Australian Government
Australian Fisheries Management Authority

Small Pelagic Fishery

Five Year Strategic Research Plan 2027–31

Securing Australia's fishing future
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Version	History	Endorsed by
1.0	Replaces the Small Pelagic Fishery Five Year Strategic Research Plan 2022–26	The South East Management Advisory Committee out-of-session, August 2026

Introduction

The *Fisheries Administration Act 1991* specifies that AFMA is to establish priorities in respect of research relating to Commonwealth fisheries and arrange for the undertaking of such research. This is supported by the *Small Pelagic Fishery Management Plan 2009* (Management Plan) which further specifies that cost-effective and high quality research is carried out in relation to this fishery in accordance with a five-year strategic research plan.

This Small Pelagic Fishery (SPF) Strategic Research Plan 2027–31 (Strategic Research Plan) was developed by AFMA in consultation with the SPF Resource Assessment Group (SPFRAG) and the South East Management Advisory Committee (SEMAC) and identifies areas of high priority research for the SPF for the period 2027 to 2031. The purpose of the Strategic Research Plan is to:

- assist with the pursuit of the management objectives for the SPF, which are consistent with AFMA's objectives; and
- enable the effective implementation and appraisal of management arrangements.

The Strategic Research Plan provides the framework for identifying annual research priorities for the SPF, each of which are to be compiled in an Annual Research Statement for the fishery. The Annual Research Statement should also consider the cost-effectiveness, priority and timeframe for undertaking the work. Where research has already been funded, the Annual Research Statement should identify this, including the source of funding.

The Strategic Research Plan and accompanying Annual Research Statements are used by:

- the AFMA Research Committee (ARC) at its annual August meeting to develop the ARC annual research call made in September.
- the ARC to recommend priorities to the Commonwealth Fisheries Research Advisory Committee (ComRAC) for potential Fisheries Research and Development Committee (FRDC) funding
- FRDC in making its annual call for research expressions of interest.

The Strategic Research Plan aims to address AFMA's strategic research programs in the AFMA Strategic Research Plan 2023–28 outlined below.

Research framework

Roles

Resource Assessment Groups

Each Commonwealth fishery has an associated Resource Assessment Group (RAG). These groups provide advice and recommendations to management advisory committees, AFMA Management, the AFMA Commission and the AFMA Research Committee on the status of fish stocks, byproduct and bycatch species, fishery economics and on the impact of fishing on marine ecosystems and the environment. RAGs also advise on the type of information required for specific stock assessments.

RAG members include fishery scientists, industry members, fishery economists, AFMA Management and other interest groups. Having this variety of membership ensures that industry knowledge and developments in management strategies, market prices and the costs of harvesting as well as scientific information are considered when making recommendations.

SPFRAG provides advice on the SPF. Further information on this group can be found here.

Management Advisory Committees

Each Commonwealth fishery also has an associated Management Advisory Committee (MAC). These committees provide advice to AFMA on biological and economic indicators for fish stocks, byproduct and bycatch species, and on the impacts of fishing on marine ecosystems and the environment.

MAC members are drawn from industry, policy, conservation, state and territory governments, recreational and research fields. Advice provided by MACs must be evidence-based and address biological, economic and wider ecological factors affecting the performance of the fishery. Advice and recommendations from MACs must align with AFMA's pursuit of its legislative objectives.

SEMAC provides advice on the SPF and endorses each Five Year Strategic Research Plan for the fishery. Further information on this committee can be found here.

The AFMA Research Committee

The AFMA Research Committee (ARC) considers research priorities that contribute to improved management of Commonwealth fisheries. Specifically, the AFMA Research Committee provides advice to the AFMA Commission and AFMA Management on:

- major fishery and cross fishery research issues affecting Commonwealth fisheries to support AFMA in meeting its objectives and other legislative requirements;
- the outcome of its review of finalised research projects in terms of delivery of outputs and outcomes, adoption/impacts and required adjustment to AFMA processes;
- the strategic directions for research relevant to AFMA's information needs; and,
- priorities for potential funding from AFMA, Fisheries Research and Development Corporation (FRDC) and other funding sources.

The ARC also supports AFMA's administration of the annual research budget.

The FRDC

The FRDC takes a leading role in planning and investing in fisheries research, development and extension (RD&E) to support the ongoing sustainability of Australian aquatic sectors and ecosystems.

The Corporation is a co-funded partnership between the Australian Government and fisheries and aquaculture. It is a statutory corporation under the *Primary Industries Research and Development Act 1989* and is responsible to the Minister for Agriculture, Fisheries and Forestry.

FRDC plans, invests in and manages RD&E for fishing and aquaculture and the wider community, and encourages the adoption of the resulting knowledge and innovation for impact. It coordinates government and industry investment and works with stakeholders to establish and address their R&D priorities.

In mid-2025, the FRDC released the *FRDC RD&E Plan 2025-2030*. This plan consists of five themes outlined below:

1. Growing, resilient and innovative
2. Best practices and production systems
3. Capable and diverse people
4. Secure access and resource allocation
5. Community trust, acceptance and value.

The AFMA research process

For information on prioritising research, calling for and assessing proposals, please view the research timeline here.

AFMA's Strategic Research Plan

AFMA's Strategic Research Plan consists of three research programs, each of which is underpinned by one or more research strategies, outlined below.

Program 1 – Fishery stocks, biology and the marine environment

a. Collect appropriate information to support stock assessments.
b. Explore alternative species assessment methods and models.
c. Assess the impacts of fishing on non-target species and the marine environment.
d. Assess the impact of climate change on Commonwealth fisheries assessment and management

Program 2 – Development

a. Bycatch reduction and development of underutilised fisheries resources
b. Take account of Indigenous, commercial, and recreational interests
c. Develop a coordinated approach on economic issues.
d. Improve and enhance fishery harvest strategies and management framework
e. Management development
f. Compliance methodologies

Program 3 – Evaluation

a. Management indicators

For further information on the above, please refer to the AFMA Strategic Research Plan 2023–28

SPF research priorities 2027–31

Fishery stocks, biology and the marine environment

a. Collect appropriate information to support stock assessments.

- Undertake Daily Egg Production Method (DEPM) surveys for all target species/stocks as required under the SPF Harvest Strategy.
- Build Industry capacity in data collection methodologies.
- Improve knowledge of key biological parameters for each target species/stock.
- Support the continuation of annual fishery assessment reports.
- Monitor stock boundaries of SPF target species.

b. Explore alternative species assessment methods and models.

- Consider alternative tools (e.g. genetic techniques) to estimate stock size/biomass of SPF target species/stocks.

c. Assess the impacts of fishing on non-target species and the marine environment.

- Investigate the feasibility of AI identification and enumeration of target, byproduct and bycatch species (including Endangered, Threatened or Protected species) from electronic monitoring footage (initially through post-processing and potentially in near real-time when systems allow).
- Explore innovative midwater trawl net designs that reduce bycatch of marine mammals and maintain (or improve) catch efficiency of target species.
- Support research on the role of SPF species/stocks in the broader marine ecosystem.
- Undertake Ecological Risk Assessments for both the purse seine and midwater trawl components of the fishery as required.

d. Assess the impact of climate change on Commonwealth fisheries assessment and management

- Expand the use of environmental data loggers (that contribute to the FishSOOP program) within the SPF and encourage regular analysis of the data collected.
- Maintain climate and ecosystem reporting for the SPF, including the compilation of recent research on climate change impacts relevant to this fishery.
- Encourage research on the impacts of climate change on the SPF and relevant ecosystem components within the area of the fishery.

Development

a. Bycatch reduction and development of underutilised fisheries resources

- Explore measures to minimise interactions with Endangered, Threatened or Protected species.

b. Take account of Indigenous, commercial, and recreational interests

- Support research that seeks to improve estimates of the recreational and Indigenous harvest of SPF target species/stocks.
- Collaborate with adjacent jurisdictions on research into cross-sectoral shared stocks.

c. Develop a coordinated approach on economic issues.

- Refine the reporting of economic indicators to assist in the estimation of maximum economic yield for the fishery and inform harvest strategy settings.
- Explore opportunities for increasing sustainable economic returns to the Australian community (such as reducing the gap between the total allowable catch and the realised catch where applicable).

d. Improve and enhance fishery harvest strategies and management framework

- Conduct five-year reviews of the SPF Harvest Strategy (or earlier if required).

e. Management development

- Support work on cost-effective data collection tools.

f. Compliance methodologies

- Develop methodologies that encourage and enhance compliance with the SPF Management Plan and related legal instruments.

Evaluation

a. Management indicators

- Ensure fishery data are of a sufficient quality and quantity to support and evaluate management arrangements.