

## Minutes

Meeting	Mulloway Harvest Strategy Working Group		
Meeting Number(s)	10	Dates	6 <sup>th</sup> & 7 <sup>th</sup> of July 2023
Location	Sydney	Time	10:00 – 17:00 08:30 – 13:00
Members	<p>Independent Members: James Findlay (Chair), Sevaly Sen (Economist), Bob Kearney (Scientist)</p> <p>Aboriginal fishing: Stephan Schnierer</p> <p>Commercial fishers: Johnny Alessi, Stephen Reed, Troy Billin</p> <p>Recreational fishers: David Rae, Paul Lennon, Mark Corbin</p> <p>DPI Fisheries Manager: Heath Folpp</p> <p>DPI Fisheries Scientist: Julian Hughes</p>		
Observers	<p>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), Blake Fallon (DPI Fisheries Management Officer)</p>		
Apologies	Stephan Schnierer, David Rae		

Agenda Item	Issue	Notes & Actions
1.	Welcome and Introduction	<p>1.1 Acknowledgment of Country</p> <p>The meeting opened with an acknowledgment of the Traditional Custodians and paying respects to Elders past, present and emerging.</p> <p>1.2 Apologies and Recognition of Observers</p> <p>The working group members and observers were welcomed, and meeting guest attendance noted for the 7<sup>th</sup> of July.</p> <p>1.3 Confirmation of Agenda</p> <p>The meeting agenda was accepted by the working group with an addition of discussion on meeting Outcomes of a</p>

		<p>Mulloway workshop held by the Professional Fisher's Association.</p> <p>1.4 Declaration of pecuniary interests</p> <p>Updates to the register of pecuniary interests were confirmed.</p> <p>1.5 Progress of other NSW fisheries harvest strategies</p> <p>DPI provided an update on progress of the draft NSW Spanner Crab Harvest Strategy and the Line and Trap Harvest Strategy Working Group (HSWG) who are commencing with harvest strategies for Snapper and Yellowtail Kingfish (Kingfish).</p> <p>Although the Spanner Crab Harvest Strategy has not been adopted formally, the Total Allowable Fishing Committee acknowledged and considered the draft NSW Spanner Crab Harvest Strategy when making the determination of the Total Allowable Catch for Spanner crab for the 2023/24 fishing period.</p> <p><b>Discussion</b></p> <p>Members queried planned management actions for both Snapper and Kingfish. Both species are classified as sustainable in NSW, however, management is a shared responsibility across jurisdictions. Snapper is classified as 'Depleted' in QLD and this will need to be considered by the Line &amp; Trap HSWG when drafting the NSW harvest strategy for Snapper. Kingfish are a pelagic fish species that can travel wide distances. DPI gave an overview of future management considerations including work already in progress for monitoring movements, connectivity and spawning behaviours of the Kingfish stock which is currently known to span from New Zealand to the east coast of Australia down to South Australia.</p> <p>1.6 The Minutes of the 9<sup>th</sup> meeting were adopted with minor revision.</p>
2.	Updates for ongoing business items	<p>2.1 Outcomes – Mulloway workshop held by the Professional Fisher's Association (PFA)</p> <p>Members of the Working Group who attended the PFA Workshop gave a brief overview of attendance and discussions had at the workshop. DPI noted attendance and presentation at the workshop about research proposals through the FRDC incorporating work with commercial fishers to collect data.</p>

		<p>2.2 Update on Compliance operation 'Mulloway Assist'</p> <p>DPI provided an update on the Mulloway compliance program which commenced in July 2022 to increase education and compliance around Mulloway management rules for both commercial and recreational fishers.</p> <p>The majority of offences across fishing sectors since the start of the operation have been minor in nature with overall high compliance across the state of NSW. Members acknowledged the reality of ongoing non-compliance by a small number of stakeholders across all sectors.</p> <p>It was noted that a recent communications package released by DPI to promote responsible fishing as part of recommendations from the previous Working Group meeting has had immediate results, including improved awareness and response to presence of juvenile Mulloway. Voluntary changes in fishing practices with the intention to protect juvenile Mulloway recruitments was noted.</p> <p><b>Discussion</b></p> <p>Members noted the presence of compliance on the water has a big impact in fishers' behaviour and the Working Group discussed compliance operations relating to Mulloway.</p> <p>The Chair and members noted that the communications strategy has sent a powerful message and expressed their appreciation for the support from the compliance program.</p> <p>2.3 Additional business updates</p> <p>DPI provided an update on ongoing business items, including progress on improving commercial and recreational data, planned Mulloway stocking activities, research proposals (noting application for FRDC funding proposal approved to start and run for the next five years) as well as the independent Estuary General fishery observer program underway.</p> <p><b>Discussion</b></p> <p>Members discussed recent DPI stocking events including small numbers of tagged fish released, noting that tagging data could be considered to provide information around recaptures and spatial distribution. Members requested further information at the next meeting.</p> <p>Members discussed the timing of the commercial independent observer program, and it was suggested the</p>
--	--	--

		<p>program could continue for a longer period to cover all seasons of the year.</p> <p>2.4 Outstanding catch returns</p> <p>As requested by members at the previous meeting, DPI presented information on fishing businesses who have outstanding catch returns. All fishing businesses have a requirement to submit a monthly catch return within twenty-eight days from the end of that month for all amounts of fish species caught. This data can assist fisheries researchers and managers to understand trends in stock abundance and apply appropriate management actions. Conversely, outstanding catch data can limit assessment of a stock and hinder fine tuning operation of a harvest strategy.</p> <p>The data was restricted to fishing businesses that have reported Mulloway in the past twelve years.</p> <p>DPI also presented data on Sydney Fish Market price data of Mulloway looking at price/volume relationships.</p> <p><b>Discussion</b></p> <p>Members discussed how to improve catch reporting within the required timeframe, noting compliance in this area as unsatisfactory. It was noted the value of the data from catch records is reduced as time passes due to its accuracy. A percentage of returns are also being processed later due to entry time and corrections. The Chair noted benefits of improving fishery data and encourages action to be taken. Some members suggested fishers with long term outstanding catch returns should have fishing operations limited or ceased until these are up to date.</p> <p>Members discussed market value of Mulloway and it was suggested to extend the analysis period as years of COVID-19 may affect representation. Members discussed price value of Mulloway in June being the period when the highest volume of Mulloway are caught, with some signs of price depression. It was noted this is also consistent across all species for the winter months suggesting market price is likely driven by demand rather than supply volume.</p> <p>Members discussed price / size relationships for Mulloway noting fishers will target certain sizes.</p> <p>The Chair questioned the Working Group if there was anything new on bycatch reduction, noting trawling vessels on the Clarence River not fishing due to White spot.</p> <p><b>Action</b></p>
--	--	--

		<ol style="list-style-type: none"> <li>1. DPI to present to the Working Group further information on tagging of stocked Mulloway.</li> <li>2. DPI to present a time series (approx. 15 years) of price/volume data</li> </ol>
3.	Options for constant catch	<p>Benefits of constant catch levels through the rebuilding stage of the harvest strategy have been recognised by the Working group. These include certainty around harvest levels until the proposed new data streams become a valuable assessment tool. It has previously been recognised by the Working Group that a constant catch level must manage both targeted and incidental catch of Mulloway including bycatch discards.</p> <p><b>Discussion</b></p> <p>The Chair encouraged discussion on the potential options available with members recognising advantages and disadvantages of many options.</p> <p>Members continued previous meeting discussions around options for reducing a race to fish under a competitive catch limit scenario (if implemented) for the rebuilding stage of the harvest strategy. Suggestions included daily limits to allow for incidental catch under a broader total catch limit as well as limits applying to incidental catch for a longer period such as a year. Members also discussed approaches including managing catch under daily or other limits or having primary (targeted) and secondary (incidental) catch pools.</p> <p>Members were supportive of an equal contribution to rebuilding between fishing sectors.</p> <p>The Chair noted that there is a need to reduce incentive to fish for Mulloway or appropriately control catch noting new recruitment to the stock and the potential for catch to rise as abundance increases.</p> <p>Members agreed management arrangements under the harvest strategy should have a consistent effect for all sectors and could be managed under different arrangements.</p> <p>Members continued discussion on the benefits of a regional management approach given the likelihood of localised populations and generally limited movement. Members agreed a broader scale than the current seven NSW commercial Estuary General regional boundaries and recognised benefits of fewer, larger regions for managing Mulloway to simplify management and reduce compliance risks. Discussion led to combining current NSW Estuary</p>

		<p>General regions based on historical total commercial catch averages to establish possible regions for management of Mulloway under the harvest strategy, noting that the regions would apply to all commercial fisheries and to non-commercial sectors.</p> <p>Discussion of options also included consideration of Individual Transferrable Quota (ITQ) to simplify management, noting that significant process and time is involved with establishing ITQ's and allocations of catch and other management options are available to support the rebuilding phase. Alternate allocation methods were also discussed such as allocating catch to existing share classes, however this raises similar issues and complexities in determining allocations and having a functional ITQ system given the varied share structures both within and between respective commercial fisheries.</p> <p>Members expressed support for real- or near-time reporting to support robust catch information, and also considered issue of Mulloway tags to be a potential option to support effective compliance. A tradeable tagging system was also considered, however not all members were in favour of this option.</p> <p>The Chair suggested for the Working Groups consideration a two-speed system under catch limits where once a certain amount of catch was reached, a trigger would slow or limit targeted catch.</p> <p>Members revisited the seasonal structure for catch limits, agreed that any limits could be applied to an annual period, and limits should apply separately to commercial and non-commercial sectors.</p> <p>Members also revised management options available for managing non-commercial catch, including Total Allowable Catch (or catch limit), bag or slot limits, and spatial or temporal closures, recommending that management of recreational and charter catch should be considered as one harvest sector.</p> <p>DPI was requested to present an options assessment at the following meeting to help refine the preferred approach.</p> <p>The Chair reminded members that options chosen now by the Working Group can be changed at later date if they are not working to rebuild the stock, and noted that the focus should be on both effectively managing catch and building additional fishery data.</p>
--	--	---

		<b>Action</b> <ol style="list-style-type: none"> <li>1. DPI to present an options analysis for the Working Groups consideration.</li> </ol>
4, 5, 8.	Discussion – Decision rules and developing draft	<p>The Working Group revisited the current stock assessment and further discussed current limitations in current data. The primary data source for Mulloway stock assessments is collected from Estuary General meshing which has been recognised by the Working Group to have some limitations due to the targeted nature of fishing, but presents a time series of the best available information. Recognising this, the assessment is undertaken based on two separate analyses using independent data sources to increase certainty of biomass estimates.</p> <p>It was also recognised that recreational catch estimates include large ranges, and increasing precision of the estimates would strongly benefit future assessments.</p> <p>A range of measures are in development to increase data and certainty of stock assessments including a new FRDC research program and enhancing reporting systems which will provide benefits in coming years, however certainty is not an uncommon problem and can be considered by applying a precautionary approach to management to account for this.</p> <p>It was agreed for the harvest strategy to describe current data and indicators to be used in the early operation of the harvest strategy, and also capture how future data and indicators will be incorporated over time.</p> <p>Members worked through the strategy draft once more, with a focus on reviewing strategy elements including the decision rules that will be used to management catch and rebuilding of stock biomass towards the target levels specified in the draft harvest strategy.</p> <p>Members discussed decision rule options if the harvest strategy should not meet rebuilding objectives within specified time frames, and discussed adjusting catch across sectors to ensure the rebuilding targets will be met. The approach discussed included periodic review of progress with provisions to adjust catch if needed to ensure rebuilding is achieved, noting that this will take some time and periodic review of the harvest strategy will also be undertaken.</p> <p>As operation of decision rules can be complex, the Chair requested DPI draft a decision tree for members to use for</p>

		<p>considering decision rule options further at the next meeting.</p> <p><b>Action</b></p> <ol style="list-style-type: none"> <li>1. DPI draft a decision-making tree for members to use for considering decision rule options at the next meeting.</li> </ol>
6.	Guest Speaker – CommFish Representative	<p>The Working Group welcomed the CommFish NSW representative to provide an overview of his experience and fishing industry perspective focused on work completed to minimise bycatch on trawling vessels over the past twenty years in the Clarence River region of NSW.</p> <p>The commercial fishing industry has worked with DPI to develop and implement a range of measures to reduce bycatch levels on estuarine and ocean trawling vessels to minimise impacts on non-target species including small prawn whilst maximising fishing efficiency, quality of product, and sustainability of fishing operations. Changes are based on extensive research and testing of improvements to net design and Bycatch Reduction Devices (BRDs), with development and extension work ongoing.</p> <p>Approximately 95% of fishers in the Clarence River recognise the benefits of using improved technologies such as Nordmore grids with many fishers choosing to use them. Similarly, voluntary use of Nordmore grids is occurring in the school prawn sector of the ocean trawl fishery off the Clarence coast.</p> <p>Trawl fishers in the Clarence region have established a Clarence River School Prawn Committee to strengthen co-management and locally manage trawl fishing related issues to achieve a faster reaction time compared to current legislative arrangements. Extending co-management with DPI support towards other areas and issues (such as responding to bycatch) is identified as a future direction.</p> <p>It was explained that fishers are actively managing their fishing activities to reduce risks to species such as Mulloway and Bream, including by monitoring and moving fishing areas, and using BRDs most appropriate to the fishing conditions. In the ocean fishery, additional responsive controls apply including closures around river entrances that are introduced immediately following significant flood events. It was also recognised that the NSW trawl fleet (ocean and estuary) has significantly reduced over time and</p>



		<p>that this alone contributes to reduced impacts on fisheries resources.</p> <p><b>Discussion</b></p> <p>Members participated in discussion throughout the presentation, which provided further insight into operation and changes in the trawl fisheries to achieve significant improvements in performance over time. It was agreed that these improvements are not always recognised, and members were pleased to learn more about the changes and stewardship in the trawl sector.</p> <p>Members particularly recognised and supported the development of a co-management framework and further improving the selectivity of trawl gear.</p> <p>Members noted the success and queried options to increase use of grids, with discussion recognising this can be problematic when excess [detached or floating] weed is present and that optimal outcomes will likely be achieved through ongoing research and extension and a co-management approach to adaptively managing when and where best practice net designs (or BRDs) must be used.</p> <p>It was recognised that non-compliance or irresponsible behaviour can be an issue by a minority, and that members supported strong compliance and education programs to minimise compliance risks and impacts.</p>
7.	Guest Speaker – RFNSW Representative	<p>The Working Group welcomed the Chair of the Recreational Fishing NSW Advisory Council to provide an overview of the Councils perspective on Mulloway management and options that could be considered for the draft harvest strategy.</p> <p>The speaker expressed appreciation for the development of the harvest strategy noting harvest strategies have been recognised as best practice worldwide. The recreational sector considers Mulloway to be an iconic species, and strongly supports recovery of the stock and recognises the recreational sectors commitment to contribute considering its contribution to harvest.</p> <p>Benefits of improving recreational harvest estimates have been recognised by RFNSW and changes to enhance catch information now in development have been supported.</p> <p>RFNSW have pro-actively supported previous management changes including reductions to the recreational bag limit, and considers effective management under the harvest strategy to be the best strategy to ensure rebuilding.</p>

		<p>As a wide and varied sector, the speaker noted education will be an important component to support understanding of the harvest strategy, and how catch from each sector will be effectively managed to mitigate potential misunderstandings about activity between sectors. If appropriate limits are in place, sectors should be able to undertake their fishing without worrying about what is happening in the other sector. Education could be supported by using examples such as the NSW lobster fishery, where all stakeholders have seen enhanced benefits including increased catches as a result of good management.</p> <p><b>Discussion</b></p> <p>Members participated in discussion throughout the presentation, which provided further insight into perspectives of RFNSW and the recreational sector.</p> <p>Members discussed progress for enhancing data collection in the recreational sector and the potential benefits for managing species such as Mulloway into the future.</p> <p>The value of stakeholder education was agreed, with further discussion on how this could be achieved, as well as potential management options that could support operation of the harvest strategy. The discussion also touched on misunderstanding of some community members of the commercial industry which can lead to unfounded conflict, as well as a potential disconnect between food and where food sources such as fish come from.</p> <p>Discussion led to the issue of illegal Mulloway catch as well as many fishers being unaware of fishing rules such as the minimum legal size or bag limit for Mulloway. It was agreed that education and communication will be important to support successful management and rebuilding, particularly for the recreational sector which includes a much larger number of fishers than other sectors.</p> <p>It was noted that DPI routinely release education material through social media and other channels, with discussion leading to misconceptions and conflict around the Ocean Hauling fishery, which may be particularly relevant during a rebuilding stage of the harvest strategy. It was suggested that more education about NSW fisheries being well-managed and sustainable commercial fisheries can help to dispel misconceptions and minimise potential sector conflict.</p>
--	--	---

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

The next meeting is proposed to be held in October 2023.