



## House of Representatives Standing Committee on Agriculture and Water Resources Inquiry into Water Use Efficiency

### Submission by the Murray-Darling Basin Authority

1. The Murray-Darling Basin Authority (MDBA) welcomes the opportunity to make this submission to the House Standing Committee on Agriculture and Water Resources.
2. The MDBA was established under the federal Water Act 2007 as an independent, expertise-based statutory agency. Working with and through Basin state governments in partnership with the Australia Government, the MDBA undertakes activities that support the sustainable and integrated management of the water resources of the Murray–Darling Basin in a way that best meets the social, economic and environmental needs of the Basin and its communities. As such, the MDBA strongly supports initiatives that lead to more efficient and effective use of the Basin's water resources as this provide benefits for Murray Darling Basin communities, industries and the nation more broadly.
3. The federal Water Act 2007 required the MDBA to develop the Murray-Darling Basin Plan, which established new Sustainable Diversion Limits (SDLs) for water extraction to ensure that water is shared between all uses, including environmental and cultural uses, in a sustainable way.
4. The Basin Plan is underpinned by best-available science, and is adaptive. It can be refined and updated with the knowledge gained from reviews and evaluations. The Basin Plan is also being implemented gradually over a long period, in consultation with stakeholders, to allow industries and communities time to adapt to change.
5. The importance of these Basin Plan principles and the type of decision making they can support was demonstrated through the MDBA's recent review of the sustainable diversion limits in the northern part of the Murray Darling Basin (Northern Basin Review). The Review was informed by socioeconomic analysis of how different levels of water recovery are likely to affect Northern Basin communities (Northern Basin Review). It also weighed up how different ways of recovering water for the environment affected social and economic outcomes for Basin communities.
6. The socio-economic analysis found that communities in the Northern Basin had been subject to a considerable period of structural change prior to the implementation of the Basin Plan. Consequently, environmental water recovery from buybacks can introduce an additional driver of change for northern communities. The adjustment challenges can be particularly significant when there are sudden changes in irrigation activity associated with the government purchase of large parcels of water entitlements in irrigation dependent communities. A more steady approach to buybacks can somewhat mitigate the social and economic impacts.

7. The socio-economic analysis provided an insight into the social and economic effects of water acquired through buybacks compared with investments in water use efficiency.
8. The MDBA analysis that informed the Northern Basin Review has also highlighted how environmental water recovery through investments in more efficient water use can lead to very different social and economic outcomes compared with buybacks. Sustaining the level of irrigated agricultural production, even when there is less water available for irrigation overall, means the social and economic impacts of environmental water recovery on agricultural service industries and regional communities are greatly reduced.
9. The socio-economic analysis was conducted at a community level which provided a level of detail and insight not previously available. The social and economic outcomes for a community like Goondiwindi, where more environmental water recovery was done through investments in water use efficiency than it was through buybacks, were very different to other communities where more buybacks were used. The full report on this analysis is available for download at: <https://www.mdba.gov.au/sites/default/files/pubs/NB-social-economic-technical-overview%20final-Dec16.pdf>.)
10. The social and economic analysis done to support the Northern Basin Review has served to reinforce the MDBA's view that water recovery from improvements to water use efficiency – both off-farm and on-farm – should be prioritised over buybacks. A water recovery strategy build around this position will allow for the re-balancing of water use in the Murray Darling Basin and deliver the best outcome for communities by keeping the social and economic impacts to a minimum.
11. During 2017 the MDBA will be undertaking an evaluation of the first five years of implementation of the Basin Plan. In undertaking this evaluation, the MDBA will look at the observed environmental, social, economic and cultural outcomes in the basin, and also undertake some new research to help understand whether the outcomes are consistent with what was expected at this stage of Basin Plan implementation.
12. The 2017 evaluation will be broad-ranging, including analysis of: environmental water planning, management and outcomes; implementation of water trade rules and the water quality and salinity management plan; implementation of the adaptive management elements of the Basin Plan (such as the Sustainable Diversion Limit Adjustment Mechanism); the progress with Commonwealth water recovery (including the on-farm and off-farm infrastructure improvement programs); and the social, economic and cultural outcomes from all these activities. The social and economic analysis is expected to provide additional insights into the social and economic benefits of water recovery from investments in water use efficiency.
13. In addition to the work to support the 2017 evaluation, the MDBA notes that on 17 March 2017 the Murray-Darling Basin Ministerial Council agreed to an independent analysis of Efficiency Measures, which aim to recover water for the environment in ways that have no adverse social or economic outcomes. The independent study is scheduled to report in December 2017. This study will take into account information arising from the MDBA 2017 evaluation, and inform the design of a set of programme arrangements that enable the Efficiency Measures to achieve their goals.
14. Further information and updates on the 2017 evaluation are available on the MDBA website.