Submission on the NSW Water Reform Action Plan

prepared by

EDO NSW
15 April 2018

About EDO NSW

EDO NSW is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law.
Our reputation is built on:

Successful environmental outcomes using the law. With over 30 years' experience in environmental law, EDO NSW has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO NSW is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

Independent and accessible services. As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

EDO NSW is part of a national network of centres that help to protect the environment through law in their states.

Submitted online at: water.reform@industry.nsw.gov.au

For further information on this submission, please contact:

Dr Emma Carmody
Senior Policy & Law Reform Solicitor
EDO NSW
T: 02 9262 6989
E: emma.carmody[at]edonsw.org.au

Ms Rachel Walmsley
Policy & Law Reform Director
EDO NSW
T: 02 9262 6989
E: rachel.walmsley[at]edonsw.org.au

EDO NSW
ABN 72 002 880 864
Level 5, 263 Clarence Street
Sydney NSW 2000 AUSTRALIA
E: edonsw@edonsw.org.au
W: www.edonsw.org.au
T: + 61 2 9262 6989
F: + 61 2 9264 2412

This submission is divided into 5 parts:

Part 1: Introduction
Part 2: Summary of recommendations
Part 3: *Water Management Amendment Bill 2018*
Part 4: Environmental water consultation paper[1]
Part 5: Floodplain harvesting consultation paper[2]

Part 1: Introduction

EDO NSW welcomes the opportunity to comment on the NSW Government's Water Reform Action Plan (**Action Plan**). We also look forward further engagement as the reform process unfolds.

By way of background, EDO NSW is a community legal centre specialising in public interest environmental law. 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 including irrigators, community groups and peak conservation organisations on the *Water Act 2007* (Cth), Basin Plan and State legislation and policies.

Our work is evidence-based and draws on advice from experts on our technical advisory panel and expert register, as well as landholders and irrigators with considerable experience in managing their properties in variable conditions.

Relevantly, EDO NSW has particular expertise in compliance and enforcement under the *Water Management Act 2000* (NSW) (**WM Act**). This has been most recently evidenced by the civil enforcement proceedings – the first of their kind –filed in the NSW Land and Environment Court (**NSW LEC**) in late 2017 on behalf of our client the Inland Rivers Network and which concern alleged breaches of the WM Act.

As we have consistently argued for improved metering and measurement of extractions, greater transparency with respect to usage and account data and greater protection of environmental and low flows, we are pleased to see these issues being discussed in the Action Plan. However, we are mindful that the Action Plan has been initiated in response to extremely serious allegations and revelations with respect to water management in NSW and would therefore expect the 'solutions' proposed therein to be commensurate with the magnitude of the problem.

The scale of mismanagement of water resources in NSW – including in relation to metering and measurement of water, compliance and enforcement and protection of environmental water – is clearly articulated in the following official reports published between September 2017 and March 2018:

- 'Independent investigation into NSW water management and compliance - Interim report' by Mr. Ken Matthews;[3]
- 'Independent investigation into NSW water management and compliance – advice on implementation: Final report' by Mr. Ken Matthews;[4]

[1] Better management of environmental water: Consultation Paper.
[2] Implementing the NSW Floodplain Harvesting Policy: Consultation Paper.
[3] Dated 8 September 2017.
[4] Dated 24 November 2017.

- 'Murray-Darling Basin Water Compliance Review' by the Murray-Darling Basin Authority (**MDBA**) and Independent Panel;[5]
- 'Investigation into water compliance and enforcement 2007-2017: A Special Report to Parliament under Section 31 of the *Ombudsman Act 1974*' by the NSW Ombudsman;[6]
- 'Correcting the record: Investigation into water compliance and enforcement 2007-17' by the NSW Ombudsman.[7]

To these we would add:

- the current investigation into water management being undertaken by the State's anti-corruption watchdog, the Independent Commission Against Corruption (**ICAC**);
- the Murray Darling Basin Royal Commission, currently underway in South Australia;
- The aforementioned civil enforcement proceedings in the NSW LEC;
- Criminal prosecutions recently commenced by the NSW Government in relation to alleged breaches of the WM Act, also in the NSW LEC.

The extent of the systemic issues that have been formally identified is significant and ranges from incompetence to possible corruption. Furthermore, it is reasonable to assume that additional, serious revelations may come to light as a consequence of the ICAC investigation and the SA Royal Commission. To that end and as noted above, the response of the NSW Government must reflect the seriousness and scale of this problem.

This is particularly true given trust in water management processes in NSW has been severely eroded – and understandably so. Water is a shared resource upon which all Australians depend for their prosperity. Furthermore, while water access licences (**WALs**) are a form of private property, *they confer a right to use a particular resource that is by law vested in the Crown*. This right is fettered by licence conditions and other rules; WALs may also be suspended or withdrawn by the Minister as a result of non-compliance (although we are not aware of any Minister exercising their discretion to do so).

It is in light of water's unique status as our most important, shared natural resource that the community has made it clear that it will not continue to tolerate *inter alia* absent or inaccurate metering and measurement of water extractions, failure to disclose water usage and account data, and failure to enforce the law. Furthermore, if these issues are not adequately addressed, it will have the perverse impact of undermining the reputation of the many WAL holders who are complying with all relevant laws – and who are excellent stewards of their land.

Consequently, only a rigorous set of measures to address compliance and enforcement, transparency, protection of environmental water and floodplain harvesting will restore the public's confidence in water agencies and the irrigation industry. Our analysis and recommendations are therefore to be interpreted against this backdrop – and in view of the fact that we act at the interface between the community (including downstream water users and floodplain graziers) and the government.

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[5] Dated 25 November 2017.
[6] Dated November 2017.
[7] Dated 8 March 2018.

Part 2: Summary of recommendations

Transparency

1. Core transparency requirements, including in relation to the disclosure of WAL holder identity, usage data and account balance information, should be provided for in the WM Act itself (not a regulation).

2. The WM Act should be amended to include anti-market manipulation provisions, thereby making it an offence to artificially inflate the price of any trade (similar to s. 1041A of the *Corporations Act 2001*).

3. The WM Act should be amended to provide for the creation of a central online portal. The amendments should specify, *inter alia*, that the portal is to include (an updated and improved version of the) NSW Water Register, including:

    a. Mandatory publication of identity of WAL holder (this would require the addition of one field to the NSW Water Register).

    b. Mandatory publication of usage information for each WAL (reported half yearly, although this would be grandfathered once telemetry allows for this to be provided in real-time).

    c. Mandatory publication of account balances for each WAL on a quarterly basis (although this would be grandfathered once telemetry allowed for this to be provided in real-time).

    d. Approval applications and decisions (including an explanation as to how the approval or refusal reflects the legislative framework) to be published online.[8]

    e. Mandatory cross referencing of WALs held by associated individuals and/or entities (this would require the addition of one or more fields in the NSW Water Register).

    f. Retention of details of cancelled WALs in the NSW Water Register.

4. The online portal provided for in the WM Act should further include:

    a. Decisions to approve dealings (including an explanation as to how the approval or refusal reflects the relevant laws and rules).

    b. Information regarding current pumping conditions[9] for each water source.[10]

    c. Up-to-date information for all on-farm storages (that is, storage capacity) must be provided by WAL holders.

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[8] At present only applications that are currently advertised are available in the NSW Water Register. An application number is required to search for all other approvals, which means the information is essentially inaccessible.

[9] That is, information as to whether it is legal or illegal to extract water for each water source/management zone.

[10] With an initial focus on high-risk water sharing areas.

d. Mandatory publication of any breaches (of licence and approval conditions etc.).

5. The WM Act should be amended to require all modelling to assess compliance to be based on current levels of development for the relevant water sharing plan area. This will in turn require regular auditing of development (on-farm storages etc.).

Metering

6. The WM Act should be amended to include a framework provision stating that meters of an *acceptable standard*[11] (to be determined in the regulations) must be installed and used by a given date. The proclamation date may vary from catchment to catchment (as determined by a risk assessment), with the highest risk areas to be proclaimed as soon as possible.

7. EDO NSW supports a 'no meter, no pump' policy. To that end, The WM Act should be amended to specify that:

    a. The 25 high-risk water sharing regions and any additional high-risk individuals (listed in a schedule, with the latter identified via works approval numbers) must have metering installed – and in use – by 2019.

    b. All other users must have metering installed and in use by 2022.

    c. All floodplain harvesting must be metered or otherwise measured by 2022.

8. We note that the consultation does not include any analysis or recommendations with respect extractions for the purposes of stock and domestic use. However, we recommend that this issue be addressed in the near future in a separate consultation paper.

Individual Daily Extraction Components

9. Trading of Individual Daily Extraction Components (**IDECs**) or Individual Daily Extraction Limits (**IDELs**) should only be permissible if combined with appropriate Total Daily Extraction Limits (**TDELs**) for each management zone or extraction management unit (or other appropriately designated zone, as the case may be). This is consistent with existing provision in many water sharing plans and does not breach the trading rules provided for the Chapter 12 of the Basin Plan (noting that cl. 12.18 of the Basin Plan allows for the imposition of limits on trade for environmental/hydrological/downstream water supply purposes).[12]

10. Newly created WALs in the Barwon-Darling River (for example, WALs that were not converted from a 1912 entitlement but are the product of a s.71P subdivision) are not subject to the imposition of IDELs – unless the Minister chooses to impose a 0ML/day or 0 share,[13] which is unlikely to occur, meaning the new WAL or WALs will not be subject to an IDEL. An alternative to a 0ML/day or 0 share

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[11]Accuracy of +/- 5%

[12] To the extent that these restrictions are consistent with Subdivision A of Division 1 of Chapter 12. We can see no reason as to why TDELs would not be consistent with Subdivision A of Division 1.

[13] BD WSP, cl. 52(6).

would be an IDEL based on the original pumps attached to the WAL pre-subdivision. We would therefore recommend an amendment to the Water Sharing Plan for the Barwon Darling Unregulated and Alluvial Water Sources 2012 (**BD WSP**) to allow for this to occur.

Offences

11. The WM Act should be amended to bring the penalties for Tier 1 offence provisions in line with those contained in the *Protection of the Environment Operations Act 1997* (**POEO Act**) and *Environmental Planning and Assessment Act 1979* (**EPA Act**), in particular maximum fines for corporations and custodial sentences for individuals.

12. The WM Act should be amended to provide for enforceable undertakings (noting that this is included in many other environmental statutes). This would allow, for example, profits gained through unlawful activity to be recuperated by the government and used to compensate affected third parties or undertake environmental restoration.

13. The WM Act should be amended to remove the right to refuse entry for the purpose of reading a meter.

14. The *Natural Resources Access Regulator Act 2017* (NSW) should be amended to include a positive duty on the part of the NRAR to take all reasonable steps to enforce the relevant laws. This is because in the absence of a positive duty, the Government cannot be legally held to account for failing to enforce the law.

15. Self-reported take recorded in logbooks during the transition period should be supported by additional, verified information (for example a statutory declaration with supporting information) regarding the quantity of crops grown during the water accounting year.

Environmental water consultation paper

16. Water resource plans should be drafted to include enforceable rules which protect environmental water. Depending on the water resource area, this could include rules that protect held environmental water after it is released (including from floodplain harvesting) and the use of IDEL and TDELs.

17. In the Barwon-Darling River, we support the use of a combination of enforceable rules in the water resource plan. This includes:

    a. Rules that protect all held environmental water released from regulated river storages that flows into the Barwon-Darling.
    b. Appropriate amendments to commence-to-pump thresholds (in particular increases to the A Class pumping threshold above Bourke).
    c. A first flush rule.
    d. Rules that take into account downstream needs, noting the recent history of increased cease-to-flow events below Bourke.
    e. The imposition of IDELS and TDELs (noting our comments above regarding the possible, perverse impacts associated with trading IDELs).

18. We note that the consultation paper does not deal with planned environmental water (**PEW**), which makes up the bulk of environmental water in NSW. PEW it is

difficult to quantify, making it vulnerable to erosion through growth in use[14] (despite a legal prohibition against doing so in the Basin Plan)[15] and non-compliance. As it is also vulnerable to climate change,[16] we recommend that the NSW Government turn its mind to addressing the most effective means of quantifying and then protecting it.

Floodplain harvesting consultation paper

19. We recommend that a complete audit of all earthworks on floodplains and on-farm storages be undertaken across the northern Basin as soon as possible, with the results of the audit made publicly available.

20. In the interests of transparency – and in order to understand growth in both development and floodplain harvesting – we recommend publishing the details of all storages that have been built or upgraded with funding from any on-farm irrigation efficiency programs.

21. We recommend developing a clear, evidence-based monitoring framework as a priority which will in turn assist with baseline data, compliance and enforcement.

22. We recommend developing a clear, evidence-based policy regarding adaptive management of floodplain harvesting (including associated structures and storages) as water becomes scarcer due to climate change.

23. After satisfying 19 – 22 inclusive (and not before), we recommend only licensing the volume assumed to develop the SDLs for the Basin Plan in 2012. This appears to be 210GL for the entire northern Basin (and subsequently less for the northern parts of NSW). Anything above this volume will undermine the Basin Plan, the purpose of which was to reinstate an environmentally sustainable level of take.

24. We recommend against the issuing of licences associated with any unlawfully constructed works.

25. We recommend against paying landholders compensation under s. 87 of the WM Act for reductions in floodplain harvesting where historic harvesting has involved the use of unauthorised structures or otherwise unlawful activity.

26. Water accounting for floodplain WALs must ensure that environmental and downstream needs are met. To that extent, we recommend discarding the proposed accounting framework, notably the proposed 500% allocation and unlimited carryover. A new accounting framework based on a transparent assessment of environmental and downstream needs – and SDLs – should be developed in its place.

27. We recommend including rainfall runoff in the floodplain licensing framework.

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[14] Wentworth Group of Concerned Scientists, *Review of Water Reform in the Murray-Darling Basin*, November 2017, pg. 56.
[15] Basin Plan, cl. 10.28.
[16] Wentworth Group of Concerned Scientists, *Review of Water Reform in the Murray-Darling Basin*, November 2017, pg. 71.

28. We recommend the development of a compliance and enforcement strategy in relation to floodplain harvesting, including in relation to the decommissioning of levees post-trade.

29. We support the analysis and recommendations of Professor Richard Kingsford in his submission responding to the Floodplain Harvesting Consultation Paper.

Part 3: *Water Management Amendment Bill 2018*

Our response to the *Water Management Amendment Bill 2018* (**Draft Exposure Bill**) is divided into the following themes and will include references to associated consultation papers[17] (as well as responses to questions raised in those papers):

- Transparency
- Metering
- Individual daily extraction components
- Offences
- Other

Transparency

Inadequate access to information is in our view one of the core drivers of substandard compliance and enforcement and low community confidence in water management systems in NSW. It therefore stands to reason that if appropriate, legislative steps are taken to improve transparency – particularly in relation to the identity of WAL holders, usage data and account information – that rates of compliance would improve, thereby increasing the community's trust in both government and industry. However, our analysis points to a number of limitations in the transparency provisions that are proposed under the Draft Exposure Bill, notably in relation to the use of regulations and the failure to prescribe mandatory disclosure of certain information. Conversely, we strongly support other provisions, such as the proposal to exempt certain information from privacy legislation. These issues are discussed below.

First and foremost, the Draft Exposure Bill does not include any mandatory transparency requirements. Rather, it includes a general, discretionary power to create regulations, including with respect to the publication of certain information. There is no certainty that any subsequent regulations will actually require the publication of the WAL holder's identity, usage or water account data. Furthermore, even if robust regulations are created, there is real possibility that they will be repealed or diluted as a consequence of mounting pressure from certain industry groups (noting that regulations are far easier to amend and repeal than enabling legislation, such as the WM Act). This second observation is made against the backdrop of incremental erosions to the *Water Act 2007* and poor implementation of the Basin Plan over the last five years and to that extent is not merely speculative or hypothetical.

Delegating the core elements of this reform process to subordinate legislation – the content of which remains unknown – creates uncertainty for the community and raises questions regarding the NSW Government's commitment to introducing

[17] Notably: Water take, measurement and metering: Consultation paper; Transparency measures: Consultation paper; Better environmental water management: Consultation paper.

effective measures designed to restore the community's confidence in water management systems in NSW.

Furthermore, several provisions in the WM Act provide for WAL, dealing and approval registers to be kept, and prescribe the matters that are to be contained therein. While the *Water Management (General) Regulations 2011* (**WM Regulations**) do set out further particulars regarding the content of these registers, most of the core requirements are set out in the Act itself. There is therefore strong precedent for including any new requirements – particularly important ones designed to address systemic problems – in the Act itself.

Second, we have already written about issues with the current registers – which for all intents and purposes comprise the NSW Water Register, which is available online, and the Water Access Licence Register (**WAL Register**) kept by the Department of Property and NSW Land Registry Services. However, it is worth touching on a few core concerns which in turn illustrate why it is important to attach the identity of WAL holders to the WALs that are included in the NSW Water Register (or an updated and improved equivalent). These concerns are based our extensive experience using these registers for the purposes of advising our clients.

While it may only cost $14.20 to search the WAL Register, searches can only be undertaken if the specific WAL number is known. While WAL numbers for water sources are included in the NSW Water Register, the identity of the owner is not attached to these WALs numbers. As there are sometimes thousands of WALs in a given water source, it is almost impossible for the average person to identify which WAL or WALs in that source may be of interest in order to then conduct a search. The requirement to know a WAL number clearly constitutes an insurmountable barrier to accessing complete WAL information – including the identity of the WAL holder – for most people in NSW.

Furthermore, obtaining a WAL title document in order to confirm the owner's identity actually costs approximately $25.[18] Additional searches may then be required to obtain information about dealings registered on the title, all of which incur a fee. Where multiple WALs are held, a client could incur hundreds or even thousands of dollars in costs (particularly where speculative searches must be undertaken to try and obtain the relevant title(s) as the identity of the holder is unknown). This is prohibitively expensive for many individuals and community groups with a genuine interest in understanding whether licence conditions are being adhered to by a particular WAL holder or holders (including upstream extractors).

Third, it is in the overall public interest to publish water usage and account balance data in real time. This is because disclosure of this information would be the single most effective deterrent to non-compliance, especially if combined with tamper proof meters, improved gauging and satellite technology. However, we understand that there is concern that publication of this information in real time – particularly account balances – could result in price gouging and other negative impacts on the market. However, this assumption fails to take into account a number of key factors, as outlined below:

- The price of water is primarily driven by seasonal water availability, which is affected by allocations, rainfall, trading rules and environmental purchases.[19]

[18] This is the cost of obtaining a WAL title through our search provider.
[19] According to the MDBA, 'A range of external and government analysis has shown that while no single factor determines allocation price, seasonal water availability conditions are

Information about water availability/scarcity at any given time and in any given catchment is widely available, with irrigators and brokers tracking changes very closely and adjusting trading prices accordingly.

- Water requirements are seasonal and predictable (being determined by the type of crop being grown and weather conditions in a given year). Again, this information is widely available and contributes to price fluctuations (particularly for the temporary market).
- Analysis indicates that temporary trading (also known as allocation assignment) constitutes a significant component of all trading activity in the Murray-Darling Basin.[20] Temporary trade is often opportunistic, with the allocation purchased generally only allowing one-off use within that particular water year. In other words, this water is only purchased for use in the short term, which in itself communicates to the vendor/broker that water is required on a more or less urgent basis (with the exception of temporary trade that is being undertaken to top up a water account – carryover rules permitting). This is particularly true when water is purchased on the temporary market toward the end of the water year (unless, again, it is being purchased for future use due to carryover rules which render this permissible). It would therefore appear that the existence of a temporary market creates ample opportunity for price gouging.
- Permanent trade – which also affects water account balances – is less opportunistic in the sense that it does not occur to top up a water account to allow for imminent use. Rather, it is part of a longer-term growth/financial strategy. Hence it is difficult to see how revealing information about account balance fluctuations caused by permanent trade could give rise to price gouging.
- Perhaps most significantly, price gouging is not a novel concept and has the potential to distort all markets – not just water markets. This is why market manipulation is *expressly prohibited in legislation all over the world*. In Australia, the *Corporations Act 2001* includes effective anti-market manipulation provisions[21] which the High Court has determined prohibit 'conduct, intentionally engaged in, which resulted in a price which does not reflect the forces of genuine supply and demand'.[22] The forces of 'genuine supply and demand' constitute 'those forces which are created in a market by buyers whose purpose is to acquire at the lowest available price and sellers whose purpose is to sell at the highest realisable price.'[23]
- If industry and governments were genuinely concerned about price gouging – – they would have taken steps after the National Water Initiative was signed by the Council of Australian Governments (**COAG**) in 2004 to ensure that anti-market manipulation provisions were included in relevant legislation and applied to water markets. However, this sort of advocacy has not – to the best of our knowledge – occurred.
- In summary, farmers are already vulnerable to price hikes as the factors affecting demand are, as detailed above, already well known.

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clearly the biggest determinant: https://www.mdba.gov.au/report/basin-plan-annual-report-2015-16/basin-communities-industries/water-markets

[20]The volume of allocation trade in Australia has grown substantially since 2008–09. In 2016–17 the total volume of allocation trade was 7,035GL, 21 per cent higher than in 2015–16. See: http://www.agriculture.gov.au/abares/research-topics/water/aust-water-markets-reports#national-overview

[21] Notably *Corporations Act 2001(Cth),* s. 1041A.

[22]*Director of Public Prosecutions (Cth) v JM* [2013] HCA 30 at 70.

[23]*Director of Public Prosecutions (Cth) v JM* [2013] HCA 30 at 71.

Fourth, we support the inclusion of a provision (s. 87D) that enables the Minister to arrange for publication of information regarding pumping conditions for a given water source. This would enable the community to understand whether commence or cease-to-pump rules were in operation, which would in turn allow them to understand whether a particular WAL holder is complying with the law. We would recommend that this information be incorporated in a central, online portal for all catchments, rather than on an ad-hoc basis (although gradual role out may be necessary, which means that focusing on high risk areas would be welcomed in the first instance).

Fifth, we strongly support the proposal to clearly exempt usage and account data from any relevant provisions in the *Privacy and Personal Information Act 1988* (noting that this Act does not, in any case, apply to corporations).

Finally, though it is not provided for in the Draft Exposure Bill, we strongly support the use of telemetry (that is, real time water usage monitoring), with this information being made available to the public on a central, online portal. While mobile phone coverage is not available in certain rural areas, satellite coverage is universal (noting that modern farm machinery is often equipped with GPS technology, which is dependent on satellites).

Recommendations:

1. Core transparency requirements, including in relation to the disclosure of WAL holder identity, usage data and account balance information, should be provided for in the WM Act itself (not a regulation).

2. The WM Act should be amended to include anti-market manipulation provisions, thereby making it an offence to artificially inflate the price of any trade (similar to s. 1041A of the *Corporations Act 2001*).

3. The WM Act should be amended to provide for the creation of a central online portal. The amendments should specify, *inter alia*, that the portal is to include (an updated and improved version of the) NSW Water Register, including:

    a. Mandatory publication of identity of WAL holder (this would require the addition of one field to the NSW Water Register).

    b. Mandatory publication of usage information for each WAL (reported half yearly, although this would be grandfathered once telemetry allows for this to be provided in real-time).

    c. Mandatory publication of account balances for each WAL on a quarterly basis (although this would be grandfathered once telemetry allowed for this to be provided in real-time).

    d. Approval applications and decisions (including an explanation as to how the approval or refusal reflects the legislative framework) to be published online.[24]

[24]At present only applications that are currently advertised are available in the NSW Water Register. An application number is required to search for all other approvals, which means the information is essentially inaccessible.

e. Mandatory cross referencing of WALs held by associated individuals and/or entities (this would require the addition of one or more fields in the NSW Water Register).

f. Retention of details of cancelled WALs in the NSW Water Register.

4. The online portal provided for in the WM Act should further include:

   a. Decisions to approve dealings (including an explanation as to how the approval or refusal reflects the relevant laws and rules).

   b. Information regarding current pumping conditions[25] for each water source.[26]

   c. Up-to-date information for all on-farm storages (that is, storage capacity) must be provided by WAL holders.

   d. Mandatory publication of any breaches (of licence and approval conditions etc.).

5. The WM Act should be amended to require all modelling to assess compliance to be based on current levels of development for the relevant water sharing plan area. This will in turn require regular auditing of development (on-farm storages etc.).

Metering (ss. 115, 115C)

As with the transparency provisions, we are concerned that the Draft Exposure Bill does not actually include any mandatory provisions with respect the metering and measuring of water. Rather, it includes provisions which provide for the discretionary creation of regulations with respect to:

- the imposition of mandatory conditions on water supply work approvals related to metering equipment etc.;
- metering equipment (including the installation, use and maintenance of this equipment; the setting of standards for this equipment; and the keeping of records when metering equipment is not able to be used).

We wish to make some brief comments about the proposed use of regulations (as opposed to amendments to the WM Act itself).

In the first instance, we understand that there may be complications associated with prescribing a specific standard of meter in the Act itself. However, we are of the view that the Act could reasonably be expected include a framework provision stating that meters of an *acceptable standard* (to be determined in the regulations) must be installed and used by a given date. The proclamation date could vary from catchment to catchment (as determined by a risk assessment), with the highest risk areas to be proclaimed as soon as possible. We note, for example, that the MDBA indicated in its Compliance Report that the 'time and event' meters used on the Barwon-Darling River 'under-measured the volume of water pumped by 15% or more under high flow

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[25] That is, information as to whether it is legal or illegal to extract water for each water source/management zone.
[26] With an initial focus on high-risk water sharing areas.

conditions.'[27] The poor standard of meters used in this catchment, combined with other well-identified problems, makes it an obvious candidate for early, legislatively prescribed intervention.

Second, EDO NSW supports 'Option 1: No meter, no pump', as set out in the 'Water take, measurement and metering' consultation paper.[28] This option is consistent with the recommendations made by both Mr Ken Matthews in his Interim Report[29] and the MDBA in its Compliance Review Report.[30] However, we realise that there are practical impediments to rolling this out quickly and so would suggest that a staged, risk-based approach is taken, with the initial focus being twofold: the 46% of water supply works that account for 95% of water use (discussed under Option 1) and the 25 water sharing plan regions that have been classified as high-risk (discussed under Option 4).

We note that the community is more likely to see this reform process as a genuine attempt to remedy metering in high-risk catchments and in relation to high-risk individuals if the *WM Act itself* were amended to include specific provisions to address these problems - noting that they have already been identified (that is, there is already a high level of certainty regarding the level of risk). For example, the Act could be amended to specify that the 25 high-risk water sharing regions and any additional high-risk individuals listed in a schedule (with the latter identified via works approval numbers) must have universal metering by a specific date or dates (between 2019 and 2022, as identified in the 'Water take, measurement and metering' consultation paper).[31]

Recommendations

6. The WM Act should be amended to include a framework provision stating that meters of an *acceptable standard*[32] (to be determined in the regulations) must be installed and used by a given date. The proclamation date may vary from catchment to catchment (as determined by a risk assessment), with the highest risk areas to be proclaimed as soon as possible.

7. EDO NSW supports a 'no meter, no pump' policy. To that end, The WM Act should be amended to specify that:

    a. The 25 high-risk water sharing regions and any additional high-risk individuals (listed in a schedule, with the latter identified via works approval numbers) must have metering installed – and in use – by 2019.

    b. All other users must have metering installed and in use by 2022.

    c. All floodplain harvesting must be metered or otherwise measured by 2022.

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[27] Murray-Darling Basin Authority and Independent Panel, *Murray-Darling Basin Water Compliance Review*, p. 37.
[28] Water take, measurement and metering: Consultation Paper, p. 4.
[29] Matthew, Ken AO, Independent investigation into NSW water management and compliance: Interim Report, p. 41.
[30] Murray-Darling Basin Authority and Independent Panel, *Murray-Darling Basin Water Compliance Review*, p. 36.
[31] Water take, measurement and metering: Consultation paper, p. 14.
[32] Accuracy of +/- 5%

8. We note that the consultation does not include any analysis or recommendations with respect extractions for the purposes of stock and domestic use. However, we recommend that this issue be addressed in the near future in a separate consultation paper.

Individual daily extraction components (proposed s. 71QA)

In order to understand the advantages and disadvantages of the proposal to create an IDEC, it is necessary to return to first principles. Notably, what is the purpose for imposing a daily extraction limit on individual WAL holders? Will the proposal, as currently conceived, help to achieve this objective?

The answer to the first question is usefully summarised in the Environmental Water Consultation Paper. In short, IDECs (or their equivalent, IDELs) 'could be used to break extended cease-to-flow periods, whole-of-river flow connectivity and protection of held environmental water in transit.'[33] The answer to the second question, namely whether or not IDECs will achieve these environmental outcomes, is more complex and depends on a number of factors. To that end, we have identified a number of issues that – left unaddressed – will undermine and even negate the role that IDECs or IDELs could play in improving protection of environmental flows. Specifically:

- The Draft Exposure Bill makes IDECs tradeable. The Environmental Water Consultation paper assumes that this 'provides a market-based mechanism for the protection of environmental flows.'[34] However, creating a tradeable right may well result in perverse outcomes for the environment and downstream users for the following two reasons. First, there is a real possibility that WAL holders with a large market share[35] in a particular water source or management zone(s) will be assigned an unsustainably large volume of IDECs. Second, these same WAL holders will invariably seek to augment that share by purchasing IDECs from other willing sellers on the market (including from holders of sleeper WALs). While these transactions will be constrained by applicable trading rules, it is important to remember that these rules are not always sufficient to prevent unintended third party impacts (noting that, in our experience, the access licence dealing principles are not always properly applied). In summary, both of these scenarios – unless otherwise fettered - will perpetuate over-extraction, including of low flows.
- There is no guarantee that individual WAL holders will choose to trade their IDECs to a statutory environmental water holder for the purposes of protecting an environmental flow event (keeping in mind that trade is voluntary).
- The Draft Exposure Bill and Environmental Water Consultation Paper do not include any indication of how the new s. 71QA will interact with certain dealing provisions, in particular s. 71S. For example, the Consultation Paper does not specify whether amendments to dealing rules in water sharing plans will be required to prevent the relocation of pumps to an upstream location (which could in turn result in a concentration of IDECs in that location) from having unintended, perverse impacts.

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[33] Better management of environmental water: Consultation Paper, p. 9.
[34] Better management of environmental water: Consultation Paper, p. 9.
[35] Expressed as the share and/or extraction component (as the latter includes the size, number and pumping capacity of all attached works i.e. pumps).

Recommendations:

9. Trading of IDECs/IDELs should only be permissible if combined with appropriate Total Daily Extraction Limits (**TDELs**) for each management zone or extraction management unit (or other appropriately designated zone, as the case may be). This is consistent with existing provision in many water sharing plans and does not breach the trading rules provided for the Chapter 12 of the Basin Plan (noting that cl. 12.18 of the Basin Plan allows for the imposition of limits on trade for environmental/hydrological/downstream water supply purposes).[36]

10. Newly created WALs in the Barwon-Darling River (for example, WALs that were not converted from a 1912 entitlement but are the product of a s.71P subdivision) are not subject to the imposition of IDELs – unless the Minister chooses to impose a 0ML/day or 0 share,[37] which is unlikely to occur, meaning the new WAL or WALs will not be subject to an IDEL. An alternative to a 0ML/day or 0 share would be an IDEL based on the original pumps attached to the WAL pre-subdivision. We would therefore recommend an amendment to the BD WSP to allow for this to occur.

Offences

EDO NSW has compared the maximum penalties associated with offences under the WM Act, the POEO Act and the EPA Act in order to understand how the penalties in the WM Act compare to those contained in other environmental statutes. Notably, the Tier 1 penalties for corporations in the POEO Act and EPA Act are significantly higher, as is the maximum custodial sentence for an individual under the POEO Act. Please note that a penalty unit equates to $110.

WM Act	**POEO Act**	**EPA Act**
Tier 1 penalty (s. 363B (a))	Tier 1 Penalty (s. 119)	Tier 1 Penalty (s. 9.52)
A Tier 1 penalty corresponds to a maximum penalty of: (i) in the case of a corporation, 20,000 penalty units ($2.2 million) and, in the case of a continuing offence, a further penalty of 2,400 penalty units ($264,000) for each day the offence continues, or (ii) in any other case, imprisonment for 2 years or 10,000 penalty units ($1.1	Tier 1 Offence Maximum penalty for tier 1 offences A person who is guilty of an offence under this Part is liable, on conviction: a) in the case of a corporation—to a penalty not exceeding $5,000,000 for an offence that is committed wilfully or $2,000,000 for an offence that is committed negligently, or b) in the case of an individual—to a	9.52 Maximum penalty—Tier 1 1) If Tier 1 is specified as the maximum monetary penalty at the end of a provision (or a number of provisions) of this Act, a person who contravenes or fails to comply with that provision (or those provisions) is guilty of an offence and (subject to subsection (2)) liable to a penalty not exceeding:

[36] To the extent that these restrictions are consistent with Subdivision A of Division 1 of Chapter 12. We can see no reason as to why TDELs would not be consistent with Subdivision A of Division 1.
[37] BD WSP, cl. 52(6).

million), or both, and, in the case of a continuing offence, a further penalty of 1,200 penalty units ($132,000) for each day the offence continues.	penalty not exceeding $1,000,000 or 7 years' imprisonment, or both, for an offence that is committed wilfully or $500,000 or 4 years' imprisonment, or both, for an offence that is committed negligently.	a) in the case of a corporation: (i) $5 million, and (ii) for a continuing offence—a further $50,000 for each day the offence continues, or b) in the case of an individual: (i) $1 million, and (ii) for a continuing offence—a further $10,000 for each day the offence continues.

In light of these discrepancies, and given the fact that water is a shared resource upon which we all depend, we would suggest that the WRAP process is an opportune moment to revise the Tier 1 penalties under the WM Act so as to bring them into line with equivalent provisions under the POEO Act and EPA Act. These comments also reflect feedback that we have received from community members and clients regarding the need to increase penalties under the WM Act.

Recommendations:

11. The WM Act should be amended to bring the penalties for Tier 1 offence provisions in line with those contained in the POEO Act and EPA Act (in particular maximum fines for corporations and custodial sentences for individuals).

12. The WM Act should be amended to provide for enforceable undertakings (noting that this is included in many other environmental statutes). This would allow (for example), profits gained through unlawful activity to be recuperated by the government and used to compensate affected third parties or undertake environmental restoration.

13. The WM Act should be amended to remove the right to refuse entry for the purpose of reading a meter.

14. The *Natural Resources Access Regulator Act 2017* (NSW) should be amended to include a positive duty on the part of the NRAR to take all reasonable steps to enforce the relevant laws. This is because in the absence of a positive duty, the government cannot be legally held to account for failing to enforce the law.

Other

EDO NSW wishes to make some additional, brief comments about certain provisions in the Draft Exposure Bill:

- We support the amendment to s. 324 to include a specific 'environmental test'.

- We support the amendment of s. 91H to include ‘failure to use’ metering equipment, thereby extending the offence provision.
- We support the addition of subsection (2) to s.91J (which makes it an offence to knowingly make a statement or furnish information that the person knows to be false or misleading in relation to metering records). However, based on our experience, a requirement to keep accurate metering records is difficult to enforce and there is confusion – including amongst some departmental staff – as to when logbooks are required to be kept. While logbooks are going to be phased out, their use (including self-reporting), will continue for an unspecified period.[38] This requires additional measures to improve the reliability of self-reported take.
- We support the inclusion of provisions which allow for additional regulations to be created to protect environmental water (ss.115 (2) and 115A). However, the success of these provisions will naturally depend on first, the creation of regulations, and second, the actual imposition of mandatory conditions on relevant WALs to allow for event-based management of environmental flows. Please also refer to our comments in Part 4, below.

Recommendations

15. Self-reported take recorded in logbooks during the transition period should be supported by additional, verified information (for example a statutory declaration with supporting information) regarding the quantity of crops grown during the water accounting year.

Part 4: Environmental water consultation paper

EDO NSW has identified statutory protection of environmental water as a priority issue in for both State and Commonwealth Governments in almost every water-related submission that we have drafted over the last five years. We are therefore pleased to see the NSW Government proposing a range of options to address what is widely considered to be one of the biggest threats to sustainable management of the State’s water resources. Ultimately, the success of any ‘protection program’ will depend on the suite of measures chosen, whether these measures are legally enforceable and whether they are in fact enforced.

With this in mind, EDO NSW supports – at a general level – the inclusion of enforceable rules in water resource plans designed to protect held environmental water, low flows and downstream users, noting that failure to include such statutory protections in existing water sharing plans has resulted in environmental flows propping up reliability for consumptive users (that is, resulting in third party *benefits*).

Recommendations:

16. Water resource plans should be drafted to include enforceable rules which protect environmental water. Depending on the water resource area, this could include rules that protect held environmental water after it is released (including from floodplain harvesting) and the use of IDEL and TDELs.

17. In the Barwon-Darling River, we support the use of a combination of enforceable rules in the water resource plan. This includes:

[38] Water take, measurement and metering: Consultation paper, p. 12.

a. Rules that protect all held environmental water released from regulated river storages that flows into the Barwon-Darling.
b. Appropriate amendments to commence-to-pump thresholds (in particular increases to the A Class pumping threshold above Bourke).
c. A first flush rule.
d. Rules that take into account downstream needs, noting the recent history of increased cease-to-flow events below Bourke.
e. The imposition of IDELS and TDELs (noting our comments above regarding the possible, perverse impacts associated with trading IDELs).

18. We note that the consultation paper does not deal with planned environmental water (**PEW**), which makes up the bulk of environmental water in NSW. PEW it is difficult to quantify, making it vulnerable to erosion through growth in use[39] (despite a legal prohibition against doing so in the Basin Plan)[40] and non-compliance. As it is also vulnerable to climate change,[41] we recommend that the NSW Government turn its mind to addressing the most effective means of quantifying and then protecting it.

Part 5: Floodplain harvesting consultation paper

While EDO NSW is generally supportive of the proposal to bring floodplain harvesting within a licensing framework, we do not support the issuing of floodplain harvesting WALs in the absence of any clear, defensible and publicly available evidence regarding:

- the current volume of water being diverted (or lost, as the case may be) in the northern Basin via floodplain harvesting;
- how much of this is being diverted (or lost) as a consequence of unlawfully constructed structures, noting that it is inconsistent with the NSW Government's current stance regarding compliance and enforcement to reward unlawful conduct with a valuable, tradeable property right;
- the environmental and downstream impacts of licensing a particular volume of water in each affected catchment;
- the environmental and downstream impacts of the proposed accounting methodology, noting that a 500% allocation does not exist for any other class of WAL in the State and would allow for large volumes of water to be diverted from floodplains (and away from downstream users and the environment) during a single flood event. Again, this is manifestly inconsistent with the NSW Government's current policy position regarding the protection of environmental flows;
- the relationship between the SDLs set under the Basin Plan and the volume of water that will be licenced under the Floodplain Harvesting Policy. Relevantly, the Basin Plan assumed that only 210GL was being diverted or lost as a consequence of floodplain harvesting in the northern Basin.[42] However, the consultation paper indicates that 600.5GL would be eligible for

[39] Wentworth Group of Concerned Scientists, *Review of Water Reform in the Murray-Darling Basin*, November 2017, pg. 56.
[40] Basin Plan, cl. 10.28.
[41] Wentworth Group of Concerned Scientists, *Review of Water Reform in the Murray-Darling Basin*, November 2017, pg. 71.
[42] Murray-Darling Basin Authority and Independent Panel, *Murray-Darling Basin Water Compliance Review*, p. 42.

entitlements in the *Gwydir catchment alone*.[43] This suggests that it will be difficult to comply with SDLs in affected catchments if more than 210GL of water is licenced for the purposes of floodplain harvesting;

- how trading will actually function, keeping in mind that the vendor would have to decommission levees to prevent future, unlawful impoundment of overland flow. This is unlikely to occur unless the NSW Government is vigilant and extremely proactive with respect to compliance and enforcement. However, the government has not provided the community with a detailed compliance and enforcement strategy to comment on, making it difficult to support a 'hypothetical' trading framework;
- how floodplain harvesting (including associated structures) will be dealt with over time as water becomes scarcer due to climate change;
- why metering cannot be used to measure some harvested water, keeping in mind that overland flow is generally diverted from levees into channels which then flow into storages. Where channels are dry, the inflow from overland flow can be metered through a pipe. In any case, LiDAR can also be used to calculate volumes of harvested water; and
- how the Floodplain Harvesting Policy and proposal to issue WALs interacts with the NSW Government's on-farm irrigation efficiency funding programs. We understand that these programs have been subsidising on-farm storages (ostensibly to reduce evaporation) in the northern Basin, which in turn allows for greater volumes of overland flows being harvested and then stored. These storages would have been built/augmented in the last decade.

As a final note, we wish to state that the consultation paper has been drafted in a manner that excludes meaningful participation by most members of the community. Again, this is contrary to the NSW Government's stated policy position regarding openness and broad engagement.

Recommendations:

19. We recommend that a complete audit of all earthworks on floodplains and on-farm storages be undertaken across the northern Basin as soon as possible, with the results of the audit made publicly available.

20. In the interests of transparency – and in order to understand growth in both development and floodplain harvesting – we recommend publishing the details of all storages that have been built or upgraded with funding from any on-farm irrigation efficiency programs in the last decade.

21. We recommend developing a clear, evidence-based monitoring framework as a priority which will in turn assist with baseline data, compliance and enforcement.

22. We recommend developing a clear, evidence-based policy regarding adaptive management of floodplain harvesting (including associated structures and storages) as water becomes scarcer due to climate change.

23. After satisfying 19 – 22 inclusive (and not before), we recommend only licensing the volume assumed to develop the SDLs for the Basin Plan in 2012. This appears to be 210GL for the entire northern Basin (and subsequently less for the northern parts of NSW). Anything above this volume will undermine the Basin

[43] Implementing the NSW Floodplain Harvesting Policy: Consultation Paper, p. 14.

Plan, the purpose of which was to reinstate an environmentally sustainable level of take.

24. We recommend against the issuing of licences associated with any unlawfully constructed works.

25. We recommend against paying landholders compensation under s. 87 of the WM Act for reductions in floodplain harvesting where historic harvesting has involved the use of unauthorised structures or otherwise unlawful activity.

26. Water accounting for floodplain WALs must ensure that environmental and downstream needs are met. To that extent, we recommend discarding the proposed accounting framework, notably the proposed 500% allocation and unlimited carryover. A new accounting framework based on a transparent assessment of environmental and downstream needs – and SDLs – should be developed in its place.

27. We recommend including rainfall runoff in the floodplain licensing framework.

28. We recommend the development of a compliance and enforcement strategy in relation to floodplain harvesting, including in relation to the decommissioning of levees post-trade.

29. We support the analysis and recommendations of Professor Richard Kingsford in his submission responding to the Floodplain Harvesting Consultation Paper.

END