



**Biodiversity  
Council**

# Submission to Water Amendment (Restoring Our Rivers) Bill 2023 [Provisions]

5 October 2023

## **About The Biodiversity Council**

The Biodiversity Council brings together leading experts, including Indigenous knowledge holders, to promote evidence-based solutions to Australia's biodiversity crisis. The Council was founded by 11 universities with the support of Australian philanthropists.

## Overview

The Biodiversity Council welcomes the opportunity to provide a submission to the Water Amendment (Restoring Our Rivers) Bill 2023 [Provisions].

The Murray-Darling Basin contains some of Australia's most significant river and wetland freshwater ecosystems. This includes many cultural landscapes connected to over 40 Indigenous Nations, more than 30,000 wetlands, including 16 of international significance under the Ramsar Convention, and is home to 156 flow dependent vertebrate species and more than 50 listed threatened fauna. The health of ecosystems within the basin have deteriorated significantly following many decades of over-allocation and over-extraction of water resources, via colonial water laws, predominantly for irrigation. Irrigation diversions account for at least 46% of the average surface water available. This has resulted in declining waterbird numbers on major wetlands, reduced breeding and significant reductions in extent of floodplain inundation, leading to widespread death and degradation of floodplain eucalypt communities such as river red gum, black box and coolibah woodlands and forests. Catastrophic fish kills on the Darling River in 2018-2019 and 2023 also reflect a river system that continues to be in poor ecological health.<sup>1 2</sup>

There has been significant, systemic and ongoing failure by governments, settler water legislation and policy not providing Indigenous people of the Basin with equitable access to water rights and entitlements.

The Basin Plan was enacted in 2012 under the Water Act 2007 in an attempt to restore balance to the basin and its ecosystem. The Plan set a compromise target of 2750 GL to be recovered for the environment, including an additional 450 GL, to total 3,200 GL. It is now apparent that the Basin Plan is off track and, under current policy settings, is unlikely to deliver on the water recovery targets within the timeframes agreed to by Basin States and the Federal Government in 2012.

There are a range of factors contributing to the delay in the delivery of the basin plan, but a notable contributor has been the cessation of water-buybacks from willing sellers to restore water to the environment. There has also been slow policy implementation in relation to floodplain harvesting and access to low flows on the Barwon-Darling River system. Lacklustre progress on water recovery in recent years sits in contrast to the effort that has gone into rule changes and engineering works (supply measures) that aim to reduce the amount of water that needs to be recovered for the environment. Some of these expensive supply measures have not adequately delivered on environmental dividends that were expected. Enabling the purchase of water entitlements from willing sellers is the most effective and efficient mechanism to restore water to the environment and get the basin plan back on track. In addition, this will assist in reaching the overall target of 3,200 GL of water recovered for the environment.

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<sup>1</sup> Australian Academy of Science (2019). Investigation of the causes of mass fish kills in the Menindee Region NSW over the summer of 2018–2019  
<https://www.science.org.au/files/userfiles/support/reports-and-plans/2019/academy-science-report-mass-fish-kills-digital.pdf>

<sup>2</sup> NSW Chief Scientist (2023) Independent review into the 2023 fish deaths in the Darling-Baaka River at Menindee Final Report [https://www.chiefscientist.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0006/584142/Menindee\\_Full\\_Report\\_FINAL.pdf](https://www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0006/584142/Menindee_Full_Report_FINAL.pdf)

## Key points

### 1. Recovering 450 gigalitres of additional environmental water.

We are supportive of the decision to recover the full amount of environmental water as originally indicated in the Act and the MDB Plan. It is our opinion that the full amount of water targeted for recovery is a minimum that is able to achieve the objectives of the Plan, particularly in the context of a drying climate. Therefore recovering the full amount as planned is essential in order to consolidate and further improve the ecological condition of the river and wetlands within the MDB. This is also crucial for the many communities that depend on the natural flooding and drying processes that deliver the range of ecosystem services to First Nations peoples along the river. This includes improved water quality, fish resources and floodplain flows for grazing communities.

### 2. Expand the type of projects that can deliver the Basin Plan target of 450 gigalitres (GL) of additional environmental water;

It has become clear that the works and measures in place or under construction across the Basin will not deliver sufficient water savings within the time required, even with the proposed extension to the date of review of the Act. Expanding the type of projects that can deliver the 450GL of additional environmental water provides much needed flexibility in delivering the Plan and provides the states with additional time to deliver the works and measures already under way. However, it is critical that these projects be independently reviewed for their 'equivalence' value. In particular, they need to produce a dividend for the environment. For example, the largest of these projects was at Menindee Lakes which was plagued by problems of poor assessment and implementation, including inadequate consultation, poor scientific assessment, inadequate environmental assessment and poor transparency that inevitably led to a decline in the environment of Menindee Lakes for environmental water for the Basin elsewhere.<sup>3</sup>

### 3. Repeal the statutory 1,500 GL cap on Commonwealth water purchases;

It has become clear that the works and measures in place or under construction across the Basin will not deliver sufficient water savings within the time required, even with the proposed extension to the date of review of the Act. Allowing for additional voluntary water purchases provides the most expedient method for achieving the necessary reallocation of water to the environment. Also the purchase of environmental water is significantly less costly to taxpayers and more effective in the relative value.<sup>4 5</sup> We acknowledge the importance of framing such purchases with assessments of the potential impacts on basin communities.

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<sup>3</sup> Ford, Z. E., S. Jackson, G. Bino, K. J. Brandis, and R. T. Kingsford (2023). Scale, evidence, and community participation matter: lessons in effective and legitimate adaptive governance from decision making for Menindee Lakes in Australia's Murray-Darling Basin. *Ecology and Society* 28(1):15

<sup>4</sup> Productivity Commission (2010), Market Mechanisms for Recovering Water in the Murray-Darling Basin, Final Report, March. <https://www.pc.gov.au/inquiries/completed/murray-darling-water-recovery/report/water-recovery-report.pdf>

<sup>5</sup> Grafton, Quentin and Wheeler, Sarah Ann, Economics of Water Recovery in the Murray-Darling Basin, Australia, (2018). Annual Review of Resource Economics, Vol. 10, Issue 1, pp. 487-510, 2018, Available at SSRN: <http://dx.doi.org/10.1146/annurev-resource-100517-023039>

#### **4. Amendments of Part 2 enable funds from the Water for the Environment Special Account (WESA) to be used to enhance environmental outcomes in the Basin;**

It has become clear that the works and measures in place or under construction across the Basin will not deliver sufficient water savings within the time required, even with the proposed extension to the date of review of the Act. This was confirmed by the 2021 independent review of the WESA, which concluded that neither the full 450 GL of additional environmental water nor constraints projects were on track to be fully delivered by 2024.<sup>6</sup> This review also found that environmental water recovery would likely cost between approximately \$3.4 billion and \$10.8 billion if solely reliant on efficiency measures.

Allowing for additional flexibility to use the Environmental Special Account to support works that deliver an overall environmental benefit within the basin is a desirable outcome, noting that the highest priority for the account must be water recovery given the scale of the challenge.

#### **5. Provide additional time for Basin States to deliver Sustainable Diversion Limit (SDL) Adjustment Mechanism projects;**

It has become clear that the works and measures in place or under construction across the Basin will not deliver sufficient water savings within the time required. This has been predictable for some time, and it is regrettable that the states have not been able to meet the original timelines. However a pragmatic perspective is that these projects remain important and that interrupting their progress at this time would be counter-productive. Therefore we are supportive of provision of additional time to complete these projects.

There remain concerns regarding the use of infrastructure measures to reduce overall environmental water recovery. Given the poor record of 'supply measures' conception and delivery, we do not support new supply measures being proposed as part of SDLAM. Further, it is imperative that independent and transparent analyses be used to assess the environmental equivalence of these projects, clearly never adequately completed for Menindee Lakes.<sup>7</sup>

Provisions in Section 2 to ensure implementation of relaxation of constraints are welcomed.

#### **6. Enable the Inspector-General of Water Compliance to determine SDL compliance and require action plans;**

There is a particular need to ensure that there is adequate reporting and compliance in relation to SDL measures. Annual reporting of models and actual flows is essential. The Inspector-General requires clear powers to enable actions to achieve compliance in those river systems which have not met their SDL requirements. The role of the Inspector-General is supported in its strengthening through the revised provisions, although the provisions for ensuring compliance remain relatively weak. There is a need to hold States accountable for non-compliance. The emergence of an adversarial stance between the Commonwealth and the States with respect to action plans has

<sup>6</sup> Australian Government (2021), Second Review of the Water for the Environment Special Account, CC BY 4.0.

<https://www.dcceew.gov.au/sites/default/files/documents/second-review-water-for-the-environment-special-account.pdf>

<sup>7</sup> Ford, Z. E., S. Jackson, G. Bino, K. J. Brandis, and R. T. Kingsford (2023). Scale, evidence, and community participation matter: lessons in effective and legitimate adaptive governance from decision making for Menindee Lakes in Australia's Murray-Darling Basin. *Ecology and Society* 28(1):15

happened on several occasions and endangers delivery of the Plan. The introduction of the Inspector General in an arbiter's role seeks to manage the potential for conflict in these arrangements. But most importantly, there is a need to establish costs to States for non-compliance. This role was previously carried out by the National Competition Council on the basis of State management of the rivers of the Murray-Darling Basin. Such a process needs to be reinstated. It could be established under the aegis of the Inspector-General or in the future under a future Environment Protection Authority.

**7. Provide for a roadmap for the delivery of constraints relaxation projects across the Southern Basin;**

The failure to address constraints has now occurred over a long enough period that it is a significant limiting factor for delivering the Basin Scale benefits of environmental water. Water can simply not be delivered in the way needed to address environmental needs in the lower part of the river without risks to infrastructure and flooding of private land. This needs to urgently be addressed. There is a need to establish the costs and liabilities transparently and then potentially identify an independent body to deliver these constraints projects given the inability of governments to deliver on this important reform. Without the ability to manage environmental flows onto private land which was always naturally flooded (ie. floodplain), there are considerable restrictions on the ability to maximise environmental outcomes.

**8. Amendment of Part 1 Subsection 253(1) delays the review of the Act from 2024 until 2027;**

We are supportive of this delay. It is clear that against a background of extreme hydrologic variability that drawing strong science-based conclusions on the effectiveness of the Water Act is likely to require additional data to be collected and analysed.

**9. Implement recommendations of the Water market reform: final roadmap report in relation to water markets and water management in the Basin.**

Water markets provide a mechanism for water to be recovered for the environment and more critically to allow water to be traded to the consumptive users which can generate the largest financial benefit. Water markets are an imperfect mechanism without substantive regulation, as the adoption of economic incentives alone can generate social and environmental costs. Many of the major impacts on the irrigation industry have occurred as a result of the restructuring of water markets (e.g. movement of water from dairy to almonds). Often it is the environment that gets the blame for impacts on irrigation industries when the costs are much more complex and seldom adequately assessed by governments. Pricing water can also incentivise investment in water efficiency innovations. It is not clear that all of these outcomes have occurred, or that the market is behaving optimally against triple bottom line outcomes. A genuine critical review through producing the final roadmap report is essential to a genuine assessment of the effectiveness of the Murray Darling-Basin Plan.

**10. Other changes**

A series of other amendments are made that are largely technical in nature. We are supportive of amendments to Division 2 which provide more specificity in terms of reviewing and implementing Action Plans.

The Bill also amends the Water Act 2007 to make technical amendments in relation to First Ministers' Council and makes consequential amendments to the Water Act 2007 and Competition and Consumer Act 2010.

## 11. Outstanding issues

Despite these changes there remain substantial weaknesses in the Act with respect to the following matters.

- i. **Accommodating climate change:** The Basin Plan does not adequately account for the effects of climate change. It is increasingly clear that water yields will be altered by climate change, and this is likely to decrease hard won improvements in ecological condition through time. It is likely that additional water will need to be recovered to maintain existing condition, even without considering objectives of improving condition. Most importantly this impact is likely to affect planned environmental water more than current users with water allocated from large dams.
- ii. **Indigenous values and cultural water allocations:** The Basin Plan does not adequately take account of Indigenous values or ownership of water. There has been little improvement in Indigenous engagement through governments and the major agencies, with a lack of cultural targets in the Plan that has hindered the engagement of Indigenous people in co-management of the rivers and groundwater. Provisions of the Plan for cultural flows have been rarely implemented due to complex governance arrangements and difficulties in coordinating water planning. Further there is no accountability of governments that continue to fail to meet the requirements of the Act and Basin Plan, including the accreditation by the Minister for the Environment of water resource plans that do not contain basic cultural values and uses of Indigenous people as required by Chapter 10 Part 14 of the Basin Plan. The federal government provided \$40 million in 2018 for the purchase of water entitlements for Indigenous people of the Basin. At the time of writing, not a single dollar has been spent, which is a considerable blight on governments promising and not delivering.
- iii. **MDB Objectives and the Basin Environmental Watering Strategy:** Many of the objectives in the Basin Plan are poorly articulated and would be extremely challenging to clearly report against. The Basin Environmental Watering Strategy (BEWS) seeks to implement the Plan through articulating the Plan objectives as measurable outcomes. However the BEWS is currently being rewritten and it is challenging to clearly determine targets while this critical piece is not complete. Further, these objectives need to be clearly articulated and assessed against the Water Resource Plans of the states. Currently, there is limited interaction between water management as articulated by water resource plans and environmental objectives for different rivers.