

# WENTWORTH GROUP

## OF CONCERNED SCIENTISTS

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### **SUBMISSION TO DEPARTMENT OF CLIMATE CHANGE, ENVIRONMENT, ENERGY AND WATER ON OPPORTUNITIES FOR WATER RECOVERY UNDER THE MURRAY-DARLING BASIN PLAN**

**July 2023**

We welcome the commitment by the Commonwealth Water Minister Tanya Plibersek to deliver the Basin Plan ‘in full.’ This submission presents opportunities for achieving the Basin Plan recovery targets in a way that results in increased long-term flows in the river, has neutral or positive socio-economic outcomes and gives certainty to Basin communities. We focus on water recovery as one of several key elements of the plan that need to be delivered together - other important elements include constraints relaxation, sustainable diversion limit adjustment mechanism (SDLAM), water resource plans and measurement and monitoring.

The Commonwealth and Basin States have made substantial progress with actual water recovery under the Basin Plan, with the recovery of 2,137 GL towards the agreed 2012 target of 3,200 GL or equivalent outcomes. That level of recovery has however remained static for some time and there has been little progress towards the 450 GL enhanced environmental water program under the Basin Plan.

We continue to be concerned that the Basin Plan target will be insufficient to restore the long-term sustainability and health of the Murray-Darling system, particularly in the absence of any agreed mechanisms for climate change adaptation. The current target remains at the lower end of recommended water recovery levels based on the best available scientific evidence.<sup>1</sup> The current target will not guarantee a healthy river, but can make a real and substantial difference in terms of re-establishing some balance in the Basin.

In June 2010, the Wentworth Group in association with Prof R. Quentin Grafton, Ian Kowalick, Prof Chris Miller, Tim Stubbs, A/Prof Fiona Verity, A/Prof Keith Walker put forward an analysis of possible options for achieving a sustainable diversion limit in the Murray-Darling Basin.<sup>2</sup>

Three possible options were identified at the time, including Option 3 which provided the most cost-effective and timely approach for environmental water recovery while also assisting businesses and communities in the Basin capitalise on opportunities and adapt to a future with less water.

We have attached a copy which provides further detail of what was proposed under each of the options at the time and how they might be implemented.

We believe option 3 remains very much relevant today as we face the need to recover the outstanding 700 GL (approx.) and to deliver the 450 GL enhanced environmental water program under the Basin Plan in a way that achieves positive or neutral socio-economic objectives.

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<sup>1</sup> MDBA (2010). The Guide to the proposed Basin Plan: Technical background Part 1, Murray-Darling Basin Authority. Volume 2: p114.

<sup>2</sup> Wentworth Group et. al. (2010) Sustainable Diversions in the Murray-Darling Basin, An analysis of the options for achieving a sustainable diversion limit in the Murray-Darling Basin.

In light of the need for recovery of water in the Murray-Darling Basin in a way that supports communities to adapt to a future with less water, we propose four key approaches to be considered together:

1. **Continue to recover water for the environment from willing sellers** – continue voluntary water purchase while ensuring value for money, suitable reliability, connectivity, and flexibility in its ability to deliver environmental outcomes.
2. **Partner and collaborate with Basin communities** - Recover water through a partnership and collaboration between Basin communities and governments, with governments providing communities with help to: a) identify opportunities for water recovery, as well as b) support opportunities for community development, economic diversification and structural adjustment to mitigate adverse impacts and enable communities to transition to a more sustainable and resilient future.

Water reform in the Basin is in the national interest – an approach is needed to progress water recovery in a way that supports those that may be adversely affected. We support regional communities being given a voice regarding Basin water resource issues.

In the likely case that market mechanisms fall short of the recovery target, the Commonwealth could engage with Basin communities in the affected catchments to further explore ways of meeting the recovery targets while adjusting to a future with less water.

With financial and other support, communities may decide to move out of irrigation and branch out into new or other industries. Others may prefer to consolidate their irrigation agriculture industry and use funds to invest in new water technology or add value to their products. However, such decisions should be made for the benefit of the whole community, not just individual irrigators.

This longer-term strategy will allow a more tailored approach to structural adjustment and community development.

We also support innovative approaches that can help locals explore opportunities to allow their businesses to grow while being less reliant on water. This will be particularly important for those parts of the Basin likely to have reduced water availability in the future because of climate change, thus providing an enhanced benefit.

3. **Utilise the temporary water market to address short term shortfalls** – where there are currently shortfalls or delays in permanent water recovery and environmental equivalence offsets, enable the shortfalls to be made up in the short-term through securing environmental water through the purchase and provision of temporary annual water allocations or entitlement leaseback arrangements.

In the event that a jurisdiction fails to meet its water recovery or environmental equivalence timelines under SDLAM, arrangements could be made to purchase temporary water to meet these obligations in the short term until such time as the project is delivered.

Pursuing temporary purchases and transfers possibly has other potential benefits:

- Trialling watering regimes – areas that are identified as needing only occasional watering can be targeted when conditions are supportive. Evaluation will help refine water priorities over time, allowing for adaptive management.
  - Smaller financial outlay – the cost is significantly less than the acquisition of permanent entitlements; and the
  - Ability to demonstrate and enable immediate progress and benefits.
4. **Explore rule changes where they result in reductions in consumptive use** – reduce the long-term volumes of water extracted from the river through new rule changes that result in additional flows that enable delivery of the objectives of the Basin Plan.

We have identified opportunities to compliment the water recovery target to enable improved environmental outcomes, particularly in the unregulated rivers systems of the NSW northern Murray-Darling Basin. We have

focused on opportunities which are likely to deliver significant benefits for high-value freshwater ecosystems. We recommend that new rule changes, such as flow targets, be considered where there is peer reviewed evidence to demonstrate they reduce long term extractions and increase the long-term volumes of flow in the river. We would welcome the opportunity to discuss such opportunities further.

We would like to thank the Department of Climate Change, Environment Energy and Water for the invitation to provide a submission and the opportunity to attend the workshop on delivering the Murray-Darling Basin Plan on Monday 26 June 2023.

We would welcome further opportunities to consider pathways for recovering water in the Basin which would improve the health of the Basin and give communities greater confidence in their future.