



Inquiry into the management and use of Commonwealth environmental water

12 April 2018

EDOs of Australia (formerly ANEDO, the Australian Network of Environmental Defender's Offices) consists of eight independently constituted and managed community legal centres located across the States and Territories.

Each EDO is dedicated to protecting the environment in the public interest. EDOs:

- provide legal representation and advice,
- take an active role in environmental law reform and policy formulation, and
- offer a significant education program designed to facilitate public participation in environmental decision making.

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Introduction

EDOs of Australia (**EDOA**) is a network of community legal centres specialising in public interest environmental law. A number of our offices service clients – including community groups, dryland farmers and irrigators – located across the Murray-Darling Basin (**MDB**). We therefore support evidence-based laws and policies that guarantee the long-term, sustainable management of the MDB's highly variable water resources *and* promote regional development.

We have many years' experience engaging with water law and policy processes at both State and Commonwealth levels. We also have extensive experience advising a broad range of clients on the *Water Act 2007* (Cth), Basin Plan, State legislation and policies. Our work involves legal advice on specific issues as well as broader legal analysis of systemic issues and legal questions. It often draws on advice from scientific experts on our technical advisory panel, as well as irrigators with considerable experience in managing their properties in a variable climate.

Based on this experience, we have considerable concerns regarding the current management of environmental water. A key rationale of the Basin Plan was to restore the Basin to health. Recovering water for the environment is absolutely essential as a healthy system underpins healthy regional communities and economies. Despite this imperative, the benefits of the water recovered for the environment to date have been undermined by insufficient protection of environmental flows.

This relates to our overarching concern regarding the failure on the part of the Commonwealth and certain Basin States to actively ensure we have a scientifically rigorous, risk-based approach to the management of the MDB's variable and scarce water resources, underpinned by strong laws.

In addition to the non-compliance and lackluster enforcement of unlawful extractions (both of which have recently received considerable media coverage), we are concerned about the current lawful mismanagement of Basin water resources, which is both serious and in our view systemic. Lawful mismanagement relevant to this inquiry includes (but is not limited to):

- extraction limits that do not take into account climate change and which are not based on best-available science;
- lawful extraction of environmental or 'community' water purchased with taxpayers' money;
- closed tender 'buybacks' lacking in transparency, value for money and environmental utility; and
- recovering water for the environment via on-farm efficiency upgrades which – based on best-available evidence – are likely to *reduce* environmental flows.

These existing regulatory gaps undermine the effective management and use of environmental water across the Basin in accordance with the objectives of the *Water Act 2007*. Relevantly, current limitations on the management of environmental water also potentially undermine Australia's capacity to implement its international obligations, in particular under the Convention on Biological Diversity (**CBD**) and the Ramsar Convention on Wetlands. While many of our clients are concerned about the health of the MDB's many listed species and its 16 Ramsar-listed wetlands, it is nonetheless important to consider Australia's reputation on the international stage - a reputation which is inextricably linked to proper implementation of these obligations.

We note that the Committee Terms of Reference (**ToR**) focus on the management and use of Commonwealth environmental water, giving particular consideration to the role of the Commonwealth Environmental Water Holder in:

1. **maximising the use of environmental water for the protection and restoration of environmental assets;**
 2. **considering innovative approaches for the use of environmental water;**
 3. **monitoring and evaluating outcomes of the use of environmental water; and**
 4. **options for improving community engagement and awareness of the way in which environmental water is managed; and**
- any other matter of relevance that the committee wishes to consider.**

This submission addresses the four terms of reference and reiterates recommendations for improved management of environmental water, with links to relevant EDO water law reform submissions in the **Appendix**.

1. Maximising use of Environmental water (ToR 1)

A core element of the National Water Initiative (**NWI**) is an acknowledgement of the need to 'return all systems to environmentally sustainable levels of extraction.'¹ The Productivity Commission has examined progress against this objective, justifiably noting that '[a]ll jurisdictions except Western Australia have legally recognised the environment's share of water through planning arrangements. Provisions of water for the environment are made in all water plans.' It goes on to note that in certain areas, in particular the 'highly-regulated parts of the Murray-Darling Basin, governments also provide environmental flows by way of entitlements with the same rights and conditions as those of consumptive users...Substantial entitlements are now actively managed for environmental benefit.'²

Notwithstanding the existence of these provisions, EDOA is concerned that sustainable management of Australia's water resources – even in States with extensive water planning frameworks and limits on extractions – is being undermined by a number of factors. This part identifies key threats to environmental water that are currently a barrier to maximising the use of environmental water for environmental outcomes.³

The role of the Commonwealth Environmental Water Holder (CEWH) – current limitations

The CEWH's capacity to maximise use of its multi-billion dollar asset is being undermined by a number of barriers and limitations. These include, but are not limited to, the issues outlined below.

- There is a notable absence of adequate laws (notably in Water Sharing Plans) to protect environmental water. This in turn means that it is legal to extract this water for commercial purposes. This is evidenced by frequent references to possible or actual legal extraction of environmental water by the CEWH in their

¹ National Water Initiative, paragraph 5.

² Productivity Commission, *Draft Report into National Water Reform*, p. 127.

³ See our *Submission responding to the Productivity Commission's Draft Report into National Water Reform* (3 November 2017), where we note a number of the threats to environmental water. While the focus is on the Murray-Darling Basin (**MDB**), some of these issues are relevant in other jurisdictions (in particular the lack of statutory protection for environmental flows and growth in on-farm storage).

Portfolio Management Plans for each valley.⁴ This is a significant problem - possibly even more so than non-compliance. While the NSW Government is in the process of exploring options to improve protection of environmental water, it is unclear whether this will result in the necessary mix of statutory-based protections.

- In the absence of adequate protections for environmental water in unregulated systems, the CEWH would be reliant on entering into commercial arrangements with landholders to store the Commonwealth's water in on-farm storages and call for its release at appropriate times. These arrangements are unsatisfactory from a number of perspectives: having paid for the water, the taxpayer is required to pay private landholders to store it; the water is likely to be contaminated with pesticides; and in the absence of an embargo or other measures to protect the water once it is released, it could be extracted further downstream. In summary, these arrangements reflect a failure on the part of State governments to embed protections for environmental water in water sharing plans.
- There has been insufficient action to remove constraints in certain areas (around the Barmah Choke, for example). It is crucial that concrete steps are taken to remove constraints so as to allow for sufficient volumes of environmental water to be delivered to key locations. Failure to address this issue will undermine proper implementation of the Basin Plan, including delivery of the 450GL provided for under Part 2AA of the *Water Act 2007*.
- There is uncertainty in the community regarding the development by certain Basin States of appropriate pre-requisite policy measures (**PPMs**), as provided for under Chapter 7 of the Basin Plan.
- There is no legal requirement for the Commonwealth to purchase any particular class of licence in any particular catchment (or to ensure that these purchases represent value for money). For example, the Government has made a number of 'strategic purchases' of low reliability entitlements for well above market rate. These decisions undermine the CEWH's capacity to maximise environmental outcomes with its water - and erode the community's confidence in purchasing decisions made by the Department of Agriculture.
- It does not appear that the CEWH is adequately consulted regarding the purchase of entitlements, which is undertaken by the Department of Agriculture. As the CEWH is responsible for using – and maximising benefits from – this water, it should have significant input with respect to these purchases. Greater collaboration could result in better decision-making, including avoiding the acquisition of water of negligible environmental value (such as the Warrego entitlements purchased in 2017).
- We have been unable to find any analysis by the Commonwealth as to whether the \$2.27 billion dollars' worth of water it has purchased⁵ will actually be available under different climatic scenarios, and if so to what extent. Nor have we found any analysis as to how its portfolio of entitlements will be used to maintain the ecological character of the Basin's 16 Ramsar listed wetlands, particularly in a changing climate.
- Current operational rules can actually disadvantage the CEWH.

⁴ See for example: 'Commonwealth Environmental Water Portfolio Management Plan: Macquarie River Valley 2016–17, Commonwealth of Australia, 2016', p. 31; 'Commonwealth Environmental Water Portfolio Management Plan: Gwydir Valley 2016–17, Commonwealth of Australia, 2016', p. 10; 'Commonwealth Environmental Water Portfolio Management Plan: Border Rivers 2016–17, Commonwealth of Australia, 2016', pp. 25, 26.

⁵ Based on figures provided to the Senate Regional and Rural Affairs and Transport Committee during Senate Estimates on 26 May 2017. Specifically, as of that date \$2.36 billion was contacted and \$2.27 billion had been spent.

2. Innovative approaches for the use of environmental water (ToR 2)

This term of reference refers to innovative approaches for the *use* of environmental water. Our primary recommendation is that any proposed innovative ways to use water must be validated by an independent scientific expert to ensure the proposed use will achieve the objective of protecting and restoring the environmental asset/s.

Of more concern, and of relevance to this inquiry, are purported “innovative” ways that have been suggested to augment environmental water, for example, by recovering water through on-farm efficiency works, and by claiming environmental benefits from complementary measures. These are discussed below, with further analysis of the CEWHs role regarding ‘environmental activities.’

On-farm efficiency upgrades and return flows

With a legislated 1,500 GL/year cap on the outright purchase of entitlements, the emphasis is now on recovering water through on-farm efficiency works. \$1.77 billion dollars has been set aside for this purpose under Part 2AA of the *Water Act 2007*. We further understand that as of late 2016, \$3.44 billion had been spent on both on and off-farm infrastructure projects.⁶ However, best-available evidence suggests that on-farm irrigation upgrades are likely to increase (rather than reduce) consumptive use primarily due to reduced return flows and increased production.⁷ We also understand that funding from these programs has been used to increase the size of storages, ostensibly to reduce evaporation. However, increased storage size – particularly in the northern Murray-Darling Basin – is likely to result in increased extraction of overland flows (which could include the CEWH’s held water).

While we support technological innovations to improve water efficiency, we have found no evidence that monitoring or auditing is being undertaken to ensure that:

- irrigation upgrades are actually resulting in additional environmental flows and reduced consumption;
- the money provided to the irrigator is being used to construct the works stipulated in the contract;
- the irrigation upgrades being undertaken are cost effective (or that the costing is indeed accurate).

This is also relevant to **ToR 3** regarding monitoring and evaluation.

It is deeply concerning that one of the core planks of the Commonwealth’s water recovery program is not only fundamentally flawed, but is lacking in any sort of appropriate oversight. A number of our clients have expressed concerns that in the absence of the necessary checks and balances, public money may be misused at the

⁶ Letter from Prime Minister Turnbull to the South Australian Premier, Jay Weatherill. Dated 29 November 2016.

⁷ Qureshi, M. E., K. Schwabe, J. Connor, and M. Kirby (2010), Environmental water incentive policy and return flows, *Water Resour. Res.*, 46, W04517, doi:10.1029/2008WR007445; Grafton, R. Quentin, Water Reform and Planning the Murray-Darling Basin, Australia, *Water Economics and Policy*, Vol. 3, No. 3 (2016) 1702001; Adamson, David, Loch, Adam, Possible negative feedbacks from ‘gold-plating’ irrigation infrastructure, *Agricultural Water Management* 145 (2014); Perry, Chris, *Does improved irrigation technology save water? A review of the evidence. Discussion paper on irrigation and sustainable water resource management in the Near East and North Africa*, Food and Agriculture Organization of the United Nations, May 2017, pp. 13-14 (on Australia).

expense of the environment and other users in the Basin. This is a serious issue that requires urgent attention.

Complementary measures as ‘offsets’

EDOA notes the Productivity Commission’s comments regarding the use of complementary waterway management methods to improve environmental outcomes.⁸ While these methods are indeed necessary (to manage pests, for example), we are concerned by calls from certain stakeholders to *substitute* so-called ‘complementary measures’ for environmental flows, including in systems vulnerable to water scarcity. There is no credible evidence base to support this approach, particularly in light of the fact that the SDLs set under the Basin Plan are unlikely to satisfy the definition of an environmentally sustainable level of take (ESLT). In summary, natural resource management should be additional to – not a substitute for – water for the environment.

CEWH Environmental activities⁹

The *Water Amendment (Review Implementation and Other Measures) Bill 2015* expanded the CEWH’s functions to include undefined ‘environmental activities’ where certain conditions are met. We reiterate our previous comments on this part of the Bill, as they are still relevant.

First, we note that it is highly unusual not to define terminology such as ‘environmental activities’ in legislation. We understand that this was deliberate choice intended to provide the CEWH with sufficient flexibility to undertake a range of activities that may augment the environmental outcomes that they can achieve with their water.

While we can see the value of this approach, we are nonetheless concerned that the relevant provisions do not include sufficient checks and balances. This may in turn result in the CEWH being required to undertake activities that are the province of other agencies.

The Bill provided that CEWH may only dispose of allocations for the purposes of undertaking such activities if he or she ‘reasonably believes, at the time of the disposal, that using the proceeds for [these] activities’ would improve the capacity of the CEWH’s water holdings to be applied to meet the objectives of the environmental watering plan (EWP) (or an area outside the Basin, if provided for in any regulations).

We note that the test ‘reasonably believes’ is not a subjective one. At the time the CEWH decides to sell the allocations, there must be some factual basis to their belief that the proceeds of the sale can be used – at some point in the future - for environmental activities that will improve the capacity of their water to meet the objectives of the EWP or any relevant area outside the Basin.

However, the Bill did not include a requirement that the CEWH ‘reasonably believes’ that the activities themselves will improve the capacity of their water to meet the objectives of the EWP. This is a subtle but potentially important distinction. Specifically, it means that CEWH can ultimately undertake environmental activities that do not improve the capacity

⁸ Draft Report, pp. 134-5.

⁹ *Submission regarding the Water Amendment (Review Implementation and Other Measures) Bill 2015*, EDOA submission, 25 February 2016.

of their water to meet the objectives of the EWP (or an area outside the Basin) without breaching the proposed provisions.

EDOA does not support such broadly drafted legislation. While the Act imposes a high order requirement on the CEWH to carry out its functions 'so as to give effect to the relevant international agreements', the wording nonetheless opens up the possibility of inappropriate cost shifting. Moreover, it removes the strict nexus between the activities of the CEWH and the objectives of the EWP, which is one of the key elements of the Basin Plan.

3. Monitoring and evaluating outcomes of the use of environmental water (ToR 3)

Monitoring and evaluating outcomes of the use of environmental water is essential given the significant public expenditure involved in acquiring this water, its role in restoring Basin health, and the current low levels of community confidence in water management across the MDB.

EDO has made a number of recommendations for improving monitoring and transparency, for example in light of the systemic problems identified by Ken Mathews and the Ombudsman in NSW. Our detailed submissions are listed in the **Appendix**.

Monitoring environmental water after it is released

There is insufficient information in the public sphere regarding the fate of environmental water after it is released from public storages. Notably, there is little clarity regarding the percentage of this water that actually reaches the targeted environmental asset/s (and the percentage that is extracted en route). We note, however, that monitoring is not a substitute for statutory protections to prevent legal extraction of environmental water. Rather, it is a necessary tool to inform the development of rules in water resource plans to rectify the loophole that currently allows legal extraction of the CEWH's held water.

Growth in on-farm storages

We understand that there has been significant growth in on-farm storages in certain catchments, notably across the northern Basin (including the Barwon-Darling). Relevantly, neither the *Water Management Act 2000* (NSW) nor the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 (BD WSP)* include provisions restricting growth in storages. We note that while the NSW Government is currently exploring ways to improve management of environmental water in the Barwon-Darling, the government has not expressed an intention to explicitly prohibit growth in on-farm storages. We further note that the success of the NSW Government's reforms – which are yet to be finalised – will ultimately depend on whether they are statutory in nature, enforceable and enforced.

As noted above, we further understand that on-farm efficiency funding programs are subsidising the expansion of private storages, some of which are being used to capture overland flows (which could include the CEWH's water). This is contrary to the purpose of these programs, which is to increase the overall pool of environmental water.

Finally – and for the purposes of this particular ToR – formal audits have not been undertaken by the appropriate State or Commonwealth agencies to first, obtain accurate, up-to-date data regarding this growth and second, to use this data to inform the setting of

rules to protect environmental water (and to ensure cap compliance). Failure to remedy this omission is likely to result in perverse environmental and social outcomes in some areas, and potential breaches of the *Water Act 2007* and Basin Plan.

Evaluating outcomes

Evaluating outcomes is essential to demonstrate that investments in environmental water are helping to achieve the objects of the *Water Act 2007* and Basin Plan. Moreover, evaluation is required to identify any additional factors limiting or inhibiting the CEWH from maximising the use of its water – and to inform any future policy decisions regarding removal of these barriers.

Evaluation should be undertaken regularly by suitable qualified, independent scientific experts. Results of evaluation must be made public.

4. Options for improving community engagement and awareness (ToR 4)

Community *awareness* of water management issues has increased greatly due to media on non-compliance and poor enforcement over the last 9 months. Improving constructive community *engagement* will involve improving community confidence in water management.

This requires improving transparency and accountability of water management generally, but also specifically in relation to public expenditure. Concerns with the current tender process are set out below.

Recent closed-tender purchases of entitlements by the Commonwealth

The Commonwealth's procurement information system, Austender, indicates that the Department of Agriculture and Water Resources (**DAWR**) has spent \$182, 352, 078 year-to-date on closed-tender purchases of entitlements from five entities.¹⁰ While EDOA is not alleging any unlawful conduct on the part of the vendors, we are concerned about these purchases for the following reasons.

First, the community is only notified of these purchases after a contract has been entered into between the vendor and Commonwealth. In other words, no public consultation is undertaken (and nor is it required to be undertaken by law).

Second, the DAWR does not – and is not required by law – to explain how proposed purchases will further the objectives of the *Water Act 2007* and Basin Plan, and whether they are strategically the best use of taxpayer money.

Third, the security level of the entitlements purchased is not readily available, which makes it difficult for the community to assess their environmental and social value. However for example, title searches indicate that the \$81,999,888 purchase of entitlements from Tandou Ltd was predominantly for general security water¹¹ and that this water was purchased at well above market rate.¹² While there are circumstances in which paying above-market rate may be justified (for example where the environmental

¹⁰ The information downloaded directly from Austender in relation to these purchases can be provided to the Commission upon request.

¹¹ Of the 21,781ML purchased, 19,361ML was general security water.

¹² Average prices paid for permanent water transfers in the Lower Darling are available on the NSW Water Register.

and social benefits are significant and indisputable), the lack of transparency around this particular purchase (and the fact that it was for low/medium reliability water) has prompted a number of our clients to question its overall value-for-money. Similar questions have been raised about some of other purchases referred to above.

In short, while EDOA considers 'buybacks' preferable to water recovery via efficiency upgrades, the Commonwealth should only be purchasing entitlements where it can demonstrate that: the purchased water will result in measurable environmental and social benefits (with reference to the *Water Act 2007* and Basin Plan); is strategically the best use of taxpayer money; and represents overall value-for-money. This is relevant to **ToR 1** – maximising the use of environmental water.

Reporting requirements

Community awareness would be assisted by more comprehensive and easily accessible reporting. When the *Water Amendment (Review Implementation and Other Measures) Bill 2015* was passed, EDOA was broadly supportive of the proposal to expand the CEWH's annual reporting requirements to include information regarding:

- the water disposed of during the year;
- the amount of the proceeds of the disposal; and
- the purposes for which the proceeds of disposals have been used during the year.

However, we reiterate that it would be useful for the community to understand how any environmental activities undertaken by the CEWH have improved their capacity to use their water to meet the objectives of the EWP (or to achieve outcomes outside the Basin, as stipulated in any relevant regulation). This is also relevant to **ToR 3** regarding monitoring and evaluation.

Recommendations to improve management of environmental water

To improve effectiveness, transparency, protection and outcomes for environmental water, we make the following recommendations:

1. Water resource plans must include rules to protect environmental water.
2. PPMs must be properly implemented in all relevant valleys, including the Barwon-Darling River.
3. The *Water Act 2007* must be amended to:
 - a. require all proposed purchases of entitlements by the Commonwealth to be subject to a minimum four weeks public consultation period;
 - b. require all proposed subsidies for on-farm efficiency works to be subject to a minimum four weeks public consultation period;
 - c. require the consultation process to include documentation explaining how the subsidy/purchase is value-for-money and furthers the objects and substantive provisions of the *Water Act 2007* and Basin Plan;
 - d. require the CEWH to have a concurrence role in relation to purchases of entitlements;
 - e. require all water saved to be transferred to the Commonwealth at market rate;
 - f. prohibit investment in on-farm efficiency upgrades that reduce return flows;
 - g. require final contracts for on-farm efficiency projects to be published online (noting that the public interest in favour of disclosure outweighs commercial or privacy concerns);

- h. introduce strict auditing and monitoring provisions to ensure Commonwealth subsidies for on-farm efficiency works is being spent lawfully and water is actually being saved;
 - i. include a provision which requires the CEWH to 'reasonably believe' that undertaking a particular environmental activity will improve their capacity to meet the objectives of the EWP (or an area outside the Basin, as stipulated in any relevant regulations);
 - j. require the CEWH to outline in their annual report how any environmental activities undertaken during the year have improved their capacity to meet the objectives of the EWP (or to achieve outcomes outside the Basin, as stipulated in any relevant regulation);
 - k. Provide for the CEWH to have a formal role regarding the assessment of water resource plans (currently done by the MDBA), particularly in relation to the protection of environmental water and Ramsar wetlands (for which they are responsible);
 - l. Ensure the CEWH is adequately consulted regarding supply and efficiency measures and PPMs.
4. Monitoring (including with the use of remote sensing technology) of existing on-farm irrigation efficiency projects must be undertaken to understand the actual impact of these capital works on consumption and to adjust future recovery accordingly.
5. Audits must be undertaken to understand current on-farm storage capacity. This information must then be used to that water resource plans include rules to properly protect environmental water and downstream users.
6. Complementary measures must be clearly identified as complementary only, not as a 'substitute' for environmental flows.
7. The CEWH must remain in the Commonwealth environment department.

Appendix

We refer the committee to our full submissions at the following links:

- *Submission responding to the Productivity Commission's Draft Report into National Water Reform* - EDOs of Australia, 3 November 2017 - [**Download this PDF.**](#)
- *Submission to the Inquiry into the Integrity of the Water Market in the Murray-Darling Basin* - EDOs of Australia, 17 October 2017 - [**Download PDF**](#)
- *Inquiry into National Water Reform – EDOs of Australia submission, May 2017* - [**Download PDF**](#)
- *Surface Water Status and Issues Papers for the Barwon-Darling and Namoi catchments* – EDO NSW submissions, March 2017
- *Murray Darling Northern Basin Review* – EDOs of Australia submission, February 2017 - [**Download PDF**](#)
- *EDOs of Australia submission to Senate Inquiry into the Water Amendment (Review Implementation and Other Measures) Bill 2015*, 5 February 2016 - [**Download PDF**](#)
- *EDO NSW submission on the Commonwealth On-Farm Further Irrigation Efficiency Program (COFFIE Program)*, 10 December 2015 - [**Download PDF**](#)
- *EDOs of Australia submission to the Select Committee on the Murray-Darling Basin Plan*, 25 September 2015 - [**Download PDF**](#)
- *Submission on Water Amendment Bill 2015 (Cth)*, 31 July 2015 - [**Download PDF**](#)
- *ANEDO Submission to the Murray-Darling Basin Authority regarding the Draft Basin-wide Environmental Watering Strategy*, September 2014 [**Download PDF**](#)
- *ANEDO Submission to statutory review of the Water Act 2007 (Cth)*, 9 July 2014 - [**Download PDF**](#)