MURRAY-DARLING BASIN ROYAL COMMISSION SUBMISSION

I appreciate the opportunity to provide a submission to the Royal Commission.

I refer to the Terms of Reference of the Commission numbered 1 to 13 and will comment on specific terms as outlined below.

My comments refer mostly to water management processes in the Northern Basin. There has been significant information available to the public, relating to mismanagement by NSW government (NSW) of the Darling River and tributaries. This is especially the case since that outlined in the Four Corners TV program in July 2017 and confirmed in the Matthews Interim Report 2017.

1. Unless the largely ineffectual measurement of water take in the Northern Basin is corrected, I do not believe the community can have confidence in the efficacy of the proposed Water Resource Plans and the Basin Plan that relate to the Northern Basin. A high level of accurate water take information must be achieved, before the range of assumptions that underpin both Plans can be relied upon.

Water take measuring must include extractions from both river channels and floodplain harvesting.

I believe another flaw in governance relating to measuring has occurred recently, in that NSW is considering retro-approval of any unapproved or illegal floodplain structures.

Findings of the Matthews Interim Report 2017 included:

- that water-related compliance and enforcement arrangements in NSW have been ineffectual and require significant and urgent improvement.
- the industry's "social licence to irrigate" is at stake.
- a loss of public confidence in water compliance and enforcement arrangements in Barwon-Darling, and NSW more broadly
- any non-compliant or illegal extraction of water should not be tolerated and should be dealt with firmly.
- observations of a "group culture diverging from the best traditions of Australian public administration".

NSW are now proposing to grant retro approvals for unapproved or illegal floodplain structures. This approval process would bear no resemblance to processes that are needed to correct the shortfalls in governance included in the Matthews report.

As I understand, NSW has only a minor level of ability to measure both the quantity and the water take potential of the structures.

It is difficult to comprehend how the above retro approval corrects the findings of the Matthews report.

The need remains to reach best practise and to build a compliance and enforcement regime that ensures strong and certain regulation.

If you can't measure, you can't manage.

- 2. No Comment.
- 3. I believe the Basin Plan is not complying with the objects and spirit of the Water Act and the Basin Plan, relating to ensuring the return to environmentally sustainable levels of extraction of water resources in the Northern Basin.

The outcomes of the range of water regulation changes introduced in recent years by NSW have increased extraction levels. This in turn has invariably reduced river flows, impacting on downstream stakeholders that include rural towns, indigenous communities, floodplain graziers, irrigators, stock and domestic users as well as an amenity for residents and tourists.

This is in stark contrast to the objectives of the Water Act and the Basin Plan in relation to achieving sustainable rivers and the requirement to undertake appropriate community consultation.

Even though many of these regulation changes were introduced by NSW immediately before the Basin
^{Cont'd} Plan commenced, unless the changes are now substantially reversed, they will become enshrined in the Basin Plan.

The Matthews Interim Report 2017 confirms widespread deficiencies in compliance and loss of community trust in processes in the Northern Basin. These deficiencies bear little resemblance to the objectives of the Water Act.

An objective of the Water Act is to optimise social, economic and environmental outcomes arising from the use of basin water resources in the national interest.

Australia has a longstanding strong market recognition for "clean and green" products. Export and domestic markets are increasingly demanding production in sustainable environmental conditions. Horticultural industries have invested heavily so as to be able to demonstrate and authenticate their "clean and green" credentials.

The events in the Northern Basin pose a threat to Australia's export markets; not just products from the Northern Basin.

The valuable marketing reputation that Australia enjoys in food and fibre products must be protected by ensuring that our products can be shown to have been produced in environmentally sustainable conditions.

I believe the Commonwealth should ensure that the Murray Darling Basin Authority complies much more effectively with the Water Act and the Basin Plan.

In respect of environmental objectives, a long-held principle in landscape restoration has been to prioritize the restoration investment to the most valuable sites. The Darling and tributaries is a prime example of a priority site for recruitment and habitat for native fish, particularly Callop. These waterways rank very highly in these categories across the Murray Darling Basin. Research has shown that Callop, spawned in the Darling River system, may make a significant contribution to lower River Murray populations.

In years such as 2009-10, the Darling river may be the primary source of fish. Samples taken in the Lower Murray River of Callop year-classes that spawned in 2009-10 originated almost exclusively from the Darling system, whereas samples taken of Callop that spawned 2010-11 were about 50-50 from the Darling and Lower Murray Rivers (*Zampatti et al. 2015. Ye et al. 2017*)

See: http://www.pir.sa.gov.au/ data/assets/pdf file/0019/248131/Golden Perch Murray Darling Basin Report - FINAL .pdf See: http://www.environment.gov.au/system/files/resources/e50547b8-9554-4bf9-b232-f17451129e56/files/lower-murray-ltimreport-2015-16.pdf

Another prime example of a Murray Darling Basin priority site is the RAMSAR Coorong site in South Australia.

Even with the significantly depleted numbers of international migratory waterbirds recorded there now, the Coorong would still qualify for RAMSAR accreditation. Also, the suite of different bird species recorded there is outstanding in terms of the Murray Darling Basin.

The Coorong, although already in a degraded state, is also a naturally occurring wetland, different from the most prevalent wet/dry wetlands in the Murray Darling Basin. There should be a priority given to mimic as far as possible the habitat conditions prevailing in 1985.

Further, it's important that Australia complies with its obligations to relevant international agreements.

In terms of improving the sustainability of the Coorong, the waterway can in the main, be largely managed separately, with reduced consequential effects on other sites and other stakeholders.

Therefore, a very favourable return on investment should be achieved on environmental works.

- 4. No Comment.
- 5. No Comment.

6. Given the extensive deficiencies in measurement of water take in the upper Darling and tributaries, it would be extremely difficult to immediately this measure this impact. However, a recent internal MDBA scientific review of one stretch of Darling River, indicated that increased upstream extractions had reduced downstream flows.

See: <u>https://www.smh.com.au/environment/sustainability/treachery-leaked-report-reveals-low-river-flow-blamed-on-extraction-20180303-p4z2pu.html</u>

7. The key outcome of achieving sustainable rivers needs be given much more focus in the roll-out of the Basin Plan. This is required by both the Water Act and Basin Plan objectives.

Sustainable rivers can only result from sufficient flows along the entire river length. Sufficient flows are needed to allow a stream to function satisfactorily

The increased flows urgently needed in the Darling and tributaries will invariably need to be derived mostly from a claw-back in extractions arising from the outrageous water regulation changes in NSW in recent years.

- 8. Refer to comments included in 7. above.
- 9. No Comment.
- 10. Refer to comments included in 1. and 2. above.
- 11. NSW has repeatedly refused to protect environmental flows from being diverted for irrigation over the period. This action is in stark contrast to the objectives and spirit of the Basin Plan (I note that a release of environmental water was approved on 13th April 18). See: https://www.waternsw.com.au/about/newsroom/2018/major-environmental-flow-to-benefit-barwon-darling

There is strong public expectation that arrangements for protection for environmental flows should be in place already, and to the extent that they are not, a remedy is urgent.

The need for effective processes to protect environmental flows is not negotiable.

- 12. No Comment.
- 13. No Comment.

It is of paramount importance to the community, that the Basin Plan be implemented.

The range of serious water management shortcomings in the Northern Basin still prevail and are not in accordance with the Water Act. Unless these are corrected, the shortcomings will be enshrined in the Basin Plan.

I believe the Commonwealth should ensure that the Murray Darling Basin Authority complies much more effectively with the objectives and spirit of the Water Act and the Basin Plan.

The Royal Commission process is an opportunity to ensure that the sustainability of Basin rivers is given a much higher priority in the implementation of the Basin Plan. Flows over the entire length of the rivers are needed to achieve this priority.

Barrie MacMillan 30 April 2018