

Minutes

Meeting	Mulloway Harvest Strategy Working Group			
Meeting Number(s)	7	Dates	3 rd & 4 th November 2022	
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)			
Apologies	Stephan Schnierer and David Rae			

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 with addition of DPI updated catch data presentation as requested by the working group at previous meetings. 1.4 Declaration of pecuniary interests Updates to the register of pecuniary interests were confirmed. 1.5 Progress of other NSW fisheries harvest strategies The Draft NSW Spanner Crab Harvest Strategy has been developed by the Spanner Crab Harvest Strategy Working Group. The draft harvest strategy is anticipated to be released for public consultation in late November 2022, before a final draft is prepared and submitted to the Minister for adoption. **Action** DPI to distribute the Draft Spanner Crab Harvest Strategy to this Working Group when it is made public. 1.6 Minutes of the previous meeting The minutes of the previous meeting were adopted following confirmation that all comments had been addressed. 2. Updates for DPI provided an update on ongoing business items, including updates on the Business Efficiency Program ongoing business items (BEP), progress on improving commercial and recreational data, planned Mulloway stocking activities, additional research proposals (including application for FRDC funding) and projects on enhancing bycatch reduction devices (BRDs) in trawl fisheries. **Discussion** The Working group discussed several methods for strengthening the stock assessment and indicators used for the harvest strategy, as well as enhancing reporting of Mulloway catches and reducing potential for incidental mortality. Recreational members raised some concerns regarding the potential impact of future changes such as changes to use of monofilament nets in the estuary general fishery during the rebuilding phase. **Action** The HSWG agreed to raise the relevance of incidental mortality to operation of the harvest strategy to CommFish NSW.

3.	DPI catch data presentation	As requested at previous meetings, DPI presented information on fishing entitlements and harvest of Mulloway in the commercial sector from the 2017/18 fishing period to present.	
		Action	
		DPI to send a copy of the presentation to the working group.	
4.	4. Decision rules and developing the draft harvest strategy	All harvest strategies contain decision rules, which 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 of 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 potential longer-term operation of the harvest strategy. 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 protect an appropriate percentage of the spawning biomass until the stock can recover. Once stock biomass has increased to an initial rebuilding target, the harvest strategy will then adjust harvest to reach and maintain a longer term target at a level that aims to optimise economic, social and cultural benefits from the fishery. In addition, the harvest strategy would need to recognise that robust management actions will be required if stock health decreases in the future.	
		Discussion	
		The working group revisited previous discussions supporting a precautionary approach and catch limit for Mulloway to assist in the gradual rebuilding of the stock within a specified timeframe, until biomass has reached an interim rebuilding target. A cap-and-close option was suggested, whereby, if a predetermined catch limit (e.g. linked to reported commercial and recreational harvest) is reached, targeted fishing for Mulloway would close to reduce total fishing mortality, potentially on a regional basis. The working group also recognised the requirement for a limit reference point to be consistent	
		requirement for a limit reference point to be consisted with the NSW Harvest Strategy Policy and Guidelines	

considering current stock status and any uncertainty surrounding it.

The working group recognised setting a catch limit (without Individual Transferable Quotas/Catch Shares) may prompt a 'race to fish' where fishers compete to catch the greatest share of the total annual harvest, being a primary concern raised by the commercial sector. The working group recognised the benefits of avoiding, where possible, developing decision rules that may encourage a race to fish or considering mitigative measures to limit this potential. Members recognised the benefits of management measures that will retain consistent data series to support ongoing comparative assessments of stock health. Members discussed advantages and disadvantages of Individual Transferable Quotas as a strategy to resolve a race to fish, with consideration of several alternatives to a catch limit that could still effectively manage catch.

As part of discussions on alternatives to a catch limit, the working group considered several potential options to manage catch by controlling fishing effort in commercial and recreational sectors. Members saw benefit in several suggestions for managing effort across sectors, including exploring further into previous discussions around regionalised management as opposed to a broader state management. However, not all management approaches proposed were agreed as suitable options, with members revisiting discussions around the many variables associated with the behaviour of Mulloway and fishing operations. A strict catch limit would also provide greater management certainty than the potential variable restriction of catch by managing fishing effort. Further concerns were raised around many of the alternatives potentially limiting future data, thus increasing uncertainty in the assessment, and making it difficult to determine how well the harvest strategy is performing and trends in mulloway recovery.

Discussion led back to managing catch under a catch limit (or limits), with other management arrangements to be considered to mitigate additional fishing pressure or competitive fishing.

The current assessment indicates that continuing to harvest at recent historical levels may not support rebuilding of the Mulloway stock in future. Commercial fisher representatives indicated they believe the stock

may be showing early signs of rebuilding. Recreational members indicated that fishing remains challenging, and these observations may be related to shorter term environmental conditions and recruitment. It was suggested that the working group could consider measures to manage targeted fishing for Mulloway, thus mitigating issues including the potential for race to fish and higher discard mortality. It was also noted that lower levels of catch during the rebuilding stage would give greater probability of successfully increasing biomass, by protecting a higher percentage of the good recruitment over recent years with consequent potential to protect and support increased spawning biomass during the early operation of the harvest strategy.

Members agreed that protecting the potential increased biomass provided by recent good recruitment is very important for the rebuilding stage of the harvest strategy to succeed. However, members had different preferences for the level of restrictions that the rebuilding stage should place on targeted catch, noting some views that the stock is showing some anecdotal evidence of improvement despite the current overall depleted stock status. This evidence included photographs presented by a commercial representative of recent catch of Mulloway in both commercial and recreational sectors. Members also expressed caution around imposing economic pressures on industry, increasing pressure on other fish stocks and on market prices. It was noted that the protection of recently recruited juvenile Mulloway should be a focus of management through the harvest strategy support measures (i.e., reducing risks associated with incidental bycatch, improved recruitment environment/habitat, and improved compliance and education).

The working group explored the potential development of mandated 'real time' data collection programs to monitor the progress of harvest against catch limits across sectors and to provide data to underpin future assessments. Each fishing sector would need their own efficient data collection program and the management of fishing sectors could therefore be independent of each other. Members discussed potential requirements to support such arrangements, with additional consideration required.

The working group also explored the potential for the development of a DPI research program to collect

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		commercial fishery data which could be exempt from measures (if any) implemented to avoid a race to fish. Such a program could continue to allow restricted targeted fishing for Mulloway by participating fishers, thus reducing the risk of discarded bycatch, and continuing the time series of data to support assessment and service the requirements to assess the performance of the stock within the harvest strategy.
		Members revisited uncertainty around stock status, reiterating that fishers' on water experiences of stock health are different in different places. It was also discussed that differences in fisher skills may lead to different opinions on what the status of the current stock could be. It was noted that improved understanding following implementation of the harvest strategy support measures (e.g. mandated commercial and recreational fisher reporting requirements, tagging information and benefits of the restocking program) will better guide the development of decision rules. Members also noted that monitoring of such measures is already underway and better information to inform the operation of decision rules will improve over time. It was also noted that work is progressing on the Ecological Risk Assessment to better inform the harvest strategy of impacts to the stock that are not related to fishing mortality, as well as impacts of Mulloway fishing on the wider ecosystem.
		Members revisited information on Mulloway harvest that was previously presented by DPI at Meeting 3 to assist in the development of decision rules. The working group discussed the drivers of catch, including market price or demand as opposed to stock abundance, for further consideration in developing the decision rules.
8.	Next steps for Mulloway Harvest Strategy	The next meeting is proposed to continue the development of decision rules for the harvest strategy.

The next meeting is proposed for 13th and 14th of March 2023.