The Mulloway Reduction Forum was facilitated by commercial fisher, Mr Robert Toyer, and attended by commercial fishers from Ballina, Yamba/Iluka and Coffs Harbour, net makers from NSW (Gordon Farrell) and QLD (Wally Hill), OceanWatch (Michael Wooden), fisheries scientists (Matt Broadhurst) and fisheries managers (Darren Hale, Darren Reynolds and Jacob Crisp). Cameron Dixon, fisheries scientist from SARDI Aquatic Sciences also attended, providing valuable input.

Despite the prawn trawl sector not targeting or taking Mulloway for sale in any quantity and a range of controls that contribute towards reducing the fishery’s impact on this important species (e.g. tightly regulated nets and Bycatch Reduction Devices complimented by permanent JKP closures and additional closures following floods etc), industry representatives re-confirmed their commitment to help rebuild the Mulloway stock.

Given significant loss of access to school prawns on the north coast in 2010/11 and 2011/12 (as a result of closures under the industry initiated Mulloway bycatch closure guidelines), it was agreed that every effort needs to be made to develop and implement a net configuration to minimise bycatch of juvenile Mulloway. Maintaining access is critical to satisfy consumer demand for ocean caught school prawns and industry viability.

Process

It was agreed that the process for developing and implementing a new gear configuration for the school prawn sector must be cost effective, industry driven with support from Government and OceanWatch (subject to costs incurred) and be finalised as soon as practicable. Scientific validation of the preferred gear configuration is also likely to be required. The following was discussed and is to be considered when designing the process:

- Given that juvenile Mulloway may not be abundant in ocean waters this season, the preferred net configuration may need to be tested in estuarine waters initially (e.g. in the Hunter if juvenile Mulloway are present). Such an approach would need to be cost effective and robust enough to substantiate whether or not the net configuration shows promise.
- Subject to the risk of high levels of Mulloway mortality, the process should aim to provide for controlled access to ocean school prawn grounds this season. Two approaches were mentioned including immediate scientific testing of the preferred net configuration to substantiate ongoing activity (which is unlikely to be practical for a range of reasons) and industry testing subject to independent monitoring.
- The process should provide for heavy industry involvement and opportunity to tweak the net configuration(s) being tested throughout the course of the process — to iron out any operational and socio-economic issues that may arise and to optimise the effectiveness of the resulting net configuration(s).

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1 Garry Joblin (Ballina), Steven & Malcolm Kerr (Iluka), Don Anderson (Yamba), Graeme Williams (Yamba) and Darren & Phillip Ward (Coffs Harbour).
- Need to consider minimum data requirement for assessing the effectiveness of the device(s) tested, including during any industry testing/refinement phases that may be pursued (e.g. numbers of prawns/mulloway etc.)
- The process could potentially provide for investigating Mulloway behaviour inside nets using, for example, cameras. Any footage acquired as a result of this or of Mulloway escaping through the T90/BRD may be able to be used for educational/promotional purposes.
- Fishers in attendance agreed to in-kind contributions (boats for testing gear), noting some concern that it’s generally the same fishers helping out for the benefit of all, sometimes at personal expense. Funding to help offset significant personal costs incurred should be pursued.

To maintain momentum and facilitate communication the following team and key contacts were established. Industry team: Robert Toyer (key contact), Graeme Williams, Donald Anderson, Steven Kerr, Garry Joblin and Phillip Ward. DPI key contact: Darren Hale.

**Action:** DPI to draft and refer to attendees a cost-effective industry-driven process for developing and testing the new gear configuration(s).

**Gear**
Consideration was given to a range of configurations (e.g. grids, large square-mesh panels, radial-escapes, T90 codends and combinations thereof), however, it was resolved that for efficiency those that have already been tested (by DPI and by industry earlier this year) should be set aside and that the following, based on known principles, should be investigated in an attempt to achieve greater levels of reduction: a net fitted with a grid and a T90 codend (further detail below). The following was also discussed, some of which will need to be taken into account when designing the gear to be tested and the process.

- All configurations discussed are based on known principles (e.g. mechanical exclusion, exploiting behavioural differences, capitalising on water flow etc.) with devices such as grids that mechanically exclude bycatch delivering reductions in the order of 70 to 90% and behavioural type devices such as square-mesh panels delivering reductions in the order of 40 to 60% if positioned appropriately.
- When designing/building the gear to be tested, scope should be provided for it to evolve, particularly during any industry development/refinement phases. For example, use zippers for interchanging T90 sections and a frame with interchangeable grids etc.
- Preferred gear configuration (subject to final net / BRD plan):
  - Small diamond-mesh to posterior for backpressure: around 25 meshes deep and potentially <40mm mesh;
  - T90 section: with appropriate mesh size determined by the working group and significantly shorter than the SA version;
  - 45mm diamond-mesh forward of T90 section; and,
  - Grid: 17 to 20mm bar spacing (potentially up to 30mm) with increased angle and guiding panel along the lines of the SA version.

**Action:** Robert Toyer to work with Wally Hill and other attendees to draft a plan for the preferred configuration to be tested – to be referred to others for consideration/input.

**Other issues discussed**
1. Some loss of school prawn is better than total loss of access because of closures.
2. If changing gear is necessary to access the school prawn stock, so be it.
3. There are two alternative approaches for adoption of bycatch reduction technology: 1) use the new gear all the time or 2) use the new gear only when trigger limits are reached using the current gear configuration.

4. Given negative publicity, increased promotion of the work being done is required.

5. DPI is trying to encourage the EPT fishery to capitalise on the proposed promotion.

6. There is no answer as to how much collateral damage the stock can sustain – all sectors need to minimise impact to facilitate rebuilding the spawning biomass.

7. There’s been exceptional recruitment in recent years – action needs to be taken now so that these recruits can contribute towards rebuilding the spawning biomass.

8. Additional things can be done to minimise impact, subject to practicality and enforceability, including modification to the anterior part of a trawl and post harvest handling (e.g. use of hoppers).

9. OceanWatch is poised to assist with industry promotion and extension work subject to ongoing funding and costs over and above salaries.

10. There are various avenues for funding, subject to the process adopted and expense to be incurred (which is not yet finalised).

**Action:** DPI to pursue media release ASAP and draft dot points for potential media releases by OceanWatch and the Professional Fishermen’s Association.