EDOs of Australia

Submission to the Inquiry into the Integrity of the water market in the Murray-Darling Basin

28 September 2017

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 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 a range of issues relevant to this inquiry. Our overarching concern is the ongoing failure on the part of the Commonwealth and certain Basin States to support a scientifically rigorous, risk-based approach to the management of the MDB's variable and scarce water resources, underpinned by strong laws.

This failure may be divided into two core areas. The first is non-compliance and lacklustre enforcement, both of which have recently received considerable coverage. The second is the lawful mismanagement of Basin water resources, which is both serious and in our view systemic. Lawful mismanagement 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.

Failure to address these two core areas, and more generally to adopt a scientifically rigorous, risk-based approach to water management in the MDB, threatens the medium to long-term water security of users across the Basin. It also exposes communities (including Aboriginal communities) which depend on a healthy river system for their economic prosperity and social cohesion to an uncertain future.

Relevantly, it also undermines 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.

Australia's prosperity and that of its citizens depends on a sustainably managed MDB. We need a strong, independent and transparent Murray-Darling Basin Authority (**MDBA**) to ensure the Basin Plan delivers this outcome and which plays a central role in enforcing the law. EDOA is optimistic that this can be achieved so long as there is the political will to do so. As noted in our recommendations, this includes a decision by the Commonwealth Government to commission a **judicial inquiry** into water management in the MDB.

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This submission responds to the themes raised in the Terms of reference (a) – (f). It is written from our perspective as experts in public interest environmental law, with particular emphasis on access to information, public participation, and access to justice. Our focus as experts is therefore two-fold: are current laws been correctly applied and enforced, and how can the law be improved? This submission is divided into the following seven sections:

1. Threats to environmental water
    a. Lack of protection
    b. Security level of entitlements purchased by the Commonwealth
    c. Recent closed-tender purchases of entitlements by the Commonwealth
    d. On-farm efficiency upgrades and return flows
    e. Growth in on-farm storages
    f. Planned environmental water
2. Compliance and enforcement
3. Access to information (including in relation to expenditure)
4. Implementation of the Basin Plan
    a. Northern Basin Review
    b. Water resource plans
    c. Adjustment mechanism
5. Governance arrangements
6. Inadequate water recovery
    a. Inadequate SDLs
    b. Failure to consider future, likely climate change
7. Further information

Each area includes recommendations for reform, which are summarised below.

Recommendations

Overall, we support a scientifically rigorous, risk-based approach to laws and policies governing water management in the Murray-Darling Basin. Such an approach is vital if we are to manage our most productive river system sustainably, maintain water security in a changing climate and promote regional development. Accordingly, our recommendations are as follows:

Threats to environmental water

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 Commonwealth Environmental Water Holder (**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 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 are being spent lawfully and water is actually being saved.

4. Monitoring (including with the use of remote sensing technology) of existing on-farm irrigation 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. Planned environmental water must be protected as per cl. 10.28 of the Basin Plan. In the interests of transparency, the MDBA must explain how it will ensure that this occurs for each water resource plan. All relevant data should be made available upon request so that the community has confidence that this water will be protected under the Basin Plan.

Compliance and enforcement

7. A Commonwealth **judicial inquiry** is necessary to properly understand the extent of possible non-compliance, misconduct and corruption in relation to the management of Basin water resources.
8. EDOA supports the recommendations made by Ken Matthews AO in his recently published Interim Report 'Independent Investigation into NSW water management and compliance.'
9. The MDBA – in cooperation with Basin States - must ensure that modern, functioning meters are operational across the Basin as soon as possible. Telemetry must be universally applied and access to the resulting data made available to the community.
10. The MDBA must be properly funded to ensure that it has a state-of-the-art, properly resourced compliance and investigations unit.
11. Technology – including remote sensing – can and must be used to track consumptive use across the Basin. This information must in turn be used by the appropriate compliance and enforcement unit(s).
12. The *Water Act 2007* must be amended to impose a positive obligation on the part of the MDBA to investigate (and where necessary take action in relation to) possible breaches of Part 2 of the Act.
13. Where necessary, Basin States should refer powers to extend the MDBA's compliance and enforcement role.
14. The compliance provisions in the Basin Plan are too flexible and must be strengthened.

Access to information

15. See recommendation 3 with respect to closed-tender purchases;
16. See recommendation 3 with respect to on-farm efficiency upgrades;
17. Cap reporting for the last five years must be completed and published as soon as possible. Note that draft reports must be subject to proper, independent peer-review by objective, non-conflicted experts;
18. Business cases for supply measures must be published online without delay;
19. Water agencies must ensure all levels of public servants and officers adhere to a clear code of conduct and code of ethics (in particular the requirement that civil servants be non-partisan). This requires genuinely balanced consultation with all stakeholders.
20. Licensing, approval and water account information must be made available by all relevant agencies to deter non-compliance and restore the community's trust in the management of Basin water resources.

Implementation of the Basin Plan

21. See the recommendations contained in our submission responding to the Northern Basin Review, attached at **Annex 1**.
22. Water resource plans must include appropriate rules to protect environmental water.
23. The MDBA must be properly resourced to ensure it can properly assess each draft water resource plan against the requirements of the *Water Act 2007* and Basin Plan.
24. An expert panel of independent, appropriately qualified experts (including hydrologists, modelers, ecologists and lawyers) must be convened by the MDBA to peer-review each draft water resource plan and assist in communicating their implications to the community.
25. The MDBA must be properly resourced to ensure that it can facilitate genuine engagement with the community in relation to draft WRPs. In addition to the aforementioned panel or group, this will require appropriately qualified engagement officers who can explain the implications of different rules in these documents.
26. The Basin Plan recovery figure must not be adjusted (under the adjustment mechanism) until crucial issues regarding the risks associated with supply measures and efficiency works are resolved.

Governance arrangements

27. The *Water Act 2007* must be amended to set minimum (and maximum) quotas for representation on the Board of the MDBA. These quotas will prevent certain stakeholders from dominating the board and guarantee representation for others.
28. The NWC must be reinstated. Its functions must include mandatory auditing of performance of Basin States and MDBA against the requirements of the *Water Act 2007* and Basin Plan, an annual compliance review and mandatory publication of its findings. As part of this, it must be empowered to access all necessary data. Where constitutional constraints exist, the States will be required to refer the necessary powers.

Inadequate water recovery

29. While the immediate priority is on achieving the targets in the current iteration of the Basin Plan, risk to water users and the environment can only be mitigated by proper consideration of the future, likely impacts of climate change. Work on this matter must be undertaken with a view to ultimately amending the recovery figure.

Case-study: Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012

30. This water sharing plan must be amended before it is accredited as a water resource plan. This must include the introduction of individual and total daily extraction limits, shepherding provisions and changes to water allocation account management rules (amongst other changes).
31. A full audit of on-farm storages on the Barwon-Darling River must also be undertaken and taken into account before the water resource plan is accredited.
32. Accordingly, any modelling undertaken for the MDBA for the Barwon-Darling River must takes into account current rules and current on-farm storage capacity.

1. Threats to environmental water

Based on our analysis, water that is purchased by the Commonwealth to meet the requirements of the *Water Act 2007* and Basin Plan is being eroded in a number of ways. This in turn undermines the capacity of the **CEWH** – through no fault of its own – to maximise outcomes with its portfolio of entitlements. It also calls into question the very foundations of our multi-billion dollar national water recovery program and the capacity of this program to guarantee water security in the MDB over the medium to longer term.

Threats to held environmental water are addressed in subsections (a) – (e), while subsection (f) examines possible threats to planned environmental water.

a) Lack of protection

The benefits of the water recovered to date have been undermined by insufficient protection of environmental flows. Water sharing plans generally do not include rules to protect environmental water as it flows through the system. Indeed, environmental flows may trigger 'commence-to-pump' rules, thereby resulting in legal extraction of this water. This is evidenced by frequent references to possible or actual legal extraction of environmental water by the CEWH in their Portfolio Management Plans for each valley.[1]

We are particularly concerned that the MDBA's interpretation of certain clauses in the Basin Plan will dissuade Basin States from including rules to protect environmental water in their water resource plans.[2] We not only have serious doubts about the legal accuracy of this interpretation, but about the consequences for the Commonwealth's environmental water.

Similarly, we are concerned by correspondence received from the MDBA in which they have indicated that shepherding is not a 'prerequisite policy measure' (**PPM**)[3] and to that extent does not need to be implemented in the Barwon-Darling River as part of the proposed Menindee Lakes Scheme supply measure. This would in effect reduce protection for environmental flows, and is in our view legally questionable. Advice prepared by EDO NSW on this issue can be made available to the Committee, subject to our client providing consent.

While it is often argued that 'cap protects the environment', such an approach fails to take into account the fact that species and ecosystems do not function on the basis of long-term annual averages. Accordingly, event-by-event management is at times required to generate actual environmental outcomes (for example bird and fish breeding events) and to protect water quality. This means that rules must be in place to prevent environmental water from being pumped as it flows through the system. This is particularly important as the CEWH's water has been purchased with public money to fulfil the obligations outlined in the *Water Act 2007* (which includes Australia's obligations under a number of environmental treaties, including the Ramsar Convention and the CBD).

b) Security level of entitlements purchased by the Commonwealth

A significant percentage of the Commonwealth's portfolio of entitlements is low reliability water, which effectively means it will not be delivered during drier periods (for example when storages have insufficient volumes to service lower reliability users). This water is particularly vulnerable to the impacts of climate change which means its availability will diminish over time.

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[1] 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.

[2] See Basin Plan Water Resource Plan Requirements- Position Statement 1H – Potential Reliability Changes. Available online: https://www.mdba.gov.au/sites/default/files/pubs/WRP-Position-Statement-1H-Changing-reliability_0.pdf

[3] Basin Plan, cl. 7.15. We can provide the Committee with a copy of this correspondence if required.

Further to this point, we have been unable to find any analysis by the Commonwealth as to whether the $2.27 billion dollars' worth of water it has purchased[4] 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.

This is concerning for a number of reasons. First, it is not consistent with a scientifically rigorous, risk-based approach to water management. Second, the Commonwealth's portfolio of water may be incapable of discharging Australia's international obligations, particularly under the Ramsar Convention on Wetlands. Third, it appears that $2.27 billion dollars of taxpayer money has been spent without a detailed analysis of the medium to longer-term environmental and social value of this expenditure, and whether it is capable of meeting the requirements of the *Water Act 2007* and Basin Plan. If this analysis has been undertaken by the Commonwealth, we would welcome its publication.

c) 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.[5] 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, title searches indicate that the $81,999,888 purchase of entitlements from Tandou Ltd was predominantly for general security water[6] and that this water was purchased at well above market rate.[7] While there are circumstances in which paying above-market rate may be justified (for example where the environmental 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.

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[4] Based on figures provided to this 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.

[5] The information downloaded directly from Austender in relation to these purchases can be provided to the Committee upon request.

[6] Of the 21,781ML purchased, 19,361ML was general security water.

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

d) 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.[8] 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.[9]

To that end, 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).

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 expense of the environment and other users in the Basin. This is a serious issue that must be urgently addressed.

e) Growth in on-farm storages

We understand that there has been significant growth in on-farm storages in certain catchments, notably the Barwon-Darling. Relevantly, the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 (**BD WSP**) does not include provisions restricting growth in storages. This, together with the absence of daily extraction limits for individual licences, means that licence holders can pump and store large volumes of water, including low flow or 'A Class' water.

We further note that 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 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.

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

[9] 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).

f) Planned environmental water

While the Basin Plan states that there must be 'no net reduction' to the level of protection provided to planned environmental water under water resource plans,[10] documents obtained from the MDBA under the *Freedom of Information Act 1982* (Cth) (**FOI Act**) indicate that this water may be vulnerable to rule changes.[11] As most environmental water is planned, it is imperative that effective safeguards are in place to guarantee its protection, including independent scrutiny of compliance with cl. 10.28. This is particularly true given the susceptibility of planned environmental water to the impacts of climate change, as discussed in Section 6 of this submission.

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 Commonwealth Environmental Water Holder (**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 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.
4. Monitoring (including with the use of remote sensing technology) of existing on-farm irrigation 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. Planned environmental water must be protected as per cl. 10.28 of the Basin Plan. In the interests of transparency, the MDBA must explain how it will ensure that this occurs for each water resource plan. All relevant data should be made available upon request so that the community has confidence that this water will be protected under the Basin Plan.

2. Compliance and enforcement

EDOA is concerned that effective compliance and enforcement remains a significant issue in many catchments. Specific issues reported to and analysed by EDOs include allegations of:

- absent or ineffective metering;

[10] Basin Plan, cl. 10.28.

[11] We obtained these documents on behalf of a client, the Inland Rivers Network.

- tampering with meters;
- unlawful extractions;
- unlawful construction of levee banks and other structures;
- failure to keep logbooks where required by law;
- failure on the part of responsible agencies to properly investigate serious allegations of non-compliance;
- insufficient number of compliance officers; and
- unlawful trading activity.

Allegations of non-compliance in the Barwon-Darling River have received a great deal of public attention over the last few months. However, the issue of non-compliance in the Barwon-Darling River was raised by the Northern Basin Advisory Committee (**NBAC**) at a number of meetings in 2016, as well as the broader community during Phase 1 of community consultation for the Northern Basin Review.

Notwithstanding ongoing community concern regarding compliance in this particular river, the MDBA has refused to release a significant number of documents concerning an investigation it undertook between 2014 and 2016 which may have revealed lawful and possibly unlawful extraction of environmental water in the Barwon-Darling River. As noted in Section 3 of this submission, there is a strong public interest argument in favour of full disclosure of this information.

This matter also invokes the role of the MDBA in relation to compliance and enforcement. While we understand that certain compliance and enforcement provisions in the *Water Act 2007* do not strictly apply until the commencement of water resource plans, this does not preclude the Authority from developing an understanding of possible compliance issues across the Basin with a view to ensuring that the Plan will not be undermined by Basin States and/or individual users. This necessarily requires a well-resourced compliance and enforcement unit and the use of appropriate technology to monitor extractions across the Basin. Relevantly, the community expects its national water agency to play a central role in the enforcement of its laws.

Furthermore, as the compliance provisions in the Basin Plan are arguably too flexible,[12] consideration must be given to how they can be strengthened.

Finally, the emphasis has been on possible non-compliance in the Barwon-Darling River, our solicitors have been contacted by a number of people alleging unlawful extractions and works in other catchments and Basin States. Our solicitors have also received reports regarding possible misconduct and corruption within government agencies. While we cannot comment further on these allegations, we do believe that they justify a full judicial inquiry in order to understand the extent and nature of these issues. The credibility of our national water reform agenda and the future of our most important river system depends on nothing less than complete transparency and accountability.

Recommendations:

7. A Commonwealth **judicial inquiry** is necessary to properly understand the extent of possible non-compliance, misconduct and corruption in relation to the management of Basin water resources.
8. EDOA supports the recommendations made by Ken Matthews AO in his recently published Interim Report 'Independent Investigation into NSW water management and compliance.'
9. The MDBA – in cooperation with Basin States - must ensure that modern, functioning meters are operational across the Basin as soon as possible. Telemetry must be

[12] Basin Plan, Part 4 of Chapter 6.

universally applied and access to the resulting data made available to the community.
10. The MDBA must be properly funded to ensure that it has a state-of-the-art, properly resourced compliance and investigations unit.
11. Technology – including remote sensing – can and must be used to track consumptive use across the Basin. This information must in turn be used by the appropriate compliance and enforcement unit(s).
12. The *Water Act 2007* must be amended to impose a positive obligation on the part of the MDBA to investigate (and where necessary take action in relation to) possible breaches of Part 2 of the Act.
13. Where necessary, Basin States should refer powers to extend the MDBA's compliance and enforcement role.
14. The compliance provisions in the Basin Plan are too flexible and must be strengthened.

3. Access to information

EDOA is concerned that access to information – including licensing details, the names of licence holders, account information and applications and approvals for dealings – is lacking or non-existent in certain jurisdictions.[13] There are other areas of natural resource management, environmental and planning laws where information is made publically available on registers, subject to privacy provisions – this is discussed further below. Such leading practice approaches have a range of transparency and accountability benefits, including increased community confidence and confirmation of lawful authorisations. However, regarding water management, accessing information can be a difficult challenge for concerned Basin communities.

Based on our experience, water agencies are often reluctant to provide our clients with documents sought under freedom of information applications, even where there is a strong argument in favour of public disclosure.

This is particularly true in relation to documents sought by the Australian Conservation Foundation (**ACF)** regarding investigations undertaken by the MDBA which may have revealed lawful and possibly unlawful extraction of environmental water in the Barwon-Darling River between 2014 and 2016. To date, only a limited number of documents have been released, with the matter currently before the Commonwealth Information Commissioner. Failure to release this information in full risks further eroding public confidence in the agency charged with implementing water reform and ensuring sustainable management of one of our most important natural resources.[14]

Similarly, at a state level, EDO NSW has spent most of 2017 attempting to gain access to water account and usage data for specific licences.[15] EDO NSW's client on this matter, the ACF, is seeking access to this information in order to clarify whether the licence holder has been complying with the various conditions attached to its licences and approvals. In short, our client believes that information regarding the use of a scarce, shared public resource should be in the public domain. We note that the ACF appealed the decision to withhold the licence data to the NSW Civil and Administrative Tribunal. However, midway through the proceedings, on 14 September 2017, WaterNSW

[13] See for example: McKay, Clare and Gardner, Alex*, Water Accounting Information and Confidentiality in Australia*, Federal Law Review, Volume 41, 2013, pp 127-162.

[14] We can provide the Committee with further details regarding this matter if required.

[15] EDO NSW is attempting to obtain this information from WaterNSW on behalf of its client, the ACF.

reversed its position and formally made a new a decision to release the licence data. The licence holders now have rights to object to WaterNSW's new decision, and if those rights are fully exercised, it may be several more months before a final determination is made as to whether the data should be released.

Our concerns regarding access to information and transparency further extend to the following matters:

- Closed tender purchases outlined in Section 1 of this submission. This is particularly concerning given that these purchases – which are for 2017 alone – amount to $182, 352, 078. As noted above, these purchases are not subject to public consultation and are only published after a contract has been entered into with the vendor. There is no reporting of their strategic, environmental and social value, and how they advance the objectives and substantive provisions of the *Water Act 2007* and Basin Plan.

- We understand that $3 billion dollars has been spent on both on and off-farm infrastructure works.[16] However, there is a dearth of information regarding how this money is being spent on a project-by-project basis, whether individual contracts are being properly implemented, whether water is actually being saved and so on.

- Cap reporting has not been undertaken by the MDBA since 2011-12, despite a requirement to do so under the Murray-Darling Basin Agreement.[17] While the 'cap register' includes figures up to 2015-16, this is not a legal or practical substitute for detailed cap reporting. Relevantly, the cap register merely contains figures, none of which are supported by publicly available data or analysis. It is therefore difficult for the community to assess the accuracy of the information provided.

- Business cases for supply measures – which if approved will have a significant impact on Basin water resources – have not been made publicly available despite requests by our clients. It is impossible for the community to properly assess the likely impact of these projects (and their lawfulness) in the absence of this information.

- It is not clear that our clients have access to the same level of information as other stakeholders, in particular certain irrigator groups. Again, we can elaborate on this issue if required.

Inability to access information in a timely matter, or at all, also constitutes a significant barrier to meaningfully enforcing the law (including licence conditions and trading rules), which in turn reduces community confidence in water regulation and governance. By way of example, the *Water Management Act 2000* (NSW) has third party standing provisions, theoretically enabling any person to enforce a breach of the Act. However, the following information is not available on the NSW Water Register, thereby making it extremely difficult for the community to verify whether a breach has occurred and to bring civil enforcement proceedings:

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

[17] Murray-Darling Basin Agreement, Schedule E includes two separate, non-interchangeable obligations. Cl. 13 (5) outlines the cap reporting requirements (known as an 'audit monitoring report'), while cll. 13(7),(8) provides for the maintenance of a cap register.

- the names of licence holders (this information can only be obtained via a title search if the licence number is known);
- account information for individual licences (allocations and balance);
- information for cancelled licences (including the relevant dealing history);
- applications for dealings requiring ministerial approval;[18]
- licences issued under the *Water Act 1912* (NSW).[19]

The counterargument to greater transparency is that it is inconsistent with privacy laws. It is our view that this argument is lacking in merit for the following reasons:

- Many licences are held by corporations, to which privacy obligations do not apply.
- It is widely acknowledged that our shared water resources must be managed sustainably and consistently with the law. This is particularly true in light of climate change and its likely impacts on water availability in certain parts of the country. The public interest in doing so far outweighs any concerns regarding confidentiality.
- To the best of our knowledge, no one has clearly articulated why greater transparency would negatively impact law-abiding licence holders or their commercial interests. Clear publically available information could in fact benefit landholders if it is clear that a lawful authorisation for an activity is in place.
- The law in many jurisdictions acknowledges that it is in the public interest for the community to have access to development applications, development consents and pollution licences, all of which are connected to the commercial interests of the relevant applicant or licence holder. It is logically inconsistent to fail to extend the same level of access to water licensing, particularly given the importance of managing water resources in a sustainable manner.
- Similarly, under Australian laws it is relatively easy to undertake searches to obtain information about property and companies. This includes land titles, encumbrances on land titles (including mortgages), survey plans, land value, company extracts, roles and relationships extracts and so on. Much of this information is arguably more sensitive than a water account balance for a particular licence, for example.

Recommendations:

15. See recommendation 3 with respect to closed-tender purchases;
16. See recommendation 3 with respect to on-farm efficiency upgrades;
17. Cap reporting for the last five years must be completed and published as soon as possible. Note that draft reports must be subject to proper, independent peer-review by objective, non-conflicted experts;
18. Business cases for supply measures must be published online without delay;
19. Water agencies must ensure all levels of public servants and officers adhere to a clear code of conduct and code of ethics (in particular the requirement that civil

[18] As there is a three month limit on commencing judicial review proceedings, it is important that this information be made publicly available so that the community is first, aware that an application has been made and second, able to receive legal advice as to whether the dealing is lawful.

[19] In order to ascertain whether conversion to water access licenses under the *Water Management Act 2000* and relevant regulations has been undertaken in accordance with the law.

servants be non-partisan). This requires genuinely balanced consultation with all stakeholders.

20. Licensing, approval and water account information must be made available by all relevant agencies to deter non-compliance and restore the community's trust in the management of Basin water resources.

4. Implementation of the Basin Plan

In Section 4 of this submission, we draw the Committees attention to three critical elements of implementation that warrant further investigation and analysis: the Northern Basin Review, the water resource planning process, and the adjustment mechanism**.**

a) Northern Basin Review

We would invite the Committee to refer to our submission to the MDBA regarding the Northern Basin Review, which outlines critical legal problems with the proposed amendment. This is attached at **Annex 1**.

b) Water resource plans

EDOA and many of our clients are concerned that the water resource planning process will not result in adequate protection of environmental water, as discussed in Section 1 of this submission.

We are further concerned that the MDBA is inadequately resourced to properly assess 36 different water resource plans against the requirements of the *Water Act 2007* and Basin Plan between now and mid-2019. This concern is based on the fact that each water resource plan will be highly technical and catchment-specific, therefore requiring specific expertise to assess the implications and impacts of each individual plan. It is not clear that the MDBA currently has the appropriate staffing arrangements in place to manage this process, although with appropriate funding and human resources this can and should be rectified.

The complexity of these plans also excludes most people from contributing to their development, including many farmers who are directly impacted by the rules contained therein. This essentially means that the plans are being developed with limited input from the community, with the exception of the irrigation industry which is well-resourced and on the whole knowledgeable about the rules that apply to their particular catchment. This may have a material impact on the final rules contained in the accredited plans unless certain safeguards are put in place to ensure a more balanced engagement/development process.

Finally, once accredited by the Minister, water resource plans will be in place for 10 years. Poorly drafted plans that fail to protect environmental water and which are based on inaccurate data and assumptions therefore have the potential to completely undermine the intent and purpose of the *Water Act 2007* in the first crucial decade of their operation.

c) Adjustment mechanism

EDOA wishes to draw the Committee's attention to core problems with the adjustment mechanism. In the first instance, we are concerned by the emphasis on supply measures, the failure to provide business cases for these proposed measures and the fact that the Basin Plan only requires "environmental equivalency" to be achieved according to a legislated method and in a model, not in a literal or practical sense.[20] In

[20] Basin Plan, cl. 7.15, Schedule 6.

other words, there is no legal requirement that supply measures actually result in equivalent environmental outcomes in the Basin itself. Further, these measures "have been criticised for benefiting only small areas of wetlands, having negative environmental impacts and high opportunity costs."[21]

Second, and as noted in Section 1 of this submission, on-farm efficiency works may result in more, rather than less, water being consumed. It has also been pointed out that these works are being "constructed without any climate change impact assessment, so may become redundant and need to be decommissioned under a future climate."[22] This in effect means the Commonwealth is transferring public wealth without properly assessing the long-term benefits and risks associated with these investments. Finally, and as pointed out in Section 3, there is a lack of transparency and accountability surrounding expenditure from the Special Account, and whether contracted works are being constructed as per contractual arrangements and are achieving the intended environmental outcomes.

Also refer to our comments on:

- On-farm efficiency upgrades in Section 1;
- On-farm efficiency upgrades in Section 3; and
- Business cases for supply measures in Section 3.

Recommendations:

21. See the recommendations contained in our submission responding to the Northern Basin Review, attached at **Annex 1**.
22. Water resource plans must include appropriate rules to protect environmental water.
23. The MDBA must be properly resourced to ensure it can properly assess each draft water resource plan against the requirements of the *Water Act 2007* and Basin Plan.
24. An expert panel of independent, appropriately qualified experts (including hydrologists, modelers, ecologists and lawyers) must be convened by the MDBA to peer-review each draft water resource plan and assist in communicating their implications to the community.
25. The MDBA must be properly resourced to ensure that it can facilitate genuine engagement with the community in relation to draft WRPs. In addition to the aforementioned panel or group, this will require appropriately qualified engagement officers who can explain the implications of different rules in these documents.
26. The Basin Plan recovery figure must not be adjusted (under the adjustment mechanism) until crucial issues regarding the risks associated with supply measures and efficiency works are resolved.

5. Governance arrangements

EDOA supports an independent and transparent MDBA. As such, we believe that appropriate governance structures must be legislated to ensure more balanced representation on its board. This would require simple changes to the *Water Act 2007*, as per our recommendations below.

We further support reinstatement of well-resourced National Water Commission (**NWC**) charged with, amongst other things, a range of auditing and reporting functions.

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[21] J Pittock, R Grafton and J Williams "The Murray-Darling Basin Plan fails to adequately deal with climate change" (2015) 42(6) *Water,* p. 28.

[22] Ibid. See also David, Loch, Adam, Possible negative feedbacks from 'gold-plating' irrigation infrastructure, *Agricultural Water Management* 145 (2014), p. 135, 141, 143.

We also note that EDO NSW has been requested to provide expert advice on how to improve governance of water management at a state level (for example to the review currently being conducted by Mr Ken Mathews AO). It is our view that governance reforms aimed at improving transparency and accountability must be undertaken at both the national and state levels.

Recommendations:

27. The *Water Act 2007* must be amended to set minimum (and maximum) quotas for representation on the Board of the MDBA. These quotas will prevent certain stakeholders from dominating the board and guarantee representation for others.
28. The NWC must be reinstated. Its functions must include mandatory auditing of performance of Basin States and MDBA against the requirements of the *Water Act 2007* and Basin Plan, an annual compliance review and mandatory publication of its findings. As part of this, it must be empowered to access all necessary data. Where constitutional constraints exist, the States will be required to refer the necessary powers.

6. Inadequate water recovery

Section 6 of this submission focusses on to two issues: inadequate SDLs and the ongoing failure to consider future likely climate change.

a) Inadequate SDLs

Publicly available evidence indicates that a minimum of approximately 4000GL of water must be returned to the environment in order to satisfy the requirement in the *Water Act 2007* to reinstate an 'environmentally sustainable level of take'.[23] While the immediate priority should be reaching the targets set in the Basin Plan (in particular those in long-term watering plans), the Commonwealth will ultimately need to review the current recovery figure to minimise the level of risk water users (including the environment) are exposed to in the medium to longer term.

b) Failure to consider future, likely climate change

While data from the millennium drought was included in modelling to determine SDLs under the Basin Plan, the Plan does not take into account likely, future climate change. This is problematic for two, core reasons. First, as SDLs are managed as long-term annual averages, planned environmental water will bear the overall burden of absorbing the impacts of climate change (relative to extractive water, though this consumptive licence holders will also be impacted, as discussed below). This is particularly unsustainable as it will undermine the resilience of the river system upon which all users depend. Second, basing SDLs on outdated data means that investors are unable to properly assess the value of their assets and the medium to long-term risks to their water portfolio, which gives rise to uncertainty.

Accordingly, any review of SDLs must consider future, likely climate change scenarios, as recommended by Professors Pittock and Grafton.[24] Relevantly, they note that:

> *It is our view that the failure to use current knowledge on projected impacts of climate change in the computation for the Basin Plan's sustainable diversion limits, or provision for systematic adjustment into the future, significantly increases the risks to the ecological heath of the river systems. It also increases*

[23] MDBA, *Guide to the proposed Basin Plan, Volume 2: Technical background*, 2010 pp. 114-15.

[24] Pittock, J and Grafton, R. Quentin, Williams, J, *The Murray-Darling Basin Plan fails to adequately deal with climate change*, Water, January 2015.

> *the uncertainty to communities, who now have no clear policy setting or process to manage the anticipated changes in water availability into the future.*[25]

We further note that a significant proportion of the entitlements recovered by the Commonwealth are what may be broadly classified as low to medium security entitlements,[26] which are particularly vulnerable to climate change as they do not guarantee reliability of supply during drier years. In practical terms, this means that the water held on these licences will be unavailable for the environment as water availability decreases in certain parts of the Basin.[27]

While it is often argued that the existing Basin Plan is adaptive in nature and that allocations can vary to reflect future variations in water availability, this analysis fails to take into account data from the millennium drought which indicates that "environmental flows across the basin declined by about four times as much as reductions in surface water extractions by irrigators."[28] As such, there is "little evidence that the existing allocations framework is a cure-all for future reductions in rainfall"[29] in the MDB. Furthermore:

> *Reallocation of water to account for climate change will get harder, not easier, as funds from the Australian Government's multi-billion dollar Water for the Future package are exhausted and if water availability declines. Further, adjustment of the SDLs is now legally complex and administratively difficult.*[30]

In summary, it is imperative that current recovery figure be reviewed and the issue of future, likely climate change addressed in order to maintain water security for the environment, industry and regional communities.

Recommendation:

29. While the immediate priority is on achieving the targets in the current iteration of the Basin Plan, risk to water users and the environment can only be mitigated by proper consideration of the future, likely impacts of climate change. Work on this matter must be undertaken with a view to ultimately amending the recovery figure.

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[25] Ibid, p. 26.

[26] Variously known as general security, supplementary, low reliability, and overland flow licences. For open tender purchases see: http://www.agriculture.gov.au/water/markets/commonwealth-water-mdb/average-prices#southern-murraydarling-basin-tenders-201213

[27] Modelling (dry extreme scenario) indicates that parts of the MDB could experience a 37 percent reduction in water availability by 2030. See: CSIRO, *Water availability in the Murray-Darling Basin. A report to the Australian Government from the CSIRO Murray-Darling Basin Sustainable Yields Project.* CSIRO, Australia, 2008 p. 35.

[28] R Grafton, J Pittock, J Williams, Q Jiang, H Possingham and J Quiggin "Water planning and hydro-climatic change in the Murray-Darling Basin, Australia" (2014) 43(8) *Ambio* 1082 at 1084, citing CSIRO, *Water Availability in the Murray: A Report to the Australian Government from the CSIRO Murray-Darling Basin Sustainable Yields Project* (2008) 35 https://publications.csiro.au/rpr/download?pid=procite:cfc7ab48-acf5-4cff-87aa-f398cfb0287f&dsid=DS1.

[29] Carmody, Emma "Climate change is water change: integrating water management, mitigation and adaptation laws and policies" *Australian Environment Review*, (2017) 31(10), p. 360.

[30] J Pittock, R Grafton and J Williams "The Murray-Darling Basin Plan fails to adequately deal with climate change" (2015) 42(6) *Water,* p. 30.

7. Further information

Case study: Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012.

EDOA has a detailed understanding of the BD WSP, including changes to rules that allowed increased access to 'low flow' or A Class water. As we are currently advising clients on a range of matters concerning this water sharing plan, much of our work is subject to legal professional privilege. However, we can provide the Committee with further information regarding the aforementioned rule changes and their implications if necessary, subject to the consent of our clients.

Recommendations:

30. This water sharing plan must be amended before it is accredited as a water resource plan. This must include the introduction of individual and total daily extraction limits, shepherding provisions and changes to water allocation account management rules (amongst other changes).
31. A full audit of on-farm storages on the Barwon-Darling River must also be undertaken and taken into account before the water resource plan is accredited.
32. Accordingly, any modelling undertaken for the MDBA for the Barwon-Darling River must takes into account current rules and current on-farm storage capacity.

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ANNEX 1

24 February 2017

Mr Neil Andrews
Chair
Murray Darling Basin Authority
GPO Box 1801
Canberra ACT 2601
By email: submissions@mdba.gov.au

Dear Mr Andrews,

Northern Basin Review

EDOs of Australia welcome the opportunity to comment on the proposed amendments to the Basin Plan (**Proposed Amendments**).

We are a network of independent not-for-profit community legal centres that specialise in public interest environmental law. Our clients include environmental organisations, as well as community groups, Aboriginal groups and farmers located throughout the Basin.

We have extensive experience advising on the *Water Act 2007* (**Water Act**) and Basin Plan. Our law reform and policy work includes submissions responding to the Draft Basin Plan, strategies made pursuant to the Basin Plan, and various amendments to the Water Act.[1]

We have consistently argued that while the Water Act requires the Basin Plan to optimise socio-economic (as well as environmental) outcomes, this can only be achieved if the river system is managed sustainably into the future. Failure to do so will ultimately undermine the long-term viability of the industries and communities that depend on a healthy Murray-Darling.

In summary, EDOs of Australia **do not support** the proposal to increase sustainable diversion limits (**SDLs**) in the Northern Basin, or for specified groundwater sources. We also **strongly oppose** the proposed amendments to Part 4, Chapter 6 and to clauses 10.20(1)(a) and (b), as well as the deletion of clause 12.17. Our reasons are set out in the body of this submission, which focuses on the legal implications of the Proposed Amendments. It is divided into the following nine sections:

1. Role of socio-economic factors
2. Role of science
3. International obligations
4. Toolkit measures
5. Compliance
6. Method for determining compliance (Part 4, Chapter 6)
7. Menindee Lakes
8. Groundwater
9. Trade

[1] Our submissions are available online at: http://www.edo.org.au/water1

1. Role of socio-economic factors

The proposal to increase SDLs in the Northern Basin forms part of a clear trend to promote increased consideration of socio-economic outcomes. This is contrary to the objects, purpose and other key provisions of the Water Act, as identified in advice provided by the Australian Government Solicitor (**AGS**) in 2010[2] regarding the role of socio-economic factors in the Basin Plan.

Similarly, we note the legal opinion of two of Australia's most eminent constitutional lawyers, Professor George Williams and Dr Paul Kildea, who have indicated that any attempt to overtly or implicitly privilege socio-economic factors over environmental outcomes would be unconstitutional and to that extent may result in the Plan 'being struck down by the High Court.'[3] Like the AGS, they have also made it clear that a so-called 'triple bottom line approach' is not consistent with the requirements of the Act.

We also note that the Water Act requires the Basin Plan to be developed on the basis of best available socio-economic analysis.[4] However, we are concerned that the Proposed Amendments are not based on research and analysis that would satisfy this requirement. For example:

- Documents obtained under the *Freedom of Information Act 1982* (**FOI Act**) by our client, the Inland Rivers Network (**IRN**), indicate that socio-economic modelling was provided to certain industry groups for comment and amendment prior to being finalised. However, this information was not provided to other stakeholders for comment. Inequitable access, potential influence and lack of transparency all raise questions as to the objectivity of the socio-economic evidence underpinning the proposed 70GL reduction.

- Documents obtained under the FOI Act by our client, the IRN, indicate that total jobs in Warren actually *increased* after the Millennium Drought.[5] This information has not been objectively reported in the publicly available report entitled 'Northern Basin Review – technical overview of the socio-economic analysis.' Rather, this report focuses on job loss during the Millennium Drought; it also imputes job losses to water recovery rather than water scarcity during the drought.[6]

- In their submission responding to the Proposed Amendment, the Murray Lower Darling Rivers Indigenous Nations (**MLDRIN**) questions the methodology used to determine impacts on Aboriginal communities, analysis of this information and the actual decision-making process.

- A number of towns in the Northern Basin have been omitted from the analysis. This includes Wilcannia, which has a significant Aboriginal community.

In summary, we are concerned that the final recommendation is not based on socio-economic analysis that would meet the requirements of the Water Act.

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[2] Dated 28 October 2010.

[3] Williams, G, Kildea, P, The Water Act and Murray-Darling Basin Plan, *Public Law Review (2011) 22. PLR 9.* Available online at: http://sites.thomsonreuters.com.au/journals/2011/05/19/journals-excerpt-the-water-act-and-the-murray-darling-basin-plan/

[4] Water Act, s. 21(4)(b).

[5] From 941 in 2010 to 1013 in 2012. Data for the years thereafter was not made available.

[6] MDBA, *Northern Basin Review - Technical overview of the socioeconomic analysis*, 2016,pp. 42-43.

2. Role of science

The Water Act requires the Basin Plan to be developed on the basis of best available scientific knowledge.[7] However, the report entitled 'Hydrologic Modelling for the Northern Basin Review' (**Hydrologic Report**) states that '[t]he 320 GL option recommended by the Authority is not provided as a model scenario in this report, but most of its aspects were drawn from existing scenarios.'[8] This implies that this option has either not been modelled or its actual results have been deemed unfit for publication. Either way, failure to recommend an option based on a published, modelled scenario undermines the scientific credibility of the Northern Basin Review. Further to this point, merely extrapolating from one of reported modelled scenarios in order to reach the 320 GL option is not scientifically robust without proper sensitivity analysis. In short, there is insufficient evidence to demonstrate that this option is based on best available scientific knowledge. Accordingly, it is unlikely to satisfy the requirements of the Water Act.

We also note that the true impact of reduced water recovery under the scenarios that were actually modelled has not been reported comprehensively. Specifically, the report claims that there is only a *slight* reduction in the likelihood that 20 to 22 flow indicators will be met under the modelled 320 GL scenarios (compared to the current 390 GL scenario).[9] However, a more detailed analysis of the data indicates that the probability that these indicators will be met under any of the 320 GL scenarios is *considerably lower* for some indicators,[10] for example in the Culgoa.[11]

Furthermore, the same assumptions have not used for all of the reported modelled scenarios. This is a significant methodological flaw which makes it difficult to meaningfully compare outcomes between each of these scenarios. The combination of incomplete reporting and methodological inconsistency undermines the overall scientific robustness and credibility of the Review. This in turn reinforces the likelihood of the recommended option falling foul of the legal requirement to develop the Basin Plan on the basis of best scientific knowledge.[12]

3. International obligations

It is well established that the Water Act and Basin Plan derive the majority of their constitutional validity from a suite of environmental treaties to which Australia is signatory.[13] These include the Convention on Biological Diversity (**Biodiversity Convention**), Ramsar Convention, and a number of treaties protecting migratory birds.[14]

In their 2010 advice regarding the role of socio-economic factors in the Basin Plan, the AGS specified that the Biodiversity Convention and Ramsar Convention 'establish a framework in which environmental objectives have primacy but the implementation of environmental objectives allows consideration of social and economic factors'. Williams and Kildea reinforce this hierarchy, stating that:

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[7] Water Act, s. 21(4)(b).

[8] MBDA, *Hydrologic Modelling for the Northern Basin Review*, 2016 p. 3.

[9] MDBA, *The Northern Basin Review. Understanding the economic, social and environmental outcomes from water recovery in the northern Basin,* 2016, *p. 2.*

[10] Compared to the current 390 GL scenario.

[11] 'The likelihood of a healthy outer [Culgoa] floodplain is considerably reduced under the 320 GL and 278 GL scenarios': MDBA, *Environmental outcomes of the Northern Basin Review*, 2016, p. 110.

[12] Water Act, s. 21(4)(b).

[13] Water Act, ss. 3(b), 9.

[14] Bonn Convention; Republic of Korea-Australia Migratory Bird Agreement; Japan-Australia Migratory Bird Agreement; China-Australia Migratory Bird Agreement.

> *The Water Act, both as to its own terms and when read in light of its constitutional underpinnings, recognises that a Basin Plan must be prepared to give effect to the relevant international conventions. In doing so, social and economic factors must also be taken into account. However, these latter factors cannot be given such weight as would prejudice the faithful implementation of the international environmental conventions upon which the validity of the Act depends*[15]*.*

With this in mind, there is considerable doubt as to whether the obligations contained in the Ramsar Convention, the Convention on Biological Diversity and various treaties protecting migratory birds will be properly implemented under a 2,750 GL + adjustment mechanism scenario. It is therefore unacceptable – and potentially unlawful – to further reduce the volume of water available to the Macquarie Marshes and Gwydir Wetlands, as provided for under the Proposed Amendment.[16] Specifically, it is proposed to return 12GL to the consumptive pool in the Macquarie catchment, and 14 GL in the Gwydir.[17]

While the modelling for the 320 GL C scenario indicates that all four indicators are met in the Macquarie catchment, two are met with a high level of uncertainty.[18] There is also evidence to suggest that meeting these targets is not sufficient to restore the health of the Macquarie Marshes.[19] Furthermore, four of the nine indicators for the Gwydir fail to even meet the 'high uncertainty' threshold, which means that there is a high probability that these ecological targets will not be met.

We further note the Commonwealth Government lodged an Article 3.2 notice with the Ramsar Secretariat in 2009 in relation to the Macquarie Marshes indicating that the Marshes were likely to experience a change in ecological character.[20] In this notice, the Government stated that 'the most significant action in place to help respond to the threats currently facing the Macquarie Marshes and other important waterways, is the Australian Government's AUD$3.1 billion Restoring the Balance in the Murray-Darling Program'. The notice goes on to state that the goal of this Program is to 'acquire water entitlements from willing sellers that represent value for money, and use the water allocated to them for the environment.'

It is difficult to reconcile the Article 3.2 notice and its contents with the MDBA's more recent (and likely future) position in relation to the Macquarie River catchment. In addition to the proposal to return 12GL to the consumptive pool as part of the Proposed Amendment,[21] the MDBA has indicated that an additional 31GL may be added to the consumptive pool in the Macquarie catchment following the completion of a joint Commonwealth-NSW project to

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[15] Williams and Kildea, note 3.

[16] MDBA, *The Northern Basin Review - Understanding the economic, social and environmental outcomes from water recovery in the northern basin,* p. 18 (Macquarie - reduction of10 GL local and 2 GL shared recovery); p. 22 (Gwydir - reduction of 14 GL shared recovery).

[17] MDBA, *The Northern Basin Review - Understanding the economic, social and environmental outcomes from water recovery in the northern basin,* 2016, p. 18 (Macquarie - reduction of 10 GL local and 2 GL shared recovery); p. 22 (Gwydir - reduction of 14 GL shared recovery).

[18] To reiterate, as the 320 GL option that was recommended by the MDBA is not discussed in the published materials, it is unclear whether any of these four indicators will actually be met under that option (and at what level of certainty).

[19] Ren, Shiquan, Kingsford, Richard T., Statistically Integrated Flow and Flood Modelling Compared to Hydrologically Integrated Quantity and Quality Model for Annual Flows in the Regulated Macquarie River in Arid Australia, *Environmental Management* (2011) 48:177–188.

[20] http://www.environment.gov.au/water/topics/wetlands/database/pubs/28-art-3-2-notification-20090717.pdf

[21] MDBA, *The Northern Basin Review - Understanding the economic, social and environmental outcomes from water recovery in the northern basin,* 2016, p. 18 (10 GL local and 2 GL shared).

reassess 'planning assumptions'. It is argued that this water should be made available on the basis that the Macquarie is 'over-recovered'.[22]

Documents obtained under the FOI Act by our client, the IRN, indicate that Macquarie Food and Fibre has sought to persuade the MDBA that the Macquarie is 'seriously over recovered' by increasing cap factors from 42% to 53%. However, there is no clear justification provided in the reports underpinning the Northern Basin Review for the proposal to adjust cap factors, other than a desire to increase the volume of water available for consumptive use in the short-term. Conversely, there are strong arguments that can be made against the proposed adjustment, including likely future impacts on general security licence holders and the environment.

To summarise, there is considerable doubt as to whether the relevant treaties will be properly implemented under the existing Basin Plan. It is therefore possible that any proposal to reduce the volume of water available to the environment, and in particular to Ramsar wetlands, would be unlawful. The MDBA must ensure that national and international obligations to prioritise environmental protections are upheld.

4. Toolkit measures

The 320 GL option recommended by the MDBA includes a suite of 'toolkit measures'.[23] While we support the implementation of some of these measures, we do not support their implementation in lieu of water (that is, 'complementary measures' or offsets), as per the Northern Basin Review. We further note that these measures have no statutory basis and to that extent cannot be legally enforced, except to the extent that they are already provided for under the Basin Plan. Where these measures are provided for under the Plan, it is unclear why a non-statutory equivalent is being put forward under the Review. Specifically, the following toolkit measures should be given effect under a properly implemented Basin Plan:

- Protection of environmental flows in the Barwon-Darling and Condamine Balonne. This water should be protected via shepherding.[24]
- Protection of environmental water via the imposition of cease-to-pump rules. We note that there is no legal basis to the argument that the imposition of such rules is not permitted under the Basin Plan.[25]
- Removal of constraints in the Gwydir catchment. Constraints are provided for under Chapter 7 of the Basin Plan (which provides for the removal of constraints pursuant to a 'constraints management strategy' (**CMS**)).[26] We note that the removal of constraints in the Gwydir is discussed in the CMS.[27]

We further note that certain event-based mechanisms in the toolkit are unlikely to be effective as stand-alone measures. In particular, temporary trade and store and release do not prevent the extraction of environmental water if entitlement holders further downstream are entitled to pump and have sufficient water in their account to do so. Rather, and as

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[22] MDBA, *The Northern Basin Review - Understanding the economic, social and environmental outcomes from water recovery in the northern basin*, 2016, p. 12. The Gwydir is also the subject of this joint project, with the possibility that 15 GL will be returned to the consumptive pool on the basis that it is 'over-recovered'.

[23] MDBA, *The Northern Basin Review - Understanding the economic, social and environmental outcomes from water recovery in the northern basin*, 2016, Appendix D, p. 52.

[24] Shepherding in the Barwon-Darling constitutes a PPM. See Basin Plan, cl. 7.15.

[25] For example, such rules may be required in order to properly implement PPMs, or the Ramsar Convention.

[26] Basin Plan, cl. 7.08.

[27] MDBA, *Constraints Management Strategy* – 2013 to 2024, pp. 61-2.

previously indicated, cease-to-pump rules can and should be implemented under a properly implemented Basin Plan (that is, under accredited water resource plans).

5. Compliance

We note that compliance remains a significant issue in the Northern Basin. We are aware that this issue has been raised by the Northern Basin Advisory Committee at a number of meetings, as well as the broader community during Phase 1 of community consultation for the Northern Basin Review. Issues include inaccurate metering, failure to meter, failure to keep logbooks, self-reporting and allegations of water theft. Failure to comprehensively investigate and address these problems completely undermines water markets which in turn jeopardies the success of the Basin Plan. This necessarily extends to the environmental outcomes sought in the Northern Basin, which as outlined above will be further compromised under any 320 GL scenario.

To summarise, it is impossible to ensure compliance with cap when there is either no will to enforce the law, or no capacity to do so due to ongoing issues with metering and self-reporting of take. The MDBA should therefore focus on working with the Basin States to rectify these issues, rather than further reducing the volume of water available to the environment.

6. Method for determining compliance (Part 4, Chapter 6)

EDO NSW strongly opposes the proposed wording of clause 6.11(5), which will result in cap exceedance for surface water resources being credited to the relevant account if the exceedance is 'beyond the control' of the Basin State.[28] We submit that broad discretion to apply clause 6.11(5) should be removed and replaced with a limited and clearly defined set of events that qualify as 'being beyond the control' of the State in question. Failure to effectively limit the 'beyond control' exemption may have **serious consequences** for long-term cap compliance, which would in turn undermine the purpose of the Basin Plan.

Similarly, we oppose the wording of 6.12C(4)(b) (which concerns groundwater resources) on the grounds outlined above.

On this basis, and given the importance of compliance to the overall success of the Basin Plan, we recommend that further, targeted consultation be undertaken with a view to resolving this issue.

7. Menindee Lakes

The MDBA has stated that reducing water recovery in the Northern Basin by 70 GL will only reduce inflows into Menindee Lakes by 10-15 GL/year, and into South Australia by 5-10 GL/year.[29] It has indicated that it will be able to minimise impacts on inflows into the Lakes and into South Australia due to updated science regarding connectivity between the Barwon-Darling and its tributaries, and by strategically targeting certain licences. We consider these assumptions implausible on the following grounds.

First and as noted above, the MDBA has indicated that the 320 GL option that it is recommending is not based on any of the scenarios discussed in the publicly available

[28] As per cl. 6.12(4)(b).

[29] MDBA, *The Northern Basin Review - Understanding the economic, social and environmental outcomes from water recovery in the northern basin*, 2016, p.31. This represents a long-term annual average.

materials. Accordingly, there is no scientifically rigorous basis for claiming that impacts on inflows can be limited to 10-15 GL/year under the recommended option.

Second, there is no guarantee that the Commonwealth will be able to acquire the specific licences required to ensure that impacts on the Lakes are minimised.

Third, title searches indicate that two entities upstream of Bourke own approximately 70% of all entitlements held on the Barwon-Darling River. The Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 (**BD WSP**), combined with greatly increased pump sizes, allow these entities to divert significant volumes of 'A Class' or low flow water. This necessarily includes the Commonwealth's held environmental water, including environmental water flowing into the Barwon River from its tributaries (all of which are upstream of Bourke). In the absence of rule changes designed to protect environmental water, it is therefore likely that any water that the Commonwealth does manage to recover as part of this 'targeted strategy' will be vulnerable to extraction.

In short, it is likely that impacts on inflows into Menindee Lakes and associated impacts on South Australia will be greater than asserted. As a consequence, there is an urgent need for further scientific investigation and modelling.

8. Groundwater

EDOs of Australia do not support the proposal to increase SDLs for the nominated groundwater sources. Specifically, there is insufficient scientific evidence to suggest that the increased SDLs will be sustainable in the longer term.

Furthermore, we do not support the proposed amendment to clauses 10.20(1)(a) and (b), both of which weaken the protection offered to aquifers and connected groundwater-surface water systems under accredited water resource plans.

We also seek further clarification regarding the environmental and social impact of the altered groundwater resource plan boundary changes and amalgamations, as this information has not been included in the relevant report.[30]

9. Trade

Water markets can only work if restrictions can be applied to prevent perverse outcomes on the environment and other users. EDOs of Australia is therefore opposed to the proposed deletion of clause 12.17. To clarify, this deletion removes the possibility of imposing a volumetric limit on trade for a purpose specified in clause 12.18. As noted in this latter clause, the imposition of a volumetric limit on trade may be necessary to protect, *inter alia*, hydrologic connectivity or the needs of the environment.

Please do not hesitate to contact us if you have any queries regarding our submission.

Kind Regards,

Dr Emma Carmody

Policy and Law Reform Solicitor

[30] MDBA, *Proposed groundwater amendments to the Basin Plan – additional information*, November 2016.