

# Submission to the NSW Natural Resources Commission's Review of the NSW Murray and Lower Darling Regulated Water Sharing Plan

Thank you for the opportunity to contribute a submission to the Natural Resources Commission's (the Commission) review of the *Water Sharing Plan for the NSW Murray and Lower Darling Regulated Rivers Water Sources 2016* (the Plan). I commend the Commission for prioritising the review.

Furthermore, I commend the NSW government for initiating the Office of the NSW Chief Scientist and Engineer's (OCSE) independent review and subsequent report (the OCSE Report) into the 2023 fish deaths in the Darling-Baaka River at Menindee.

I believe the OCSE Report is comprehensive and soundly based.

Outlined below are comments and observations relating to Plan related environmental, social and economic outcomes, along with suggested areas for improvement.

## #1 Environmental Outcomes

The Plan has not contributed to favourable environmental outcomes, in fact it is likely that the Plan and/or the management thereof has contributed to the degradation of the Lower Darling River system.

The unsatisfactory environmental outcomes are there for all to see in findings<sup>i</sup> of the OCSE Report.

The OCSE Report<sup>ii</sup> notes that "Explicit environmental protections in existing water management legislation are neither enforced nor reflected in current policy and operations. Water policy and operations focus largely on water volume, not water quality. This failure in policy implementation is the root cause of the decline in the river ecosystem and the consequent fish deaths".

In addition to fish deaths, the recruitment of both fish and waterbirds has been adversely affected.

I also believe excessive Northern Basin water extraction is a core component in reduced Lower Darling flows and therefore has contributed to the adverse environmental outcomes above.

Researchers from ANU and UNSW<sup>iii</sup> found that poor water management and excessive extraction are the primary causes of declining flow and the poor state of Australia's Darling River. On this point, I acknowledge that Recommendation 1c in the OCSE Report<sup>iv</sup> provides for a review of the impact of existing regulatory elements in riverine catchment health.

## #2 Social Outcomes

During the period that the Plan has been in place, social outcomes have been adversely affected by reduced river flows, reduced water availability and poor water quality, resulting in a profound negative impact on Lower Darling communities (in addition to the fish deaths and blue-green algae outbreaks).

Again, the OCSE Report findings say it all. For example, Finding 4<sup>v</sup> states "The health and well-being of the local community is inherently linked to the health of the river – none more so than the Barkandji People. Consecutive mass fish deaths have had a profound, ongoing community impact: social, cultural, mental health and economic".

### #3 Economic Outcomes

Well publicised negative events such as fish deaths and blue-green algae outbreaks can affect Australia's 'clean and green' marketing reputation.

It is becoming more evident that Australia's markets (especially in Europe) will become more demanding in terms of sustainable environmental production practices, including water management. For example:

- European markets are increasingly advocating inclusion of landscape stewardship performance in Free Trade and other marketing agreements.<sup>vi</sup>
- The four major Australian banks are indicating they will be having future regard for emission reduction targets in terms of farmer financing, resulting in an increased commercial focus on environmental management.<sup>vii</sup>

Exporting countries such as Australia have a potential marketing advantage to comply early and create an advantage for local producers.

Water quality and availability risks can impact important communities and industries.

For example, the Mildura region features predominantly irrigated horticulture which is dependent on river water of appropriate quality and supply reliability, especially in terms of large-scale permanent plantings in the region. A large proportion of the local population is engaged in horticultural related employment and numerous value-adding wineries, fruit packers and processors operate locally.

Therefore, water quality and availability risks not only apply to irrigators, but also to processors and communities across the Murray Mallee region of New South Wales, South Australia and Victoria. Irrigators in the Mildura region have already been affected by reduced flows to the Southern Basin.

### #6. Changes Needed to the Plan to Improve Outcomes

In addition to discussing any changes needed to the Plan, strong leadership by NSW Government is required in establishing significant reform in Lower Darling region. The range of evidence of sustained mismanagement contained in many expert reports over recent years indicates that current institutional structures and processes appear to be no match for the huge tasks ahead to reform water management in New South Wales.

Institutional change is a must-have to achieve reform.

Sustained governance failures are highlighted in the OCSE Report findings, specifically<sup>viii</sup> "Our findings and recommendations reflect an understanding of the 2023 event as symptomatic of broader degradation of ecosystem health and consequential long-term pressure on the Darling-Baaka river system. This observation is not new, having been the subject of numerous expert reviews and reports".

The OCSE Report recommends<sup>ix</sup> that a lead agency is clearly tasked with the responsibility and oversight for implementation and reporting progress against the Recommendations 1. to 4.

Any new agency selected should be independent from the existing structure. This change is crucial to achieving significant reform.

The OCSE Report has made very sound recommendations that need to be adopted by NSW Government. The recommendations prioritize more effective future objectives ahead of immediate interests.

## **Other Critical Factors to Consider**

### Climate Change

- Recognise and incorporate climate change into strategic planning.

### Corporate Values

- Major institutional change must be viewed as a non-negotiable component of 2026 WSP processes.
- Improve accountability and establish enforceable consequences for non-compliance.
- Adopt improved corporate values, to avoid indifference to the human cost.
- Taking stewardship of our rivers seriously.
- Act on the basis of best-available scientific knowledge.

### Water monitoring

- Monitoring for:
  - Chemical residue, including food product contamination, and
  - Blue-green algae bloom indicators.

## **Conclusion**

Business-as-usual will not result in the scale of change required to achieve improved outcomes.

It has been demonstrated that environmental outcomes, economic outcomes and social outcomes have all been adversely impacted during the term of the current Plan, therefore major changes to the 2026 Plan and its implementation are vital.

Without these changes, the health of the rivers and its communities will be even more adversely impacted for decades.

Addressing recommendations outlined in the OCSE Report is an excellent place to start.

Barrie MacMillan

25 February 2024

## About the Author

Residing in the 'tri state' area (near the borders of Victoria, New South Wales and South Australia), my former employment roles centred on processing irrigated food products, with Mildura Co-operative Fruit Co. Ltd for 31 years and with international & domestic dried fruit sales & marketing as a Board member of Australian Dried Fruit Sales Pty Ltd (later known as Sunbeam Foods) for 26 years. Dried fruit was marketed in bulk and consumer packs on both domestic and export markets.

Since retirement, I have served as a Board member on statutory regional state catchment management authorities (in both New South Wales and Victoria) and rural & urban water authorities.

My interest in the Murray Darling Basin generally, and the lower Darling & lower Murray Rivers specifically, is focussed on several key areas, including:

- Water quality, including risks to Australia's important horticultural markets.
- Balanced interests of major stakeholders ie. the importance of healthy rivers for all users.
- Stewardship and sustainability of rivers and associated landscapes.
- Planning for the impact climate change.

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## References

<sup>i</sup> "Findings", Executive Summary, NSW Government Chief Scientist & Engineer, Independent Review into the 2023 Mass Fish Deaths in the Darling Baaka River at Menindee, Findings and Recommendations, 31 August 2023 [The OCSE Report].

<sup>ii</sup> Finding #5., "Findings", Executive Summary, The OCSE Report.

<sup>iii</sup> "Water extraction is key cause of the Darling River drying: study", UNSW Media, 24 October 2022 (referring to "Resilience to hydrological droughts in the northern Murray-Darling Basin, Australia", Philosophical Transactions of the Royal Society A, 24 October 2022).

<sup>iv</sup> Recommendation 1c, "Recommendations", Executive Summary, The OCSE Report.

<sup>v</sup> Finding #4., "Findings", Executive Summary, The OCSE Report.

<sup>vi</sup> "FTA talks stall as EU and Australia fail to reach agreement", The Weekly Times, 12 July 2023

<sup>vii</sup> "Nations banks ramp pressure on farmers to hit net-zero targets", The Weekly Times, 8 August 2023.

<sup>viii</sup> Paragraph 2, Executive Summary, The OCSE Report.

<sup>ix</sup> Paragraph 1, "Recommendations", Executive Summary, The OCSE Report.