Snapper Science Stakeholder Group (SSSG) Communiqué

Meeting #1 – Wednesday 1 March 2023

The first Snapper Science Stakeholder Group (SSSG) meeting was held on Wednesday 1 March 2023 at West Beach, and via online video conference call. Matters discussed are set out below.

Dr Mike Steer, Research Director, SARDI Aquatics and Livestock Sciences outlined that the purpose of the Snapper Science Stakeholder Group (SSSG) is to facilitate discussions between researchers and stakeholders to ensure that critical stakeholder input is captured and reflected in the Snapper Science Program.

SSSG stakeholder representatives are responsible for conveying stakeholder feedback and providing the stakeholder groups they represent with research updates following each meeting.

Background and overview of the Snapper Science Program

The State Government is providing $2.5 million, matched by $2.5 million from the Fisheries Research and Development Corporation (FRDC), for the Snapper Science Program, as part of an $8.8 million support package to promote the recovery of South Australia's depleted Snapper stocks.

Projects proposed under the Program aim to address key knowledge gaps identified in the most recent Snapper stock assessment and from consultation with stakeholders during regional community information sessions following the release of the stock assessment report.

This initial meeting outlined the principles and key objectives of the program (see below), with individual projects still to be shaped in consultation with industry.

The South Australian Research and Development Institute (SARDI) is leading the three-year, multi-disciplinary Snapper Science program that will include opportunities for collaboration with other research partners. SARDI has started to identify essential capabilities and skillsets through its existing networks that would benefit the program. A national workshop to consider synergies with other jurisdictions is being progressed.

Progress and outcomes will be broadly communicated through regular updates.

FRDC FISHERIES RESEARCH AND DEVELOPMENT CORPORATION
Government of South Australia
Department of Primary Industries and Regions
SARDI SOUTH AUSTRALIAN RESEARCH AND DEVELOPMENT INSTITUTE

Program governance

The governance structure of the Snapper Science Program includes;

- a PIRSA Steering Committee that is responsible for overseeing the program to ensure it remains on track in delivering key objectives

- the Snapper Science Stakeholder Group (SSSG) consisting of representatives from the commercial recreational and Aboriginal/Traditional fishing sectors, and charter boat association. This group will operate in an open, collaborative, and consultative manner that facilitates achievement of outcomes to advance the Snapper Science Program, while also acting as the primary channel for information sharing and co-ordination of activities between respective stakeholder groups.

- a Science Group, consisting of an internal working group of researchers who will meet to plan and establish project tasks, conduct the research, collect and analyse data, and deliver research outcomes

Snapper Science Stakeholder Group (SSSG) membership

The SSSG includes representatives from PIRSA Fisheries and Aquaculture, SARDI Aquatic and Livestock Sciences, the Fisheries Research and Development Corporation (FRDC), Marine Fishers Association (MFA), RecFish SA, Charter Boat Owners of South Australia, Southeast Professional Fishermen's Association (SZRL), and the South Australian Northern Zone Rock Lobster Fishermen's Association. A Traditional Fisheries Management representative from PIRSA will also be consulted.

Program principles and objectives

The Snapper Science Program is a national program with local application in South Australia, that will focus on four key principles:

1. Gold standard science
2. Engagement with stakeholders and the broader public
3. Building capability and capacity in people
4. Promoting champions for the cause.

These principles underpin seven big-picture objectives:

1. Enhance the daily egg production method and trial/integrate acoustic surveys - to improve the accuracy and precision of spawning biomass estimates
2. Understand what drives successful spawning and recruitment - to provide a window into stock health approximately five years into the future, when Snapper reach fishable size
3. Clarify stock structure dynamics – to confirm our understanding of the structure of southern Australian stocks and, specifically, determine the capacity for self-replenishment of the West Coast population
4. Regenerate habitat and stocks – to stimulate replenishment and growth of the stocks by maximising available spawning and nursery habitats, while (in a concurrent program) producing and releasing hundreds and thousands of juvenile Snapper into the gulfs
5. Forecasting the future of the fishery – develop forecasting capacity to predict future trends in fishable biomass under various recruitment scenarios, management arrangements and a changing environment

6. Develop an online recreational catch reporting tool – to enable valuable information provided by the recreational fishing community to be captured and accounted for in future Snapper assessments
7. Improve the assessment of Snapper stocks – by incorporating the learnings from this research program and ongoing development, provide the best possible information for managing this important resource.

Proposed research projects

Dr Craig Noell (SARDI) presented an overview of the proposed projects.

Key points:

- SARDI is working with commercial fishers of the Marine Scalefish Fishery (MSF) to collect fish for adult sampling. All fish collected are processed at an accredited processor and the fillets are donated to FoodBank. Collected samples have multiple uses:
    - provide pedigree biological information to support stock assessment
    - provide tissue samples to scope close-kin mark-recapture (CKMR) feasibility
    - provide genetic and otolith samples to refine stock structure (i.e. Spencer Gulf/West Coast dynamics)
- Otolith chemistry and morphometrics will be considered in determining different stocks
- The recreational fishing community are encouraged to get involved in aspects of the program such as habitat restoration, fingerling release, promotion of digital data collections, etc., however, citizen-science involvement in collecting adult samples for research purposes is not supported given the 'sustainability' concerns of the stocks.
- Method refinement (of spawning biomass) is scheduled to occur in Gulf St Vincent (GSV) in summer 2023/24. GSV is the preferred location, due to its convenience and cost-effectiveness in undertaking the field-work, noting that the results obtained from GSV are likely to be transferable to the Spencer Gulf
- The method used to estimate spawning biomass (i.e., Daily Egg Production Method – DEPM) is an established method that adds value to our understanding of the reproductive behaviour of snapper and is an important contribution to the stock assessment. The DEPM constitutes a part of the integrated assessment which also included population demographic information and multiple time-series of fishery-dependent catch and effort data. The hydroacoustic work proposed in the Snapper Science Program will add another independent line of evidence to further enhance the assessment.
- If close-kin mark-recapture (CKMR) is developed there will be further discussion about whether all of these assessment methods are needed. Associated costs in these methods will be considered as part of the future stock assessment program.

Next meeting

The next SSSG meeting will be held on Monday 5 June 2023.