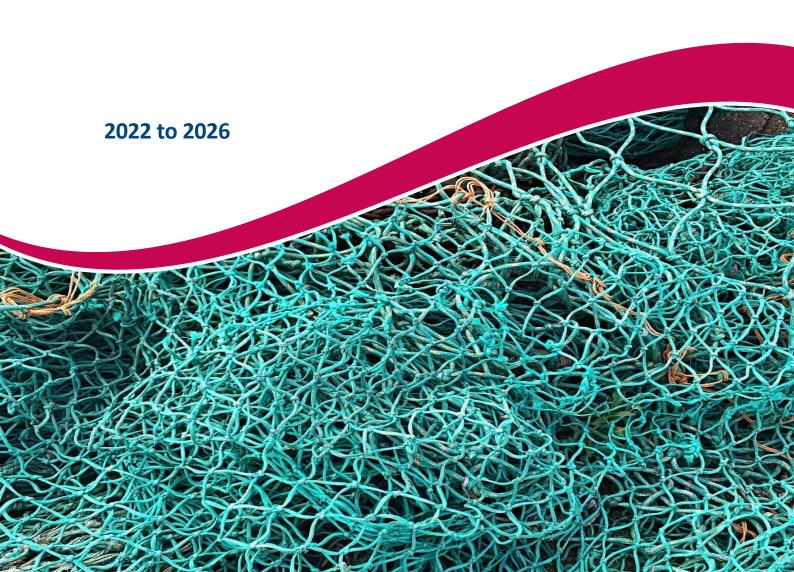


Australian Government

Australian Fisheries Management Authority

Small Pelagic Fishery Five Year Strategic Research Plan



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Version	Updates	Approver
1.0	Replaces SPF Five Year Strategic Research Plan 2017-21	Heather Johnston

Introduction

The Fisheries Administration Act 1991 (FAA) provides that AFMA is to establish priorities in respect of research relating to fisheries and arrange for the undertaking of such research. The Small Pelagic Fishery Management Plan 2009 (Management Plan) also provides measures by which the objectives of the Management Plan are attained – to provide services, including research and data collection, needed to manage the fishery.

This Small Pelagic Fishery (SPF) Strategic Research Plan 2022-26 (Strategic Research Plan) was developed by the Australian Fisheries Management Authority (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 2022 to 2026.

This Strategic Research Plan identifies the research priorities for the fishery over the next five years to:

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

This Strategic Research Plan provides the framework for identifying annual research priorities for the SPF. The annual research statement should 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.

This Strategic Research Plan and annual research statements are used by:

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

This Strategic Research Plan aims to address AFMA's strategic research programs in AFMA's Strategic Research Plan for 2016-17 to 2021-22, outlined below.

Research Framework

Roles

Resource Assessment Groups

The main function of RAGs is to peer review scientific data and information and provide advice to AFMA on the status of fish stocks, sub-stocks, species (target and non-target species) and the impact of fishing on the marine environment.

The Management Plan provides that RAGs give advice in relation to stock status, research needs, the environment and economics of the fishery.

SPFRAG provide advice on issues affecting the SPF.

Management Advisory Committees

Management Advisory Committees (MACs) are the main advisory bodies to AFMA. They provide advice on a variety of issues including fisheries management arrangements, research, compliance, and management costs.

The MACs provide a link between AFMA and those with an interest in the fishery with members from commercial industry, fisheries management, the scientific community, the recreational sector, the environment/conservation sector and, in some instances, state governments.

MACs provide a broad perspective on management options and are a forum where issues relating to a fishery are discussed, problems identified and possible solutions developed. The MACs consider the advice of RAGs and provide recommendations to the AFMA Commission based on how the options will contribute to meeting the overall objectives for a particular fishery and the pursuit of AFMA's legislative objectives. The South East MAC (SEMAC) provide advice on issues affecting the SPF.

AFMA Research Committee

The AFMA Research Committee (ARC) considers essential research priorities that contribute to improved management for fisheries. As part of its role the committee also:

- develops research priorities for Commonwealth fisheries in conjunction with MACs that are consistent with AFMA's management needs and objectives specified in the Fisheries Administration Act 1991 and Fisheries Management Act 1991;
- approves five-year fishery research plans for individual fisheries managed by AFMA;
- advises the AFMA Commission on the allocation of AFMA research funds and accounts and reports against their use;
- monitors biological and economic indicators in Commonwealth fisheries, with an emphasis on sustainability indicators and economic efficiency; and
- liaises with research providers and funding agencies to make sure AFMA's research priorities are given appropriate weight in the wider allocation of research funds.

The ARC now has a more strategic role in providing strategic advice to the AFMA Commission:

- on major fishery and cross fishery research issues affecting Commonwealth fisheries to support AFMA in meeting its objectives and other legislative requirements;
- on the strategic directions for research relevant to AFMA's information needs; and
- recommending research priorities and projects for potential FRDC funding.

Fisheries Research and Development Corporation

The FRDC is a co-funded partnership between its two stakeholders, the Australian Government and the fishing industry.

The FRDC's role is to plan and invest in fisheries research, development and extension (RD&E) activities in Australia. This includes providing leadership and coordination of the monitoring, evaluating and reporting on RD&E activities, facilitating dissemination, extension and commercialisation. The FRDC achieves this through coordinating government and industry investment, including stakeholders to establish and address

RD&E priorities. In addition, the FRDC monitors and evaluates the adoption of RD&E to inform future decisions.

In July 2020 the FRDC released its Fisheries Research and Development Corporation R&D Plan 2020-2025. This plan outlines FRDC investment that will be targeted to achieve five outcomes:

- 1. Growth for enduring prosperity
- 2. Best practices and production systems
- 3. A culture that is inclusive and forward thinking
- 4. Fair and secure access to aquatic resources
- 5. Community trust, respect and value.

FRDC is currently updating the process for identifying, assessing and funding priorities; details are available on their website: www.frdc.com.au.

The research process

For information on prioritising research, calling for and assessing proposals, please view the research timeline at the <u>AFMA website</u> ('Environment and Research' – 'Science and Research' – 'Advice for Researchers')

AFMA's Strategic Research Plan

AFMA has four research programs, which are directed to pursing AFMA's legislative objectives. These support the SPF research priorities and are listed below

Program 1 – Fishery stocks, biology and the marine environment

- collect appropriate information to support stock assessments
- explore alternative species assessment methods and models
- assess the impacts of fishing on the marine environment

Program 2 – Economic and Social

- Development of underutilised fisheries resources
- Develop the social and economic aspects of commercial, recreational and Indigenous fishing
- Develop coordinated approach on major fishery and cross fishery economic issues

Program 3 – Development

- Management development to reduce complexity and promote economic certainty.
- Compliance methodologies to deter illegal fishing and invest in processes and technologies for more cost-effective compliance arrangements.

Program 4 – Evaluation

Monitor and evaluate effectiveness of existing management strategies.

For further information on AFMA's research programs, refer to the AFMA Strategic Research Plan 2017-22

SPF Research Priorities 2022-26

Fishery stocks, biology and the marine environment

Fishery Assessments

- Undertake Daily Egg Production Method (DEPM) surveys as outlined under the Small Pelagic Fishery Harvest Strategy.
- Improve knowledge of key parameters in stock assessment models for stock species (i.e., adult parameters in blue mackerel).
- Monitor protected species populations and interactions; develop approaches to obtaining a better
 understanding of the impact of the fishery on protected species, the level of interactions and
 consider measures that may reduce protected species interactions.
- Annual compilation of the Fishery Assessment Report.

Stock Structure and Distribution

• Monitor stock boundaries of Jack Mackerel and Redbait, both of which have shown evidence of not following the current east/west management through the middle of Tasmania.

Climate change and adaptive management

• The SPF Harvest Strategy to incorporate options for adaptive management and responses to concerns raised over climate change.

Gear and technology

• Improving midwater trawl net designs to reduce bycatch of marine mammals and improve efficiency of catch of target species.

Economic and Social

Maximising net economic returns to the Australian community

- Achieving the optimum utilisation of the SPF.
- Achieving government targets in relation to the recovery of the costs of AFMA as outlined in the AFMA Cost Recovery Impact Statement.
- Select and measure key performance indicators and reference points that measure performance relative to maximising net economic returns to the Australian community.
- Identify and address barriers in the SPF that are preventing the TACs being 100% caught.

Risk-cost-catch

- Consider the risk-cost-catch framework in the context of implementing management measures and expenditure on management, compliance, assessment and other research.
- Incorporate consideration of social and economic risk and the impact of the SPF on other fisheries (eg, large pelagics) and ecosystem (eg, forage role) when targeting optimal utilisation through catch setting and other regulations.

Development

No priorities have been identified for the period of this Strategic Research Plan.

Evaluation

Monitor and evaluate effectiveness of management strategies

- Develop and conduct meta rules for the SPF Harvest Strategy.
- Conduct annual evaluations of key triggers in the SPF Midwater Trawl to determine the need for a new Environmental Risk Assessment (ERA) in the sector.