2027–28 Research Statement for the Bass Strait Central Zone Scallop Fishery

Each year, AFMA develops a Research Statement for the Bass Strait Central Zone Scallop Fishery (BSCZSF) in consultation with the Scallop Resource Assessment Group (ScallopRAG) and the Scallop Management Advisory Committee (ScallopMAC). Through this process, consideration is also given to the BSCZSF Five Year Strategic Research Plan 2022–2026.

The 2027–28 Research Statement for the BSCZSF consists of the following elements (relevant to this fishery only):

1. Outcomes of the AFMA Research Committee (ARC) funding round for the 2026–27 financial year;
2. Active ARC-funded projects;
3. Future ARC funding commitments;
4. Priorities for potential ARC funding starting in the 2027–28 financial year;
5. Research priorities and proposals for consideration by COMRAC/FRDC;
6. Active FRDC-funded projects; and,
7. A compendium of recent project reports.

ScallopRAG and ScallopMAC are invited to develop and/or refine research priorities for inclusion in this document, using the ranking criteria below as a guide. Depending on the stage of the research cycle, AFMA may also request that these advisory bodies evaluate proposals for potential ARC and/or FRDC funding. Please note that all amounts provided in the following tables are GST exclusive.

Ranking criteria for proposed ARC/FRDC projects

Cost		Management priority	Feasibility
High:	>$200K	Essential	High
Medium:	$100K - $200K	High	Medium
Low:	<$100K	Medium	Low
		Low	

1. Outcomes of the ARC funding round for the 2026–27 financial year

Title	Deliverables	Funded (Y/N)	Amount
No priorities were included in 2026-27 research call			

2. Active ARC-funded projects

Title (project code)	Objectives	Funding	Due date
Review and refinement of the Harvest Strategy for the BSCZSF (250803)	1. Evaluate the HS against the objectives of the CHSP and aims of the Management Plan. 2. Evaluate the need for spatial management and identify suitable limit and target reference points for regions. 3. Refine the Harvest Control Rules to ensure that management action is taken to maintain the stock near the target and reduce the exploitation rate as biomass declines (i.e. limit reference point is approached) and apply suitable target exploitation rates when biomass is high (around or above the target reference point). 4. Evaluate options for closing beds for more than one year and setting multi-year TACs. 5. Establish rules in the HS to determine the frequency at which biomass surveys should be conducted and identify which beds should be surveyed. 6. Establish guidelines for establishing spatial closures, that include consideration of the connectivity of beds, density of Scallops >85 cm and proportion of Scallops <85 cm 7. Evaluate potential guidelines to ensure that bycatch, high risk species and habitat impacts are included in decision making processes such as spatial closures. 8. Assess the potential use of buffers to address uncertainty in stock status and variability in factors underpinning the productivity of Scallop 9. Consolidate into the HS all actions currently used to maintain sustainability of stocks, developed in this project.	$76K	25 Sep. 2026

BSCZSF: 2026–2028 biomass survey including targets species and bycatch (250802)	1. Coordinate a fishery survey across the regions of the fishery to measure the size distribution and calculate biomass estimates to assess the potential for commercial catch rates in the BSCZSF using established methodology; 2. Inform the assessment of fishery impacts on bycatch species by year by bed, in particular the species identified as high risk in the fishery Ecological Risk Assessment, Endangered, Threatened and Protected (ETP) species and any other species identified as 'of interest'; 3. Report the draft results to AFMA, ScallopRAG and ScallopMAC and produce a final report to be published on the AFMA website. 4. Inform the assessment of fishery impacts on habitats and communities by year by bed, in particular the habitats and communities identified as high risk in the fishery Ecological Risk Assessment, Vulnerable Marine Ecosystems (VMEs) and any other habitats and ecological communities identified as 'of interest'	$236K (for three surveys - 2026 survey cancelled)	30 Jun. 2028

3. Future ARC-funding commitments

Project title	**FY 2026–27**	**FY 2027–28**
Review and refinement of the Harvest Strategy for the BSCZSF	$38K	-
BSCZSF: 2026–2028 biomass survey including targets species and bycatch	$82K	$78K
Annual commitment	**$120K**	**$78K**

4. Priorities for potential ARC funding starting in the 2027–28 financial year

Title	Need	Deliverables	Evaluation		
			Total cost	Priority	Feasibility
Nil[1]	-	-	-	-	-

[1] Given the impacts of the Eleven-armed Seastar and negligible fishing activity in 2026, ScallopRAG will revisit the priority "*Determining if recruitment is under-represented in biomass surveys: establishing a sampling method for estimating scallop recruitment*" when developing the Annual Research Statement for 2028–29

5. Research priorities and proposals for consideration by COMRAC/FRDC

Title	Need	Objectives	Evaluation		
			Total cost	Priority	Feasibility
Investigation of predation dynamics, population dynamics and potential management responses to the Eleven-Armed Sea Star (*Coscinasterias muricata*).	The (endemic) Eleven-Armed Sea Star has had a widespread and devastating impact on Commercial Scallop beds in Commonwealth, Tasmanian and Victorian waters. There is a need to investigate the predation dynamics and population dynamics of the Eleven Armed Sea Star in order to develop potential management responses to future outbreaks of this species.	1. Ascertain predation thresholds and tipping points 2. Describe seastar movement and energetics 3. Develop potential mitigation strategies 4. Integrate findings with observer and survey data 5. Identify potential commercialisation opportunities for Eleven–Armed Seastar	Medium	High[2]	High

[2] Only considered a high priority for FRDC funding if no ARC-funded biomass survey (through project 250802) is conducted in 2027. Otherwise, this priority is redundant.

6. Active FRDC-funded projects

Title (project code)	Objectives	Funding	Due date
Building industry capacity to lead co-management initiatives within the Bass Strait Central Zone Scallop Fishery: Training industry to conduct biomass estimate surveys (2019-120)	1. Build industry capacity to lead and participate in fishery data collection projects 2. Industry coordinated data collection to inform biomass estimation of the fishery 3. Industry coordinated data collection and data analysis to inform decision making and develop co-management arrangements	$75K	Dec. 2026
Characterising the impacts of warm water and other stressors on the boom-and-bust cycle of the Commercial Scallop (2022-044)	1. Identify intrinsic stressors (e.g., surveying techniques (e.g., video vs dredge) and timing, location (e.g., east vs west) and timing of fishing, the use of tumblers, size limits of scallops, etc.) and extrinsic stressors (e.g., temperature, food availability, etc.) commonly faced within the Pecten fumatus fishery that have the capacity to negatively impact scallop condition and cause mortality 2. Experimentally evaluate the effects of intrinsic, extrinsic and synergistic stressors on scallop physiology, condition, and mortality 3. Opportunistically video survey and collect scallops for sampling from scallop beds exposed to adverse conditions and/or experiencing die-offs to corroborate experimental results against real-world results 4. Develop recommendations to monitor for, and respond to, environmental conditions that may drive scallop bed die-offs 5. Work with industry and management to co-design decision frameworks for the sustainable management of Commercial scallop fisheries, including designing regional-specific approaches to optimising fishing opportunity and maximising continuity of stock, including obtaining video survey data from closed areas that may support recruitment	$373K	Jun. 2026

7. A compendium of recent project reports

Trials of oceanographic data collection on commercial fishing vessels in SE Australia

Wider investigation of the use of video survey techniques to determine commercial scallop abundance in inshore and offshore waters, closed areas and juvenile beds