

Minutes

Line & Trap Harvest Strategy Working Group Meeting 2

Details

Location: Rydges Sydney Central
28 Albion Street
Surry Hills, NSW 2010

Date: 29–30 May 2023

Chairperson: Ian Cartwright

4. Daniel Stewart, Commercial Fishing Member
5. Mitchell Sanders, Commercial Fishing Member
6. Stephen McGuire, Commercial Fishing Member
7. John Stewart, DPI Fisheries Scientist Member
8. Darren Hale, DPI Fisheries Manager Member
9. Nicholas Giles, DPI Fisheries Harvest Strategy Manager Member
10. Chad Lunow, QLD DAF Observer
11. Aaron Puckeridge, Executive Officer
12. Rowan Chick, DPI Observer
13. Ashley Fowler, DPI Observer
14. Natalie Dowling, CSIRO FishPath facilitator

People present

1. Tony Smith, Independent Scientist
2. Sevaly Sen, Independent Economist
3. Ian Puckeridge, Recreational Fishing Member

Apologies

1. Brad Gibson, Recreational Fishing Member
2. James Norris, Recreational Fishing Member

This Meeting:

No.	Issue	Action
1	Acknowledgment of country and introduction	The Chair opened the meeting with an Acknowledgment of Country, paying respect to the traditional owners of the land on which the Line & Trap Harvest Strategy Working Group (the Working Group) was meeting and paying respect to Elders past, present and emerging.
2	Action items from meeting one	<p>The Executive Officer (EO) updated the Working Group on the progress of the first meeting's action items:</p> <ol style="list-style-type: none">1.1 The EO is to distribute the <u>Tweed Aboriginal Cultural Fishing Local Management Plan (Trial Plan)</u> and <u>Birpai Barray (Hastings) Aboriginal Cultural Fishing Local Management Plan (Trial Plan)</u> to the Working Group before meeting 2 <p>The Working Group noted that these documents and hyperlinks to them on the NSW Department of Primary Industries (DPI) website had been distributed in the pre-meeting briefing package.</p> <ol style="list-style-type: none">1.2 The Chair will write to the Aboriginal Fishing Advisory Council (AFAC), indicating strong support from the Working Group for further engagement and guidance regarding Aboriginal cultural fishing interests, including the opportunity for participation of an AFAC nominee

The Working Group noted that a letter was being drafted and will be sent to AFAC.

1.3 Completion of FishPath questionnaires for Snapper and Kingfish to be scheduled for meeting 2

The Working Group noted that a detailed agenda had been circulated prior to the meeting and that they were scheduled to progress through the FishPath questionnaires in the upcoming agenda items.

The EO also noted that the minutes from the first meeting had been circulated for comments and updated accordingly. The Working Group accepted the updated version of the minutes as final, and noted that they would be published on the Working Group webpage with a Chair's Summary.

3 Snapper FishPath questionnaire

NSW DPI provided a revision of FishPath background. FishPath is a decision support tool that guides users through a series of fishery diagnostic questionnaires to categorise a fishery. The questionnaires cover the harvest strategy components: data collection, assessment, and management options. Component options are drawn from a comprehensive bank within the FishPath tool and results from the questionnaires inform the suitability of each option. This process ensures that all possible options are considered for a harvest strategy in a transparent process. Furthermore, bookmarks and notes can be taken against each question and saved to make them easily revisable. A results narrowing process is completed at the conclusion of the questionnaires. This is completed while considering both the FishPath output and the harvest strategy objectives to retain preferred and remove impractical options. The Working Group noted that NSW DPI will complete the results narrowing out of session and present the initial FishPath outputs at meeting 3.

The Working Group completed the questionnaire for Snapper (*Chrysophrys auratus*), recognising most of the harvest is taken in the recreational and commercial Ocean Trap and Line Fishery (OTLF) sectors. The scope of the questionnaire was defined on this basis, noting the Working Group does not have the expertise to complete the questionnaire for Aboriginal cultural fishing at present.

The questionnaire was completed for the data collection and management components, with the technical assessment component and any differences for the Charter Fishery to be considered by NSW DPI.

Discussion

The Working Group discussed how the assessment component of the FishPath questionnaire relates to the Snapper stock assessment. The Snapper stock assessment is currently completed using both NSW and Queensland (QLD) catch data and the FishPath questionnaire for data and management measures was completed considering NSW data and management information only. It was noted that the assessment component of FishPath is most useful for data poor fisheries. The existing stock assessment techniques developed for Snapper are likely to be more extensive than many of

		<p>the assessment options outlined in FishPath (noting that Fishpath does identify high level assessment options, but not bespoke modelling options as exists for the joint assessment). Therefore, repeating the questionnaire to include information relating to QLD may not be useful.</p>
4	Kingfish FishPath questionnaire	<p>The Working Group completed the questionnaire for Yellowtail Kingfish (<i>Seriola lalandi</i>), where the scope for the Kingfish fishery was similarly defined as recreational and commercial OTLF activities in NSW waters, recognising most of the harvest is taken in these sectors.</p> <p>The questionnaire was completed for the data collection and management components, with the technical assessment component and any differences for the Charter Fishery to be considered by DPI.</p> <p>Discussion</p> <p>The Working Group noted that the questionnaire was only being completed for activities in NSW, while the range of the eastern Kingfish stock spans from South Australia to QLD. Similarly to Snapper, the harvest strategy may need to account for cross-jurisdictional fishing mortality beyond the NSW based questionnaire. For example, Kingfish are occasionally harvested in QLD's Rocky Reef Fishery and Kingfish will be covered under the developing QLD Rocky Reef Harvest Strategy.</p> <p>While not specific to the FishPath questionnaires, the Working Group also commented on Kingfish fishery dynamics and noted that milky fleshed fish are becoming more common as far south as Ulladulla. This could affect market demand and commercial fishing patterns into the future. Further, error ranges in the recreational catch survey estimates were recognised to introduce uncertainty in assessing total Kingfish and Snapper mortality (noting that sensitivity scenarios in the assessment could help inform uncertainty associated with recreational catch), and members supported the benefits of collecting more accurate recreational data.</p> <p>The Working Group was provided with an overview of a complete harvest strategy to provide further context on how FishPath outputs can help guide harvest strategy development. While FishPath will highlight the range of data, management measures and assessment methods available, the Working Group's role will be to decide on which should be chosen and how these should be incorporated into harvest strategies.</p>
5	QLD Department of Agriculture and Fisheries update	<p>Mr Chad Lunow (QLD Department of Agriculture and Fisheries (DAF)) provided the Working Group with an overview of the QLD Rocky Reef Working Group, harvest strategy development and Snapper management. Snapper is currently assessed as 'depleted' in QLD and is thought to be between 10–23% of unfished biomass. Age data used in the stock assessments indicates few fish in the older age classes in the fishery, even for line caught fish. Data sources used to assess the QLD portion of the stock include:</p>

- Standardised Commercial Catch-Per Unit Effort (CPUE) from NSW and QLD trap and line fisheries
- Fishery independent juvenile trawl surveys in Moreton Bay
- Boat ramp surveys
- The QLD State-wide Recreational Fishing Survey

In QLD, most of the Snapper harvest is by the recreational sector (85% in the last survey). QLD are currently developing additional recreational data collection methods, including voluntary reporting of Spanish Mackerel (*Scomberomorus commerson*) catches and depredation events via the *QLD Fishing 2.0* recreational fishing mobile phone application and a pilot boat ramp camera trial to complement staffed boat ramp surveys.

The Working Group was provided with information on Snapper dynamics in QLD. Fish in southern QLD are a part of the same genetic stock as NSW. Stock mixing could be partially supported by a southward flow of recruitment after spawning events, although inshore Winter spawning generally results in low larval dispersal. While total commercial Snapper harvest remains low in QLD, an increasing portion of QLD Snapper catch is coming from the Great Barrier Reef Marine Park Area, with the south-east of QLD producing less fish.

QLD have the following management arrangements in place for Snapper:

- A competitive commercial catch limit of 42 t
- Gear restrictions
- A closed season from 15 July to 15 August
- A minimum legal length of 35 cm (both recreational and commercial), with 1 fish over 70 cm (recreational only)
- A recreational possession limit of 4 and boat limit of 8

A Management Strategy Evaluation (MSE, Campbell et al. 2021) identified that only the most significant changes to management arrangements resulted in stocks recovering over long time periods. The seasonal closure in QLD is timed to reduce fishing pressure on spawning fish when they are aggregating and particularly susceptible to fishing mortality.

Discussion

The Working Group discussed how these management arrangements affect the fishery dynamics. It was noted that other management arrangements, such as introducing Vessel Tracking, competitive quota for Snapper and Pearl Perch (*Glaucosoma scapulare*) and increased reporting as well as the impacts of depredation and market competition with New Zealand trawl caught Snapper have affected the dynamics of the Rocky Reef Fishery. As a result, despite a commercial catch limit being in place for Snapper, this has generally been under-caught and there is no race to fish. In the future, the commercial fishing sector may indicate a preference

for Individual Transferrable Quota (ITQ) instead of the existing competitive quota system, so there is less competition for catch.

The Working Group noted the investment QLD are putting in recreational catch data collection and requested an update on NSW initiatives to improve recreational catch estimates. The value of MSE for this Working Group was also noted and strategies to complete this for the biological stock could be discussed with QLD DAF further.

Action items

2.1 An agenda item on NSW recreational catch data is to be scheduled for the third Working Group meeting

2.2 NSW DPI is to discuss with QLD DAF the capacity of completing MSE on behalf of the Working Group. NSW DPI will also explore any other viable options for completing MSE

6 Introduction to harvest strategy scope

NSW DPI provided an overview of harvest strategy scope. Scope describes the function that a harvest strategy will perform in relation to relevant fisheries (i.e., the management scope) and is important to shape a strategy's goals and objectives.

Discussion

The Working Group noted at present they are not equipped to incorporate Aboriginal cultural fishing into the scope, goals, and objectives of the harvest strategies. Advice from AFAC will be sought on how this should be approached.

The Working Group discussed NSW's pathway to harvest strategy development. Some agencies have taken a top-down approach, creating a multi-species framework first then adding single species strategies as required (e.g., for depleted species). This Working Group is beginning with developing strategies for key species and will also consider the multi-species framework as these develop. Members noted it would be timely to begin fishery level discussions soon, to ensure that interspecies and fishery relationships are accounted for.

Action items

2.3 NSW DPI are to schedule a fishery level harvest strategy discussion in the meeting 3 agenda

2.4 NSW DPI are to draft fishery definitions and scopes for the Snapper and Kingfish harvest strategies and provide them to the Working Group for consideration at meeting 3

7 Introduction to harvest strategy goals and objectives

NSW DPI presented background theory relating to harvest strategy goals and objectives, and their role in identifying what a harvest strategy aims to achieve. Goals and objectives typically contain the following components:

- Goal – a high level summary of the overarching aim of the harvest strategy
- Strategic objectives – more refined strategic objectives that may identify concepts important to each sector

- Operational objectives – specific and measurable objectives that are used to track fishery performance and provide the foundation for decision rules that will manage harvest to achieve the objectives

Goals and objectives must also complement the existing aims of overarching legislation and policy but can incorporate values more specific to the fishery.

The Working Group reviewed the goals and objectives of the NSW Lobster Fishery Harvest Strategy as an example of a published NSW harvest strategy. The Working Group noted that the language used in these complemented that of the Fisheries Management Act 1994 (FMA), Share Management Plans and Fishery Management Strategies while also introducing fishery specific concepts. Operational objectives will differ between the *Lobster Fishery Harvest Strategy* and the Snapper and Kingfish harvest strategies, as the operational objectives will relate to fishery specific indicators.

8 Recreational stakeholder workshops for Snapper and Kingfish project

NSW DPI introduced the FRDC project '*Integrating recreational fishing information into harvest strategies for multi-sector fisheries*' (FRDC 2019-021). Historically, fisheries legislation and policy has had a strong commercial focus and commercial fishing is traditionally the sector with the most data. However, in NSW, recreational fisheries are growing and are estimated to harvest more of some species than commercial sectors. Furthermore, the goals and objectives of recreational fishers in NSW and Australia are not well understood. This project aims to aid integrating recreational fishing goals and objectives into harvest strategies.

To date, the project has identified stock-specific recreational fishing objectives for Mulloway (*Argyrosomus japonicus*), Yellowtail Kingfish and Snapper. To achieve this, recreational fishers experienced with these stocks were engaged to attend stakeholder workshops and recreational objectives for each stock were discussed and developed. Objectives were classed into 4 categories, ecological, economic, social, and managerial.

Most recreational objectives were similar between the stocks. Ecological goals differed where some species have specific sustainability or mortality issues, for example, Kingfish are resistant to barotrauma, so the objective of minimising post-release mortality was not identified as a focus for this stock.

The next stage of the project focuses on identifying the most important objectives for each of the 3 stocks. Data on the preferences of workshop attendees were elicited, as were those of a broader cross-section of the NSW recreational fishing sector via a state-wide survey based on the Recreational Fishing Fee database. The latter is expected to include more casual recreational fishers who may have different goals and objectives to experienced fishers. Data from this survey are currently being analysed.

Discussion

The Working Group noted the value of this research for defining recreational goals and objectives for Snapper and Kingfish in harvest strategies. It was also noted that fishing for food was not a

well-represented goal in this research. It is expected this will be better represented when sampling a broader stakeholder base of more casual recreational fishers.

9 Goals and objectives for the Snapper and Kingfish harvest strategies

The Chair introduced the agenda item and noted that during the meeting the Working Group had been provided with information relating to the goals and objectives of existing harvest strategies and research to build knowledge around recreational goals and objectives. The Working Group was now tasked with discussing what should be included in the Snapper and Kingfish harvest strategy goals and objectives.

NSW DPI presented an example of what the Snapper and Kingfish harvest strategy goals and objectives could contain, for discussion by the Working Group. This acknowledged the broader goals of legislation such as the FMA, while referencing fishery specific issues and values.

Discussion

The Working Group noted that the commercial sector's goal for Snapper and Kingfish is a steady and robust stock status which allows for high economic return. Increasing the availability of large fish is a goal of the recreational sector. The goal of higher availability of large fish could be built into the strategies, although monitoring the size of recreationally captured fish is difficult within current data collection frameworks. NSW DPI is exploring options to obtain additional data for Mulloway from the recreational sector and other priority species could be included in this process. Other jurisdictions are currently designing and trialling recreational data collection systems for key species, such as Southern Rock Lobster (*Jasus edwardsii*) in Tasmania, which may be useful to consider.

The Working Group discussed management controls which could increase the availability of large fish. Noting recreational targeting preferences and previous reform in the commercial fishing sector, managing recreational fishing could have the most substantial effect on large fish. If single sector management changes are recommended by the harvest strategy, justification for this and public communication will be important.

The Working Group also noted that much of the discussion had focussed on management controls and limiting catch, but harvest strategies also typically provide for higher catches where there is higher stock biomass. The Working Group will need to consider the full spectrum of stock health and what management action may be appropriate in each circumstance.

Noting the discussion on the cross-sector goals and objectives for Snapper and Kingfish, the Working Group requested that NSW DPI develop draft wording for the Snapper and Kingfish harvest strategy goals and objectives out of session and provide them for consideration prior to the third meeting.

Action items

2.5 NSW DPI are to draft goals and objectives for the Snapper and Kingfish harvest strategies and provide them to the Working Group for consideration prior to meeting 3

2.6 The Chair is to update the Working Group on Tasmanian rock lobster reporting systems for the recreational sector at meeting 3

10 Other business

The Working Group noted the proceedings of the meeting and discussed the work schedule for future meetings. Recreational catch data was a substantial discussion topic and the need for a recreational data agenda item has been captured in Action item 2.1. Furthermore, it would be valuable for the Working Group to consider the management options available to control recreational catch.

Action items

2.7 NSW DPI is to schedule a recreational fishing management agenda item in meeting 3

Next Meeting:

The third meeting of the Line & Trap Harvest Strategy Working Group will be held on 11-12 September 2023.
