 346 tonnes for 2026–27, 2027–28, and 2028–29 SESSF fishing seasons. These TACs were calculated using the logbook method to update the CKMR mortality threshold. This process involved:

- o   Calculating the average annual catch between 2013-17 (consistent with the 2018 CKMR assessment): **234.6 tonnes.**
- o   Projecting this forward at 7% per annum, starting in 2018 through to 2028.
- o   Determining the average projected catch for 2026–2028: **465 tonnes** (used as a proxy for CKMR mortality threshold).
- o   Subtracting forecasted State removals (S) and Commonwealth discards (D) from the CKMR mortality threshold: **346 tonnes,** where:
  - i.   D is expected future Commonwealth discards, calculated as 0.885 times (assumes a live release survival rate of 11.5% from Braccini et al 2012) the 4-year weighted average of historical Commonwealth discards, then scaled forward over a two-year projection period using an annual population growth rate of 7%.
  - ii. S is expected future State removals, calculated as the 4-year weighted average of State catch adjusted by an additional 4% to account for the discarding of lice-damaged fish, then scaled forward over a two-year projection period using an annual population growth rate of 7%. Note that for the 2025-26 season catch by South Australia is assumed to be 13 tonnes, as it is a more reliable representation of recent catches following the introduction of management measures to constrain the catch of school shark in this state. Catch by NSW were updated out-of-session following errors in the database

SharkRAG discussed:

a. There was strong evidence of stock recovery but emphasized the need for maintaining a precautionary approach given the conservation-dependent status of school shark under the EPBC Act.

b. Operational challenges and economic inefficiencies have arisen from the low by-catch TAC, which has contributed to elevated discard rates.

c. Considerable debate was focused on the parameters underpinning AFMA's proposed by-catch TACs, particularly the most appropriate population growth rate and reference time period to apply.

d. SharkRAG identified a population growth rate of 5% annually during the period from 2006 as the most robust estimate and agreed to adopt these revised parameters to update the CKMR mortality threshold using the logbook method. This process involved:

- o   calculating the average annual catch between 2006-2010: **246.6 tonnes**.
- o   projecting this forward at 5% per annum, starting in 2011 through to 2028.

         o   determining the average projected catch for 2026–2028: **565 tonnes** (used as a proxy for CKMR mortality threshold).

e. In previous years, the by-catch TAC was determined using the more conservative of two values (the CKMR-derived mortality threshold or the total forecasted removals) to ensure school shark mortality remained constrained in line with rebuilding objectives.

f. Given the results of the GLMs, SharkRAG recommended using the higher of these two values to calculate the by-catch TAC, reflecting the assessment that additional mortality constraints are not necessary.

g. The forecasted State removals (S) and Commonwealth discards (D) were then subtracted from the CKMR mortality threshold resulting in a TAC of 446 tonnes, as summarised in table below.

Logbook method	
CKMR mortality threshold for 2026-28	565 tonnes
Forecasted STATE removals (S)	51 tonnes
Forecasted COMMONWEALTH discards (D)	68 tonnes
TAC for school shark	**446 tonnes**

h. SharkRAG regarded a 5% annual population rate from 2006 as precautionary, noting that trawl CPUE has increased by ~8% since the mid-2000s. This assumption aligns with reports from industry that school sharks are difficult to avoid and helps explain why discards are the highest on record over the past two years.

i. Some concerns were raised about the exclusion of recreational catch from by-catch TAC calculations, as this may represent significant source of mortality across jurisdictions.

j. A TAC of 446 tonnes represents an increase of 234 tonnes (115%) from the current by-catch TAC of 207 tonnes. Under the Commonwealth Fisheries Harvest Strategy Policy (CFHSP), the large change rule may be applied to limit year-to-year variations in TACs of > 50%.

k. The proposed multi-year by-catch TAC of 446 tonnes aims to achieve a better balance across AFMA's legislative objectives of ecological sustainability, maximising economic returns and efficient and cost-effective management.

l. In addition, an extra 240 tonnes per year represents additional revenue for the fishery that supports reinvestment in science to inform future management of the fishery.

SharkRAG recommended:

a. An incidental by-catch TAC of 446 tonnes for school shark was recommended for the next three SESSF fishing seasons (2026-27, 2027-28 and 2028-29) to allow time for the completion of the age-structured CKMR population model and the updating of stock status through the MSE project.

b. Not to apply the large change rule, as updated scientific information indicates stock rebuilding is occurring at a faster rate than previously assumed. This adjustment is intended to align management with the best available science.

c. To maintain precautionary management, the by-catch TAC is subject to a set of breakout rules that if triggered in any of the next three years, the by-catch TAC will be reviewed and adjusted, if required:

		o *Biological Performance Trigger #1*: if the CKMR model indicates population growth rate is <4% or >9% the by-catch TAC will be reviewed and adjusted, if required, to ensure that rebuilding objectives continue to be met or the TAC is not unnecessarily constraining.
		o *Biological Performance Trigger #2*: If the stock status, as indicated by the MSE project, remains below the LRP or is well above the LRP the by-catch TAC will be reviewed and adjusted to ensure the requirements of the CFHSP are met.
		o *Catch Performance Trigger*: If discards are > 50% of the catch in any single year, a review will be conducted to assess whether fishing mortality is higher than anticipated and an adjustment is needed to support continued rebuilding.
		o *Assessment Quality Triggers*: If there are significant changes to the assessment methodology, data availability, or model assumptions that result in substantial revision of historical population estimates or growth rate projections, the by-catch TAC will be reviewed to ensure it remains consistent with best available science.
		o *General change trigger*: If there are significant changes to the fishery (e.g. environmental, operational, or other relevant factors.) the by-catch TAC will be reviewed to ensure it remains consistent with best available science.
		Action 1: AFMA will assess the implications of the increased school shark by-catch TAC on the catch ratio between gummy shark and school shark and determine whether the current ratio remains appropriate or should be adjusted. This matter is considered a management issue and will be referred to SEMAC for further deliberation. It is not expected that this issue will be returned to SharkRAG for advice.
		School shark by-catch TAC: SharkRAG recommends an incidental by-catch TAC of 446 tonnes for school shark for the next three SESSF fishing seasons (2026-27, 2027-28 and 2028-29). This multi-year by-catch TAC aims to support continued rebuilding of the stock, provides for improved economic returns and cost-effective management, while key scientific research is completed

6	Climate and ecosystem status reports	Dr. Steph Brodie (CSIRO) presented the updated 2025 Climate and Ecosystem Status Report for the SESSF and sought advice from SharkRAG on any additional observations for inclusion in the report.
		
		SharkRAG noted:
		  a. The Climate Adaptation Program, which has been in place since 2023, ensures climate change information is incorporated into fisheries management decisions.
		  b. The program includes key components such as Climate and Ecosystem Status Reports, the Climate Adaptation Handbook (developed with CSIRO), and the Climate Risk Framework that was endorsed by the AFMA Commission in September 2025.

		c. Global sea surface temperatures (SST) from 2023–2025 have been at record highs; while 2025 was slightly lower globally, regional SST in the SESSF remained among the warmest observed in recent years. d. The Bureau of Meteorology (BOM) revised El-Nino Southern Oscillation (ENSO) calculations to account for long-term warming, reclassifying the 2024-25 summer as La Niña, which strengthened the Leeuwin Current and warmed Great Australian Bight (GAB) waters. e. Chlorophyll-a concentrations were elevated along coastal margins and continental shelf, with a significant algal bloom in South Australia linked to marine heatwave and nutrient upwelling. f. FishSOOP data indicated seasonal stratification, with warm surface layers in summer and breakdown in winter, influencing ecosystem dynamics. g. The diatom-to-dinoflagellate ratio increased off Tasmania and South Australia over the past 15 years, suggesting changes at the base of the food web. h. Forecasts indicate continued anomalously warm SST for November–January, particularly off the east coast of Australia, with La Niña conditions expected to persist before returning to neutral. i. BOM's marine heatwave forecast tool is expected to be operational by December, and reports and forecasts are publicly available online. SharkRAG discussed: a. The importance of integrating climate indicators into fisheries management and stock assessment processes was discussed and there was agreement among Members that these reports provide valuable context and should remain publicly accessible, with flexibility to integrate emerging indicators and risk alerts. b. Industry reported an extended cold-water upwelling in South Australia lasting approximately six months, with bottom temperatures as low as 9°C, highlighting unpredictability and potential productivity benefits. c. Industry noted historical cycles of warming and cooling, suggesting variability may overlay long-term warming trends, and shared practical cues such as targeting temperature gradients (15–16°C SST) and monitoring BOM forecasts. d. Scientific members emphasized that forecast accuracy declines beyond three months and variability occurs at multiple scales (seasonal, ENSO cycles, decadal), complicating interpretation of trends. e. The need for improved indices linking environmental conditions to fishery productivity was also discussed, along with the incorporation of real-time data from algal bloom monitoring in South Australia and other regional initiatives.
7	Climate risk framework summary	Ms Natalie Couchman (AFMA) presented an update on AFMA's Climate Risk Framework (CRF) and the trial completed for selected SESSF species. SharkRAG noted: a. The Climate Risk Framework (CRF) that was developed over a three-year iterative process and formally adopted by the AFMA Commission in September 2025. This framework integrates climate considerations into AFMA's decision-making processes and complements broader climate adaptation initiatives, including Climate and Ecosystem Status Reports and climate-aware harvest strategies. b. It employs a four-step process:

1. Assess species risk based on what is known about climate impact and stock status for a species;
2. Identify existing adaptation measures;
3. Evaluate the impact of the adaptation measures identified at step 2 and determine residual risk; and
4. Provide advice to the AFMA Commission.

c. Key updates from the trial included improved guidance for residual risk scoring to ensure scores reflect expected biological outcomes, and recognition that adaptation measures may be implemented progressively rather than all at once and immediately.

d. Implementation will occur gradually across Commonwealth fisheries over three years, starting with several species in the SESSF (including gummy shark and elephant fish).

SharkRAG discussed:

a. Industry raised concerns about the unpredictability of extreme events, such as harmful algal blooms, and their potential short-term impacts on sharks.

b. Members acknowledged the CRF as a critical tool for integrating climate risk into fisheries management and supported its implementation.

c. Scientific members emphasized the importance of accounting for uncertainty in both climate projections and stock assessments. They also highlighted the need for improved data on discards and habitat-specific vulnerabilities for elephant fish.

d. In relation to elephant fish, SharkRAG acknowledged the uncertainty in both the climate impact and stock status information and noted that, due to persistent uncertainty in discard estimates, the stock assessment moved from a Tier 4 assessment to weight of evidence approach in 2020.

e. Suggestions to deal with such uncertainty, included integrating real-time environmental monitoring and fisher observations, aligning CRF outputs with other climate research initiatives, and exploring national-level coordination to ensure consistency across jurisdictions.

Elephant fish CRF Assessment Steps

a. The following advice was provided on each of the relevant steps:
   o Step 1: SharkRAG supported the climate risk assessment of *medium risk* (based on a climate impact risk score of high, and a stock status risk score of near target). It was noted that this stock status may change when the Ecological Risk Assessment (ERA) is updated (scheduled for 2026).
   o Step 2: SharkRAG noted several management, scientific and industry measures have been implemented in recent years.
   o Step 3: none of the measures resulted in a change to the expected stock status or climate vulnerability. The Step 1 risk score of *medium* was retained.
   o Step 4: SharkRAG agreed that elephant fish may still be vulnerable to climate change and agreed that the monitoring and data collection programs for this stock should be reviewed to ensure they are capable of detecting changes in risk profiles. Given that long term climate impacts are a key driver of the medium risk score, SharkRAG supported work to better understand climate drivers for this stock.

Gummy Shark CRF Assessment Steps

		a. The following comments were provided on each of the relevant steps:
		    o Step 1: SharkRAG supported the climate risk assessment of *very low risk* (based on a climate impact risk score of neutral, and a stock status risk score of above target), noting an updated stock assessment is expected in 2026.
		    o Step 4: SharkRAG concluded that climate change is not expected to have long-term impact on the species and agreed that no management response is required at this time.

8	Multi-species harvest strategy project update	Mr Dan Corrie (AFMA) presented an update on the emerging multi-species harvest strategy (MSHS) framework for the SESSF and sought advice from SharkRAG on three elements within the framework.
		
		SharkRAG noted:
		a. The proposed MSHS encompasses three components:
		    o Foundational (objectives, decision architecture, species categorisation);
		    o Operational (TAC-setting processes, buffers, closures); and
		    o Adaptive (mechanisms for monitoring and adjustment in response to ecological, economic, or climate changes).
		b. The modular design allows discrete elements to be refined or replaced over time, promoting flexibility and resilience.
		c. Key concepts introduced include formal integration of spatial closures into harvest strategy settings, climate resilience testing through MSE, and structured multi-species management architecture to manage technical interactions and reduce assessment burden.
		d. Multi-species architecture approaches presented, included:
		    o Pretty Good Multi-Species Yield (PGMSY) to adjust fishing mortality across species;
		    o Trigger Species (TS) with multi-year TACs and breakout conditions;
		    o Indicator Species (IS) to infer status of associated species; and
		    o Métier-Based Management grouping operations by gear, target assemblage, and spatial zone.
		
		SharkRAG discussed:
		a. Members acknowledged the complexity of managing multi-species fisheries and supported the modular approach as a practical and adaptive solution.
		b. Industry emphasized the need to avoid reactive responses to short-term variability.
		c. Scientific members noted the critical role of reliable logbook data for the métier analysis and total mortality estimates and suggested incorporating economic indicators into adaptive monitoring to assess performance and inform trade-offs.
		d. Concerns were raised about balancing sustainability with economic efficiency, particularly for species like school shark.
		e. The TS approach was supported, provided thresholds are clear and precautionary. The IS approach may play a limited role but could reduce assessment burden if robust pairings are validated.
		f. SharkRAG supported continued development and testing of the MSHS approach using MSE.

9	Improved CPUE for the SESSF for gummy shark	Dr Miriana Sporcic (CSIRO) presented a summary of the project "Improved catch per unit effort (CPUE) standardisation for gummy shark in the SESSF".
		SharkRAG noted:
		a. CSIRO presented an update on improved CPUE standardisation methods for gummy shark in the Gillnet Hook and Trap (GHAT) sector, using logbook data from 1997 to 2023.
		b. The project aimed to refine relative abundance indices for Tier 1 stock assessments and address potential biases identified by SharkRAG.
		c. Key enhancements included examination of net length effects, with best-fitting models incorporating linear net length terms and spatial smoothing.
		d. Including soak time as a covariate from 2006 onwards improved model fit and slightly raised CPUE estimates, though data gaps between 2000 and 2005 limited continuity.
		e. minimal differences were observed when spatial closures (e.g. Australian Sea Lion and dolphin closures) were included as factors.
		f. Fleet dynamics were incorporated through vessel-period factors and vessel-year interaction terms to account for new entrants and fleet changes, noting weighting by sampling frequency improved robustness.
		g. Combining hook CPUE series (manual and auto-line) is feasible but should prioritise recent data (from 2018 onwards) for reliability due to improved sampling frequency and catch levels.
		h. CPUE-based coefficients of variation (CVs) are typically narrow and do not capture process error; stock assessment models should apply higher uncertainty assumptions.
		i. Advanced modelling introduced Generalised Additive Models (GAMs) for latitude effects and recommended exploring spatio-temporal modelling for future assessments.
		j. Updated CPUE indices will inform the next Tier 1 gummy shark stock assessment, with recommendations to adopt enhanced modelling techniques and integrate effort covariates where data quality permits.
		SharkRAG discussed:
		a. Members acknowledged the importance of refining CPUE standardisation to improve abundance indices and reduce bias in stock assessments.
		b. Industry supported the inclusion of net length and soak time, noting operational realities such as variability in soak duration and its influence on catch quality.
		c. Industry highlighted potential skipper effects on efficiency, which may exceed vessel effects, and suggested exploring data availability for skipper identifiers.
		d. Scientific members recommended considering latitude-longitude interactions and incorporating technological improvements, such as GPS and electronics as potential covariates.
		e. Future work should explore spatio-temporal models and adaptive approaches to account for environmental and operational variability.
		SharkRAG recommended:
		a. CSIRO to Investigate the feasibility of recovering missing soak time data (2000-2005) and explore skipper-level identifiers for future analyses.
		b. SharkRAG supports the inclusion of net length, soak time, and fleet dynamics factors in CPUE standardisation models

10	RBC and TAC advice for gummy shark and trigger species	Dr Lianos Triantafillos (AFMA member) presented advice on the recommended biological catch (RBC) for gummy shark and TACs for elephant fish and sawshark for the 2026–27 SESSF fishing season.

SharkRAG noted:

Gummy shark

    a. The most recent Tier 1 stock assessment (2023) confirmed all 3 sub-stocks were above the TRP of 48% B_o, with Bass Strait at 50%, Tasmania at 69%, and South Australia at 63%.

    b. The TAC has been reduced in the last couple of fishing seasons to lessen the incidental by-catch of school shark and support the agreed rebuilding rate.

    c. TAC reductions applied to mitigate school shark mortality over the last two fishing seasons are no longer required given the results of the GLMs.

    d. Two RBC options were proposed for the for 2026–27 SESSF fishing season:

        1. 3rd year of the annual step-down RBC (1,660 tonnes).

        2. three-year average RBC (1,733 tonnes).

    e. Both options were considered conservative as the 2024-25 TAC was constrained by 8% to reduce the incidental by-catch of school shark.

Elephant fish and sawshark

    f. catch levels for 2024–25 SESSF fishing season was ~ 36% of TAC for elephant fish and 28% for sawshark, well below the 75% TAC trigger.

    g. The six-year reassessment threshold will be reached in 2026.

SharkRAG discussed:

    a. Scientific members emphasized the importance of updated CPUE standardisation and growth curve refinements for gummy shark before the next assessment.

SharkRAG recommended:

Gummy shark

    a. A TAC of 1,595 tonnes was recommended for the 2026-27 SESSF fishing season. This was derived by deducting state catch (~100 tonnes) and discards (~38 tonnes) from the 3-year average RBC of 1,733 tonnes.

    b. Key considerations informing this recommendation included:

        o All three gummy shark sub-stocks are healthy and TAC decisions should balance sustainability objectives with economic considerations.

        o In the previous two SESSF fishing seasons, the Commission applied the 1st year and 2nd year of the annual RBC to set the gummy shark TAC to reduce the incidental by-catch of school shark.

        o updated GLM analyses of CKMR data indicate a high probability (>85%) that the school shark population has increased by more than 5% annually since 2006, eliminating the need to constrain the gummy shark TAC to mitigate school shark mortality.

        o the 8% TAC reduction applied to limit school shark by-catch during the 2024-25 fishing season resulted in 136 tonnes of uncaught gummy shark quota, minimising the risk in moving to the 3-year average RBC instead of the 3rd year annual RBC in 2026-27.

| | | c. CSIRO's request to defer the gummy shark stock assessment scheduled for 2026 by one year (or possibly two) to prioritise the completion of the age-structured CKMR population model for school shark in 2026 was supported. As that the timing of this assessment will depend on data availability, the exact schedule for the gummy shark assessment will be determined by the SESSF Resource Assessment Group (SESSFRAG) at its mid-2026 data meeting.
 d. CPUE standardisation and growth curve refinements will be updated before this gummy shark assessment is undertaken.

 <u>Elephant fish and sawshark</u>
 e. Maintaining the TACs for elephant fish (114 t) and sawshark (525 t) was recommended, as no triggers have been breached and exploitation rates remain low.
    o Industry emphasised that maintaining current TACs provides stability and avoids unnecessary regulatory changes.
    o Scientific members highlighted the need for ongoing monitoring to ensure sustainability and detect any emerging trends in catch or effort. |
| 11 | Research priorities | Dr Lianos Triantafillos (AFMA member) presented an overview of the updated 2025-26 SESSF Annual Research Statement and outlined the proposed research priorities submitted under the AFMA Research Council (ARC) call for research.

 SharkRAG noted:
 a. The purpose of this agenda item was to identify research priorities for the SESSF to support evidence-based management decisions, with a focus on aligning research priorities with the CFHSP, rebuilding strategies for conservation-dependent species, and emerging challenges such as climate change impacts and EM advancements.

 SharkRAG discussed:
 <u>Research submitted for funding by the ARC in 2027-28 relevant to SharkRAG:</u>
 a. *Review of Tier 1 assessments of SESSF stocks:*
 SharkRAG did not recommend a stock assessment for review at this time but noted that the gummy shark assessment should be reviewed when it is updated.
 b. *Detection and estimation of discards and by-catch mitigation using AI-enabled Electronic Monitoring:*
 SharkRAG supported this project conditional upon the expansion of the project to include the shark fishery.

 <u>Research submitted for funding by the ARC in 2026-27 relevant to SharkRAG:</u>
 a. *MSE testing of a novel Spawning Potential Ratio (SPR) based approach to determine stock status and set the by-catch TAC for school shark:*
 SharkRAG identified this project as the highest funding priority for the GHAT sector.
 b. *Ageing of SESSF quota species for 3 years*
 c. *Stock assessments and data services for SESSF species for 3 years*
 d. *ERAs for selected SESSF sectors/gears (including GHAT gillnet, manual longline and automatic longline)*
 Projects 2-4 were not discussed in detail during this meeting, but they will be considered at the SharkRAG meeting in early 2026. |

12	SESSF data plan	Dr Lianos Triantafillos (AFMA member) presented an overview of the updates to the 2025 SESSF Data Plan.
		
		SharkRAG noted:
		  a. The SESSF Data Plan incorporates logbook and catch disposal record data, sampling targets under the Integrated Scientific Monitoring Program (ISMP) and Shark Industry Data Collection (SIDaC), and fishery-independent data collected through research programs.
		  b. The 2025 Data Plan includes updated sampling targets for gummy shark and school shark, and integration of EM in the GAB and Commonwealth Trawl sectors (planned rollout in July 2026).
		  c. The SIDaC contract has been renewed for the period 2026-2028 with updated sampling targets for gummy shark and school shark, as well as blue eye trevalla and pink ling.
		  d. Improved discard reporting protocols for GAB and Commonwealth Trawl sectors using grouped species categories to enhance accuracy and reduce operator workload.
		  e. Addition of economic data streams, including quota trade and beach price data, to support future economic performance monitoring.
		
		SharkRAG discussed:
		  a. The strong progress in meeting sampling targets for high-effort areas such as eastern Bass Strait, while acknowledging challenges in western Tasmania and some South Australian zones.
		  b. Industry emphasized the importance of maintaining flexibility in sampling protocols to avoid oversampling and ensure representative coverage.
		  c. Scientific members highlighted the need for improved integration of EM data streams with logbook and observer data to validate discard estimates.
		  d. SharkRAG agreed to include economic data streams (quota trade and beach prices) in the Data Plan to support broader performance monitoring objectives.

13	Other business	SharkRAG noted: a. The next meeting is scheduled for 21 January, where AFMA will seek SharkRAG advice on the updated interim harvest strategy and support for research priorities submitted to the ARC for potential funding in 2026-27.
	Close of meeting	The Chair closed the meeting at 17:33pm

Attachment A – Register of interests

Table 1. Members', invited participants' and observers' declarations of interest

Member	Position	Interest declared
Rik Buckworth	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.
Robin Thomson	Scientific Member	CSIRO, Assessment scientist. Acquiring funding for research purposes. PI of AFMA-CSIRO co-funded project 'Ongoing monitoring of school shark abundance and rebuilding in the SESSF using close kin mark recapture'. PI of the AFMA-funded project 2022/0806: "CKMR assessment design for selected key and rebuilding species in the SESSF and development of a CKMR tool for by-catch stocks". Co-investigator on FRDC project to develop harvest strategies for CKMR assessments for school shark and scalefish.
Charlie Huveneers	Scientific Member	Associate Professor and research scientist. Potential interest in funding for research. No pecuniary interest or otherwise.
Matias Braccini	Scientific Member	Employed by WA DPI Senior research scientist for the Shark and Ray Sustainability research group Potential interest in funding for research. No pecuniary interest or otherwise.

Member	Position	Interest declared
Caleb Gardner	Economic Member	Institute for Marine and Antarctic Studies. Organisation is known to submit research funding applications for consideration by AFMA Committees
Kyriakos Toumazos	Industry Member	Chief Executive Officer (South Australian Northern Zone Rock Lobster Fishermen's Association Inc.); Director of Southern Sea Eagles Pty Ltd; Director of Southern Fisheries Pty Ltd; Director Health Balance Pharmacies Pty Ltd; Member South Australian Boating Facility Board; Member of Shark Resource Assessment Group (AFMA); Member of South East Management Advisory Committee; Member of AMSA Regional Safety Committee; Director Southern Shark Industry Alliance; Director PACK Investments Pty Ltd; Director Cruickshank's Corner Developments Pty Ltd; Director Cruickshank's Corner Commercial Pty Ltd; Director Seafood Industry Australia;
Leigh Castle	Industry Member	Tasmanian shark hook, scalefish hook and tuna minor line fisher. Owns SESSF quota and vessel statutory fishing rights. Has a declared interest in shark hook items and RBC recommendations
Anthony Harriss	Industry Member	Gillnet fisher and SFR holder.
Jamie Papas	Industry Member	Gillnet fisher and SFR holder. Board Director San Remo Fishermen's Co/Op
Anissa Lawrence	Conservation Member	Director of TierraMar Ltd, registered charity.

Member	Position	Interest declared
		Independent consultant TierraMar Consulting Pty Ltd
		Undertakes contracts for a number of Conservation Non-Government Organisations, government departments, non-government agencies and the private sector on a range of fishery related matters.
		No pecuniary interest. Conservation member on SPFRAG. Conservation member on SEMAC
		Conservation member on South Australia Rock Lobster MAC and RSC. Conservation member on Spencer Gulf Prawn RSC
		Director and Chair of Ocean Future Fund Inc
Ross Bromley	Invited Participant	Principle of Girella Fisheries Services. Engaged by SSIA as SIDaC manager. Engaged by SETFIA as western orange roughy project manager. Member of Victorian Rock Lobster RAG. EO of Eastrock (Eastern Zone Rock Lobster Industry Association Inc.). Client representative of various MSC Certificates (none are shark *spp*.). No interest, pecuniary or otherwise.
Pia Bessell-Browne	Invited Participant	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.
Paul Burch	Invited Participant	Employed by CSIRO, assessment scientist. CSIRO representative on the Fisheries Statistics and Information Working Group. Acquiring funding for research purposes. Principle investigator on the SESSF stock assessment project.
Rich Little	Invited Participant	Employed by CSIRO, assessment scientist. Acquiring funding for research purposes.

Member	Position	Interest declared
Miriana Sporcic	Invited Participant	Employed by CSIRO, assessment scientist. CSIRO representative on the Fisheries Statistics and Information Working Group. Acquiring funding for research purposes.
Mark Bravington	Invited Participant	Self-employed statistician and fishery assessment scientist; worked for CSIRO from 2001--2023. Principal developer of CKMR. Part of the original School Shark CKMR project, and sub-contracted by CSIRO to provide technical advice on this one. Sub-contracted by CSIRO on AFMA project 2022/0806 "CKMR assessment design... by-catch species", and FRDC project to develop harvest strategies that involve CKMR. Acquiring funding for research purposes.
Steph Brodie	Invited Participant	Employed by CSIRO. Acquiring funding for research purposes.
Lianos Triantafillos	AFMA Member	AFMA member, Manager of the Gillnet, Hook and Trap fishery. No interest pecuniary or otherwise.
Natalie Couchman	Invited Participant	Employed by AFMA. No interest, pecuniary or otherwise.
Dan Corrie	Invited Participant	Employed by AFMA. No interest, pecuniary or otherwise.
Michelle Henriksen	Executive Officer	AFMA EO. No interest pecuniary or otherwise.
Kurt Davis	Observer	Employed by ABARES. No interest, pecuniary or otherwise.
James Woodhams	Observer	Employed by ABARES. No interest, pecuniary or otherwise.

Member	Position	Interest declared
Brooke D'Alberto	Observer	Employed by ABARES. No interest, pecuniary or otherwise.
Anna Willock	Observer	Employed by AMA, Deputy CEO. No interest, pecuniary or otherwise.
Anthony Coggan	Observer	Employed by AFMA. No interest pecuniary or otherwise.
Sally Weekes	Observer	Employed by AFMA. No interest pecuniary or otherwise.

Attachment B – Adopted agenda

Location: Hobart, Tasmania/Online, Microsoft Teams
Chair Name: Dr. Rik Buckworth

26.11.25 Day 1: 14:30 – 17:15

Time	Item	Purpose	Presenter
14:30	**1. Preliminaries** 　1.1 Acknowledgement of Country 　1.2 Declarations of interest 　1.3 Adoption of Agenda 　1.4 Minutes from previous meetings 　1.5 Actions arising from previous meeting	For noting	Chair/Michelle Henriksen (15 min)
14:45	**2. Fishery updates**	For noting	Members (15 min)
15:00	**3. School shark CKMR analysis**	For advice	Robin Thomson (60 min)
16:00	**4. School shark spatial analysis**	For advice	AFMA/CSIRO 15 min
16:15	**5. TAC advice for school shark**	For advice	AFMA (60 min)
17:15	***End of Day***		

27.11.25 Day 2: 9:00 – 16:30

Time	Item	Purpose	Presenter
09:00	**5. School shark bycatch TAC advice continued**	For advice	AFMA (90 min)
10:30	*Morning Tea – 15 min*		
10:45	**6. Climate and ecosystem status report**	For noting	Steph Brodie (30 min)
11:15	**7. Climate Risk Framework summary**	For advice	Natalie Couchman (30 mins)
11:45	**8. Multi-Species Harvest Strategy Policy project update**	For advice	Dan Corrie (60 min)
12:45	*Lunch – 30 min*		
13:15	**9. Improved CPUE standardisation for gummy sharks in the SESSF**	For noting	Miriana Sporcic (30 min)
13:45	**10. 2026-27 RBC advice for gummy shark and TAC advice for trigger species**	For advice	AFMA (60 min)
14:45	*Afternoon Tea – 15 min*		
15:00	**11. Research priorities**	For advice	AFMA

	10.1. ARC call for research		(30 min)
15:30	**12. SESSF Data plan**	For advice	AFMA (45 min)
16:15	**13. Other businesses**	For advice	Chair/members (15 min)
16:30	***End of Day***		

Attachment C - Summary of Actions and Recommendations

Agenda item	Responsibility	Action/recommendation
4.0 School shark spatial analysis	AFMA	**Recommendation 1:** AFMA to consider presenting the grid cell count data from the school shark spatial assessment (2015-2024) in a graph that overlays the TAC set and Southern Eastern Scalefish and Shark Fishery (SESSF) effort. This would enable clearer visual comparison of spatial footprint trends relative to management settings and fishing pressure.
5.0 By-catch TAC advice for school shark	AFMA	**Recommendation 2:** SharkRAG recommends an incidental by-catch TAC of 446 tonnes for school shark for the next three SESSF fishing seasons (2026-27, 2027-28 and 2028-29). This multi-year by-catch TAC aims to support continued rebuilding of the stock, provides for improved economic returns and cost-effective management, while key scientific research is completed *School shark incidental by-catch TAC* To ensure that catches of school shark are constrained to the incidental by-catch of the gummy shark fishery and that the total mortality threshold that supports the agreed rebuilding rate is not exceeded, the by-catch TAC of 446 tonnes is recommended noting that: a. the completion of an age-structured close-kin mark-recapture (CKMR) population model is delayed until 2026, and subject to funding, a Management Strategy Evaluation (MSE) project will test options for determining stock status in 2027 and determine a Harvest Control Rule for future TAC determinations in 2028. b. updated analyses of CKMR data using two Generalised Linear Model (GLMs) indicate a population growth rate of between 4-7.5% per annum, with an 85% probability that it was above 5% under the more sophisticated GLM that accounts for ageing error. This represents a substantial increase compared to the 3% growth rate assumed in the 2018 CKMR assessment and is considered more robust since it incorporates a broader range of cohorts. c. assuming a 5% annual population increase since 2006 is considered a precautionary approach, given the range of values from the GLMs. d. The higher population growth estimate is consistent with the 8% increase observed in trawl CPUE since the mid-2000s, which serves as an indirect index of abundance, and with anecdotal reports from the fishing industry indicating that school sharks are significantly more abundant than previously assumed. This also helps explain the record-high discard levels observed over the past two years. e. In the absence of an updated CKMR assessment, TACs for the past three fishing seasons have been determined using a largely consistent, methodology (the logbook method) that aims to minimise total mortality (by the states and Commonwealth)

of school shark. This method accounts for the minimum unavoidable by-catch of the Commonwealth gummy shark fishery, associated discards and state catch, while incorporating the estimated 3% annual population growth rate from the CKMR assessment over two years. The recommended by-catch TAC setting process is based on the logbook data for catches and discards as the best available estimate of recent total mortality.

f. SharkRAG again used the logbook method to determine the TAC, but updated the CKMR mortality threshold using revised parameters, including a population growth rate of 5% (instead of the previously assumed 3%). The process involved:

- calculating the average annual catch between 2006 and 2010: 246.6 tonnes.
- projecting this forward at 5% per annum, starting in 2011 through to 2028.
- determining the average projected catch for 2026–2028 as 565 tonnes, which represents the CKMR mortality threshold.

g. The forecasted State removals and Commonwealth discards were subtracted from the CKMR mortality threshold to calculate the TAC of 446 tonnes (see table below).

Logbook method	
CKMR mortality threshold for 2026-28	565 tonnes
Forecasted STATE removals	51 tonnes
Forecasted COMMONWEALTH discards (allowing for survival)	68 tonnes
TAC for school shark	**446 tonnes**

h. To maintain precautionary management, the by-catch TAC is subject to a set of breakout rules. If triggered in any of the next three years, the by-catch TAC will be reviewed and adjusted if required:

- *Biological Performance Trigger #1*: if the CKMR model indicates population growth rate is <4% or >9% the by-catch TAC will be reviewed and adjusted, if required, to ensure that rebuilding objectives continue to be met or the TAC is not unnecessarily constraining.
- *Biological Performance Trigger #2*: If the stock status, as indicated by the MSE project, remains below the Limit Reference Point (LRP) or is well above the LRP the by-catch TAC will be reviewed and adjusted to ensure the requirements of the Commonwealth Fisheries Harvest Strategy Policy are met.

		o *Catch Performance Trigger*: If discards are > 50% of the catch in any single year a review will be conducted to assess whether fishing mortality is higher than anticipated and an adjustment is needed to support continued rebuilding. o *Assessment Quality Triggers*: If there are significant changes to the assessment methodology, data availability, or model assumptions that result in substantial revision of historical population estimates or growth rate projections, the by-catch TAC will be reviewed to ensure it remains consistent with best available science. o *General change trigger*: If there are significant changes to the fishery (e.g. environmental, operational, or other relevant factors.) the by-catch TAC will be reviewed to ensure it remains consistent with best available science.
5.0 By-catch TAC advice for school shark	AFMA	**Action 1:** AFMA will assess the implications of the increased school shark by-catch TAC on the catch ratio between gummy shark and school shark and determine whether the current ratio remains appropriate or should be adjusted. This matter is considered a management issue and will be referred to SEMAC for further deliberation. It is not expected that this issue will be returned to SharkRAG for advice.
10. 2026-27 gummy shark RBC and trigger species TAC advice for the 2026-27 fishing season		**Recommendation 3:** SharkRAG recommends a Recommended Biological Catch (RBC) of 1,733 tonnes for gummy shark and a TAC of 114 tonnes elephant fish and 525 tonnes for sawshark for the 2026-27 SESSF fishing season. ***Gummy shark RBC*** SharkRAG considered two RBCs for gummy shark for the 2026-27 SESSF fishing season. These were the 3rd year of the 'annual' RBC of 1,660 tonnes and the '3-year average' RBC of 1,733 tonnes. SharkRAG recommended adopting the 3-year average RBC of 1,733 tonnes for the 2026-27 TAC, based on the following considerations: • in the previous two SESSF fishing seasons, the Commission applied the 1st year (with an 8% reduction) and 2nd year of the annual RBC to set the gummy shark TAC to reduce the incidental by-catch of school shark. • the updated GLM analyses of CKMR data indicate a high probability (>85%) that the school shark population has increased by more than 5% annually since 2006, eliminating the need to constrain the gummy shark TAC to mitigate school shark mortality. • the 8% TAC reduction applied to limit school shark by-catch in the 2024-25 fishing season resulted in 136 tonnes of uncaught 'banked' gummy shark quota, suggesting minimal risk in moving to the 3-year average RBC instead of the 3rd year annual RBC in 2026-27. • SharkRAG supported CSIRO's request to defer the 2026 scheduled gummy shark stock assessment by one year (or possibly two) to prioritise the finalization of the age-structured CKMR population model for school shark in 2026.

		• SESSF Resource Assessment Group (SESSFRAG) will confirm timing of the gummy shark assessment at its mid-2026 data meeting. ***Elephant fish and sawshark*** Elephant fish and sawshark are both categorised as 'trigger species' under the SESSF Harvest Strategy Framework. Neither species breached the trigger for review in the 2025-26 fishing season. Consistent with the agreed trigger species approach, SharkRAG recommended maintaining the TAC for elephant fish (114 t) and sawshark (525 t) for the 2026-27 SESSF season. A review of the indicators for trigger species is due in 2026.

10.0 Research Priorities		**Recommendation 4:** SharkRAG reviewed the research priorities included in the SESSF Annual Research Statements that are due to/have been submitted to the AFMA Research Council (ARC) call for research, and supported the following project proposals that are relevant to SharkRAG:
		
		Research priorities put forward to be submitted for ARC funding in 2027-28:
		• Review of Tier 1 assessments of SESSF stocks
		    o SharkRAG did not recommend a stock assessment for review at this time but noted that the gummy shark assessment should be reviewed following an update to the assessment in 2027 or 2028.
		• Detection and estimation of discards and by-catch mitigation using AI-enabled Electronic Monitoring
		    o SharkRAG tentatively supported this project conditional upon the expansion of the project to include the shark fishery.
		
		Research priorities that have been submitted as part of the ARC call for research and are now under review for funding in 2026-27:
		• Ageing of SESSF quota species for three years (ending 30 June 2029).
		• Stock assessments and data services for SESSF species for three years (ending 30 June 2029).
		• Ecological Risk Assessments (ERAs) for selected SESSF sectors/gears (including GHAT gillnet, manual and autoline).
		• MSE testing of a novel SPR based approach to determine stock status and set the by-catch TAC for school shark
		    o SharkRAG highlighted this project proposal as the highest priority for funding for the shark fishery.

Next meeting	AFMA	SharkRAG 3 meeting: 21st January 2026