Department of Primary Industries

OUT23/733

Minutes

Meeting	Mulloway Harvest Strategy Working Group		
Meeting Number(s)	8	Dates	13th and 14th of March 2023
Location	Sydney	Time	09:00 – 17:00 09:00 – 13:00
Members	Independent Members: James Findlay (Chair), Sevaly Sen (Economist), Bob Kearney (Scientist) Aboriginal fishing representative: Stephan Schnierer Commercial fishers: Johnny Alessi, Stephen Reed, Troy Billin Recreational fishers: David Rae, Paul Lennon, Mark Corbin DPI Fisheries Manager: Heath Folpp DPI Fisheries Scientist: Julian Hughes		
Observers	Rowan Chick (DPI Fisheries Scientist, Harvest Strategies), Ashley Fowler (DPI Fisheries Scientist, Harvest Strategies), Josh Cansdell (DPI, Executive Officer), Nick Giles (DPI, Fisheries Manager, Harvest Strategies), Shane McGrath (DPI Fisheries Manager)		
Guest Speakers	Emma Simpson (DPI Recreational Fishing), Ben Travis (DPI Compliance)		
Apologies	Bob Kearney – 13th and 14th of March 2023 David Rae – 14th of March 2023		

Agenda Item	**Issue**	**Notes & Actions**
1.	Welcome and Introduction	1.1 Acknowledgment of Country The Chair opened by acknowledging Traditional Custodians and paying respects to Elders past, present and emerging. 1.2 Apologies and Recognition of Observers

		The Chair welcomed all working group members and observers. 1.3 Confirmation of Agenda The meeting agenda was accepted by the working group with minor modification. 1.4 Declaration of pecuniary interests Updates to the register of pecuniary interests were confirmed. 1.5 Progress of other NSW fisheries harvest strategies DPI provided an update on progress of the draft NSW Spanner Crab Harvest Strategy and formation of the Line and Trap Harvest Strategy Working Group which will commence developing harvest strategies for Snapper and Kingfish. 1.6 Minutes of the previous meeting The minutes of the previous meeting were revised and noted for adoption at the 9th meeting.
2.	Updates for ongoing business items	DPI provided an update on ongoing business items, including the Business Efficiency Program (BEP), progress on improving commercial and recreational data, planned Mulloway stocking activities, additional research proposals (including application for FRDC funding) and projects on bycatch reduction devices (BRDs) in trawl fisheries.
2.1	Overview of Mulloway Harvest Strategy support measures	DPI provided an update on progress of support measures, including: • The Mulloway compliance program, which commenced in July 2022 to increase education and compliance around Mulloway management rules • Developing options to improve data collection from recreational and commercial sectors • Submission of a FRDC proposal to fill knowledge gaps around Mulloway biology and gear selectivity to improve stock modelling and operation of the harvest strategy • Ongoing work to reduce potential incidental mortality through Bycatch Reduction Devices and improved gear designs • Restocking undertaken through the DPI Marine Stocking Program, with 150K+ juvenile Mulloway stocked since 2021

2.2	Update on recreational reporting options and development	DPI provided an update on work continuing into NSW recreational reporting methods, including potential options for improving reporting for Mulloway and other species. Work is continuing to develop an online system that could integrate into the current FishSmart application and FishOnline data systems. DPI managers and researchers recently attended a catch reporting workshop run by a team of international reporting experts in QLD to further assess approaches undertaken by other jurisdictions. **Discussion** The working group discussed potential methods to enhance recreational reporting, supporting an education program to increase understanding of the importance of reported catch data to current and improved future stock assessments, supporting effective management to help rebuild the Mulloway stock.
2.3	Update on Mulloway Assist	DPI gave an update on the focused Mulloway compliance program 'Mulloway Assist' that commenced on 1 July 2022 as a recommended support measure to enhance education and compliance around management arrangements in place for Mulloway. The program continues to maximise voluntary compliance and build effective deterrence to illegal fishing of Mulloway, with 29 minor offences related to Mulloway recorded since the program commenced. **Discussion** Members discussed methods to boost compliance with fishing rules, and to further enhance education to both the recreational and commercial fishing sectors.
3.	Minimising incidental mortality	Members discussed several issues around potential for incidental (non-target) mortality as a factor that could affect the rebuilding of the Mulloway stock and operation of the harvest strategy. Potential for incidental mortality is likely tied to changes in environmental conditions (and thus recruitment, abundance and location of Mulloway), and is a risk associated with all sectors and fishing methods. A range of measures are in place across sectors to reduce potential for incidental mortality, including through gear design and construction requirements, static and responsive spatial restrictions, limits to the

		number and types of gear able to be used, prescribed or voluntary measures such as the use of circle hooks, and advice or requirements around handling and release methodology. **Discussion** The working group revisited the relevance of managing incidental mortality within commercial fisheries that may interact with juvenile Mulloway when targeting other species. It was recognised that significant work has been undertaken to successfully reduce incidental mortality, (e.g., modified gear design or use, use of Bycatch Reduction Devices, improvements to handling and release methodology), and managing incidental mortality can be achieved under separate mechanisms to the harvest strategy. Members discussed the potential to invite representative/s from relevant areas to a future meeting to learn more about mitigation methods and options. **Action** 1. Members agreed to raise the issue of managing incidental mortality with the Commercial and Recreational Fishing Advisory Councils and invite representative/s to discuss mitigation methods and options for the primary harvest sectors.
4.	Decision rules and developing draft	Members continued review and development of the draft harvest strategy, with discussion proceeding to the decision (or harvest control) rules. Decision rules are management actions (e.g., actions to increase or decrease harvest) that are clearly linked to the strategy's objectives, indicators and reference points. The developing draft harvest strategy aims to integrate the outcomes of all the discussions that the working group has had to date, focussing on achieving the rebuilding stage of the harvest strategy as well as the longer-term management of the Mulloway stock. The harvest strategy will also specify the duration of the rebuilding phase and how often the harvest strategy should be periodically reviewed (e.g. every 5 years). Rebuilding the stock to more sustainable levels will require management arrangements that reduce fishing mortality and protect the stock, allowing biomass to rebuild to an agreed percentage of the otherwise unfished biomass (i.e. virgin biomass or B_0). Once stock

		biomass has increased to the agreed level, the harvest strategy will switch from using the indicator and decision rule to support the rebuilding of the Mulloway biomass, to indicators and decision rules designed to meet the operational objective of maintaining biomass around the long-term target reference point and meet the harvest strategy's strategic and operational objectives. In addition, the harvest strategy will need to identify specific management actions needed to be taken, at agreed levels of the indicators, to support the stock biomass not declining below the agreed limit reference point. **Discussion** Members discussed methods to better incorporate information into the harvest strategy to educate readers and clearly describe why a Mulloway harvest strategy is required and what the harvest strategy aims to achieve. The working group revisited operational objectives, with discussion and modification to the initial rebuilding targets to recognise rebuilding would likely take 1-2 generations (i.e. 1-2 times the average time to reach spawning age). Members also discussed the potential future management target that could be pursued once rebuilding is achieved, with further discussion of the advantages and disadvantages of different stock biomass levels that the strategy could seek to maintain in the longer term. Since commercial catch data underpins the current stock assessment, members discussed potential data sources if catch needs to be strongly limited or stock biomass drops below the limit reference point with potential responses (linked to stock health) including fishery closure. The Chair guided discussion towards critical thinking for fine-tuning decision rules that either increase, decrease or keep catch constant until the stock recovers with consideration for a time frame to achieve it, and without making the assessments and harvest strategy too complicated. It was suggested a constant catch through the rebuilding stage of the harvest strategy would provide simplicity and understanding around the management measure and support not only stock recovery, but also enhanced compliance, clarity for

		business planning, market price stability and increased consumer confidence. Members queried how to decide on the initial level of catch to support rebuilding, noting differences in opinion for what the value should be. DPI commented on the various options available to the working group for setting catch limits with several members supportive of an independent body determining the initial catch level. Discussions were revisited around setting a realistic timeframe to achieve rebuilding, recognising that with current knowledge the rate of recovery is hard to predict. As the harvest strategy must consider all potential states of stock health, incidental mortality is also an issue that must be considered, which would remain present even under very low catch scenarios or should the fishery need to be closed in future. It was also acknowledged that current environmental conditions may be supporting high recruitment of stock and catches are likely to vary in response. It was recognised that a precautionary approach should be taken, and capitalising on recent recruitment is likely to be critical for rebuilding and securing a more sustainable level of biomass to support the fishery into the future, and especially to achieve the rebuilding target at a faster rate. The working group reviewed previous discussions regarding implementing regional management of Mulloway for the commercial and recreational sectors. Regional management may assist in managing spatial stock components and minimising the effects of 'a race to fish' at the whole fishery scale, should catch need to be strongly limited. DPI gave an overview on how stock assessments calculate uncertainty and how to best approach decision rules using confidence intervals. Members discussed assessment data and error around stock estimates, including how to reduce uncertainty and improve effective decision making. **Action** 2. DPI to further inform the working group regarding options for setting catch levels for the rebuilding phase of the harvest strategy.

8.	Next steps for Mulloway Harvest Strategy	The next meeting is proposed to continue development of decision rules for the harvest strategy.

The next meeting is proposed for the 15th and 16th of May 2023.