



Environmental
Defenders Office

**Murray-Darling Basin Plan: Implementation Review 2023
(Productivity Commission)**

11 August 2023

About EDO

EDO 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 has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO 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.

Environmental Defenders Office is a legal centre dedicated to protecting the environment.

www.edo.org.au

Submitted to:

Productivity Commission
Murray-Darling Basin Plan: Implementation Review 2023

By email: basin.plan.2023@pc.gov.au

For further information on this submission, please contact:

Huw Calford
Senior Solicitor, Nature Program
E: huw.calford@edo.org.au

Nadja Zimmermann
Senior Solicitor, Nature Program
E: nadja.zimmermann@edo.org.au

Emily Long
Special Counsel, Nature Program
E: emily.long@edo.org.au

Acknowledgement of Country

The EDO recognises and pays respect to First Nations Peoples. We pay our respects to Aboriginal and Torres Strait Islander Elders past, present and emerging, and aspire to learn from traditional knowledges and customs that exist from First Laws so that together, we can protect our environment and First Nations' cultural heritage through Western law. We recognise that their countries were never ceded and express our remorse for the deep suffering that has been endured by the First Nations of this country since colonisation.

A Note on Language

We acknowledge that there is a legacy of writing about First Nations without seeking guidance about terminology. We also acknowledge that where possible, specificity is more respectful. Where possible, we have used specific references. More generally, we have chosen to use the term "First Nations". We acknowledge that not all Aboriginal and Torres Strait Islander peoples will identify with that term and that they may instead identify using other terms or with their immediate community or language group.

CONTENTS

INTRODUCTION	5
SUMMARY OF ISSUES HIGHLIGHTED FOR THE COMMISSION'S ATTENTION.....	6
KEY QUESTION ONE: MEETING WATER RECOVERY TARGETS AND DELIVERING SUPPLY AND EFFICIENCY MEASURES.....	8
KEY QUESTION TWO: EFFECTIVE IMPLEMENTATION OF THE PLAN	8
DEVELOPING AND ACCREDITING WRPS	8
<i>Regularising floodplain harvesting through adjustments to the Sustainable Diversion Limit</i>	<i>9</i>
REPORTING ON WRPS	15
<i>Schedule 12 reporting (Matters 18 and 19)</i>	<i>15</i>
REVIEWS OF WRPS	19
CRITICAL HUMAN WATER NEEDS	19
<i>Role and effectiveness of the Water Act and Basin Plan</i>	<i>20</i>
ENVIRONMENTAL WATER PLANNING AND MANAGEMENT	24
KEY QUESTION THREE: GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS.....	25
KEY QUESTION FOUR: CLIMATE CHANGE	25
KEY QUESTION FIVE: ADDRESSING THE INTERESTS OF ABORIGINAL PEOPLE.	28
BROAD OBSERVATIONS.....	28
NSW WRPS AND BASIN PLAN CHAPTER 10, PART 14.....	29
KEY QUESTION EIGHT: BEST AVAILABLE SCIENTIFIC KNOWLEDGE	31

INTRODUCTION

EDO welcomes the opportunity to participate in the Productivity Commission’s 2023 Basin Plan implementation review (**2023 PC Review**, or **Review**).

EDO is the largest environmental law practice in the Australia Pacific. We work with individuals, organisations and communities in pursuit of our vision: A world where nature thrives. We pursue this by advocating for better laws and running groundbreaking legal cases. We have specific expertise in water law and regulation, with many years of experience engaging with and advising clients about the *Water Act 2007* (Cth) (**Water Act**) and the Basin Plan, as well as State laws and policies.

For this Review, s 87(2) of the Water Act requires the Commission to inquire into *the effectiveness of the implementation of the Basin Plan and the water resource plans*. The scope of the Review is broad, as are the Key Questions identified in the call for papers. This has necessitated difficult choices in selecting issues for discussion. To make these choices and direct our observations, we have been guided by the following:

- First, any measure of the effectiveness of the Basin Plan and water resource plans (**WRPs**) must be considered by reference to the history, context and purpose of the Water Act and Basin Plan. Of particular importance is the “clear and central purpose” of the Water Act: to address the long history of over-extraction and to limit extraction to an “environmentally sustainable level of take”. This was underpinned by Australia’s international legal obligations, including under the Ramsar Convention¹ and the Convention on Biological Diversity. Any assessment of the implementation of the Basin Plan and WRPs must consider whether, and how well, implementation is furthering this core – and critical – objective.
- Second, since the Water Act was enacted we have experienced droughts, floods, and bushfires. We have also witnessed dramatic and extensive fish kill events and seen Basin communities lack access to suitable drinking water. The climate continues to heat and global greenhouse gas emissions continue to grow. Knowledge as to the impacts of climate change – to date and projected forward – continue to improve and, with this, come warnings of more frequent and severe extreme weather events. In other words, the challenge of recovering flows and environments across the Basin to protect the environment into the future is only becoming more severe and more time sensitive.
- Third, EDO’s unique area of expertise is legal analysis, advice and representation. We are guided by this area of expertise and the insights shared by and gained from our work with clients and partners.
- Fourth, EDO recognizes that a key part of achieving environmental justice in Australia is the central place of First Nations across all facets of our work. EDO aims to support First

¹ *Convention on Wetlands of International Importance Especially as Waterfowl Habitat* (**Ramsar Convention**).

Nations to protect their Countries and to centre understanding of – and respect for – First Nations perspectives in our work. EDO does not seek to speak for First Nations. However, we see this Review as an important opportunity to support and elevate some of the serious issues with the Basin Plan that have been uncovered in its implementation to date.

Below we set out the summary of issues we have highlighted for the Commission’s attention. We look forward to the opportunity to provide further input in response to the Commission’s draft report later this year.

SUMMARY OF ISSUES HIGHLIGHTED FOR THE COMMISSION’S ATTENTION

Generally

1. The Commission’s analysis and critique of Basin Plan and WRP implementation and effectiveness must centre around the context, purpose, and core objectives of the Water Act and Basin Plan. Returning diversions to truly ecologically sustainable levels is critical.

Meeting water recovery targets and delivering supply and efficiency measures (p 8)²

2. Delivering the Basin Plan recovery targets in full is a matter of priority. Recovery of actual flows must be prioritised; mechanisms that remain speculative or uncertain must be deprioritised.

Effective implementation of the Basin Plan

Developing and accrediting WRPs (pp 8-15)

3. Adjustments to the Baseline Diversion Limits (**BDLs**) and an upward revision of Sustainable Diversion Limits (**SDLs**) in NSW to allow floodplain harvesting (**FPH**) to be regularised at best runs counter to the core objectives of the Water Act and Basin Plan and, at worst, is unlawful.

Reporting on WRPs (pp 15-19)

4. Now that water resource plans (**WRPs**) are (mostly) accredited, high quality reporting on implementation must become a priority. Reporting on the efficiency and effectiveness of WRPs, including as to whether they provide a robust framework under a changing climate, is of particular importance.
5. Involving the Inspector General of Water Compliance (**IGWC**) in WRP compliance reporting could improve issue identification, facilitate responsive recommendations and redress of issues, and assist the IGWC to readily identify areas of concern that warrant further investigation.

² See also EDO submission to the Commonwealth DCCEEW seeking Ideas on how water recovery and efficiency use goals in the Murray-Darling Basin can be met (**attached**).

Review of WRPs (p 19)

6. WRP review requirements in the Basin Plan are limited and inadequate. The Basin Plan should require regular WRP reviews. If it doesn't formally require this, WRP reviews ought at least be pursued and scaffolded as a project of the Commonwealth Department of Water, as a matter of public policy.

Critical human water needs (pp 19-24)

7. As demonstrated by the water security issues experienced in some NSW towns, the critical human water needs provisions in the Water Act and Basin Plan do not effectively manage and address critical human water needs (**CHWN**) and State-based laws cannot be relied on in the alternative.

Climate change (pp 25-28)

8. The Basin Plan does not adequately or appropriately deal with the challenges of climate change. We urge the Commission to assess the Basin Plan and WRPs against the “key elements of climate-ready water laws” described in this submission.

Addressing the interests of First Nations Peoples (pp 28-31)

9. The EDO does not speak for First Nations Peoples across the Basin. Our observations draw on our history of assisting First Nations clients in NSW and seek to elevate the issues raised and experienced by our clients. There is clear evidence of substantial shortcomings with respect to implementation of the Basin Plan and development of WRPs.
10. In order to obtain meaningful feedback in relation to this Key Question, it is critical that the Productivity Commission engage directly with First Nations Peoples across the Basin for the purpose of this inquiry.

Best available scientific knowledge (p 31)

11. Whereas the Water Act requires the Basin Plan to be developed on the basis of the best available scientific knowledge, the SDL:
 - a) is a well-known compromise; and
 - b) fails to account for climate change projections.

KEY QUESTION ONE: Meeting water recovery targets and delivering supply and efficiency measures

We direct the Commission to EDO's recent submission to the Commonwealth Department of Climate Change, Energy, the Environment and Water (**DCCEEW**)'s consultation seeking *Ideas on how water recovery and efficiency use goals in the Murray-Darling Basin can be met*, and to our ten recommendations in that submission (copy **attached**).

KEY QUESTION TWO: Effective implementation of the Plan

Developing and accrediting WRPs

The statutory scheme established by the Water Act and the Basin Plan is implemented at the local level through the Water Resource Plans (**WRPs**). In practice, these have been prepared by Basin States – although there is provision in the Act for WRPs to be prepared by the Murray Darling Basin Authority (**Authority**) at the direction of the Commonwealth Minister for Water (**Minister**), in limited circumstances.³

Once prepared by a Basin State, proposed WRPs are subject to assessment by the Authority and accreditation by the Minister. The effectiveness of the Basin Plan is contingent upon the successful development, implementation, and operation of WRPs.

Except for NSW, all Basin States now have fully accredited WRPs. In NSW, at the time of writing, five WRPs have been accredited;⁴ eight are with the Authority for assessment;⁵ and seven have been withdrawn by NSW (in May 2023) and will require resubmission (for a third time).⁶

The extreme delay and repeated failures of NSW to provide the Authority with suitable WRPs represents a fundamental failure to comply with the Basin Plan. However, with NSW expected to resubmit its remaining seven WRPs for assessment and accreditation imminently, focus is likely to shift to scaffolding the successful implementation of the accredited WRPs.

Nevertheless, in our opinion it remains critical that the Productivity Commission pays close attention to the substantial concerns arising from the development and accreditation of WRPs.

³ Water Act, s 68.

⁴ The *Darling Alluvium* WRP was accredited in June 2023.

⁵ <https://www.mdba.gov.au/water-management/basin-plan/water-resource-plans/list-state-water-resource-plans> (accessed 11 August 2023).

⁶ NSW withdrew the following WRPs: *Barwon-Darling Watercourse*, *Gwydir Surface Water*, *Lachlan Surface Water*, *Macquarie-Castlereagh Surface Water*, *NSW Murray and Lower Darling Surface Water*, *NSW Border Rivers Surface Water* and the *Naomi Surface Water*.

This submission discusses two issues with the WRP development and accreditation processes:

- The use of the WRP accreditation process to “sign off on” NSW’s adjustments to its so-called sustainable diversion limit (**SDL**) via amendments to the “baseline diversion limit” (**BDL**) (see pp 9-15, below); and
- Significant concerns raised by First Nations in relation to the execution of the Chapter 10 Part 14 “Indigenous values and uses” requirements (see pp 28-31, below, where we address Key Question 5).

The confined scope of this discussion should not be read as a suggestion that these are the only issues of concern that warrant attention.

Regularising floodplain harvesting through adjustments to the Sustainable Diversion Limit

NSW and the Authority have sought to regularize higher than expected historical volumes of floodplain harvesting via upward revisions of the sustainable diversion limits (**SDLs**). This has been done outside of the legislative processes for amending the SDL and/or the Plan. In this section, we explain:

- how this has happened; and
- why we consider the Authority’s endorsement of this approach, and the anticipated sign off by the Commonwealth Minister, to be a serious example of a failure to implement the Plan in accordance with the objects and purpose of the Water Act and the Plan.

The SDL and the ESLT

The “Sustainable Diversion Limit” (**SDL**) is a core concept in the Water Act. It represents a volumetric limit on water extraction and can be used to refer to extraction limits across the Basin as a whole, and/or to extraction limits that apply to particular WRP areas.⁷

The Water Act expressly requires SDLs to “reflect an environmentally sustainable level of take”.⁸ “Environmentally sustainable level of take” (**ESLT**) is defined in the Act to mean:

the level at which water can be taken from that water resource which, if exceeded, would compromise:

- (a) key environmental assets of the water resource; or
- (b) key ecosystem functions of the water resource; or
- (c) the productive base of the water resource; or
- (d) key environmental outcomes for the water resource.

⁷ Water Act, s 23(3).

⁸ Water Act, s 23(1).

The Water Act allows the SDL to be specified in the Basin Plan as a quantity of water per year, a formula for determining a quantity of water, or in any other way determined appropriate by the Authority.⁹

As stated in the 2012 Explanatory Statement to the Basin Plan, the Authority determined the Basin-wide surface water SDL to be 10,873GL/y, representing an annual, Basin-wide diversion reduction of 2,750GL/y.¹⁰

Although it is well documented that this SDL adopted under the Basin Plan does not, in fact, reflect an ESLT,¹¹ that is not the focus of this submission. In this submission, we draw attention to the further assault to the concept of the ESLT, inflicted by NSW's approach of amending its SDLs outside of the formal statutory processes for doing so, in order to "regularize" substantial volumes of FPH.

The BDL

Core to the issue discussed in this part is the the concept of the "baseline diversion limit" (**BDL**). Unlike the SDL, the concept of a BDL is not referred to in the Water Act and only arises in the Basin Plan.

It is defined in the Basin Plan as the "baseline limit of take from an SDL resource unit".¹² The purpose of the BDL is, as explained in the Explanatory Statement to the Basin Plan, to "establish a baseline from which to determine required reductions in diversions".¹³

The BDLs for each WRP area (**WRPA**) are set out in Schedule 3 to the Plan. Each BDL is defined as the sum of various forms (components) of take that were permitted in the WRPA area as at 30 June 2009. The components of each BDL are captured as a description rather than a number. For example, one of the components of the BDL in the Paroo WRPA is defined as "the long-term annual average take of water from watercourses under basic rights calculated on the basis of the take under the level of development that existed on 30 June 2009".

When the Basin Plan commenced, notes were included in Schedule 3 identifying what the MDBA estimated the volume of take for each component to be, in relation to specific WRPAs.¹⁴ In some cases, the notes indicated "The Authority is yet to estimate this take". The Explanatory Statement to the Basin Plan was silent as to the fact that certain components of the BDLs (which as noted above are particular to SDL resource units) were yet to be estimated.

⁹ Water Act, s 23(2).

¹⁰ Explanatory Statement to the 2012 Basin Plan, [91].

¹¹ See e.g. detailed discussion by the South Australia Royal Commission into the Murray Darling Basin: Royal Commission Report.

¹² Basin Plan, s 1.07

¹³ Explanatory Statement to the 2012 Basin Plan, [105].

¹⁴ For example: "The authority estimates this to be 3GL per year".

The SDL/BDL formula

The Basin Plan describes the SDL “for a particular surface water SDL resource unit” using the following formula:

$$SDL = BDL - \left(\frac{\text{local reduction amount}}{\text{reduction amount}} \right) - \left(\frac{\text{SDL resource unit shared reduction amount}}{\text{reduction amount}} \right) + \left(\frac{\text{SDL adjustment amount}}{\text{reduction amount}} \right)$$

For the purposes of this discussion, it is not necessary to consider the “local reduction amount”, “SDL resource unit shared reduction amount”, or “SDL adjustment amount” in any detail. The core point is to note the relationship between the SDL and the BDL for each WRPA that is embedded in the formula.

A legal analysis of the proposed Murray Darling Basin Plan published by EDO Victoria (now Environmental Justice Australia) in March 2012 presciently observed:

The MDBA does not actually know what the SDLs are in any surface water area, or for the Basin as a whole. It only has an estimate, and it is unclear how that estimate is derived. It also does not know what the BDL (i.e. current extraction) is in each area. This leaves a great deal of uncertainty around the SDLs, and what outcomes they can achieve.¹⁵

Nevertheless, there was an agreed Basin wide SDL at the commencement of the Plan, purportedly based on and reflecting an ESLT, being 10,873GL/y (as described above).

As we discuss further below, NSW and the Authority have relied on the formula above to assert that:

- there is a simple, linear relationship between the SDL and the BDL;
- any increase to the BDL must lead to a corresponding increase in the SDL; and
- any such upward adjustment in the SDL does not need to be approved via the usual processes that apply to SDL adjustments in the Act.

Amending SDLs and BDLs: What the Water Act and Basin Plan say

Neither the Act nor the Plan incorporate a mechanism for updating the BDL for any particular surface water SDL resource unit.

The Water Act does however expressly provide for amendments (or “adjustments”) to the SDL. This is achieved by allowing the Basin Plan to include provisions that permit the Authority to adjust the SDL.¹⁶ Several requirements are embedded in the Act – including the requirement that the Authority seek advice from the Basin Officials Committee, and invite and consider submissions

¹⁵ Environmental Defenders Office (Victoria), *Legal analysis of the Proposed Murray-Darling Basin Plan* (March 2012), p 15.

¹⁶Basin Plan, s 23A(1).

from the public.¹⁷ Any adjusted SDL must still reflect an ESLT.¹⁸ Section 23A(4) also puts a limit on SDL adjustments:

One or more adjustments may be proposed by the Authority under paragraph (1)(a), and an adjustment may be proposed under paragraph (1)(b) as a result of those adjustments, only if the total Basin adjustment percentage is no more than 5%

The adopted processes for adjusting SDLs are found in Chapter 7 of the Basin Plan.

The other mechanism for amending the SDL is to follow the Basin Plan amendment process in Subdivision F of Part 2, Division 1 of the Water Act. This is the process that was followed when the SDL was amended following the Northern Basin Review.¹⁹

The MDBA’s approach to “updating” BDLs: Circumventing the formal processes for SDL or Basin Plan amendments

On 20 August 2015, the Authority released a position statement: *Water Resource Plan Requirements, Position Statement 3D, Changes to BDL*.²⁰ The Position Statement asserts that Basin States may revise their BDL estimates and that such revisions will be “progressed and formalised as part of a WRP assessment process”.²¹ It also explains that if a State proposes a new BDL, and the MDBA is satisfied with the revised estimate, “this will result in an amendment to estimated volume of the SDL” and that “[n]o amendment to the Basin Plan is required”.²²

The outcome of this approach is that SDLs would be increased (or decreased) because of amended estimates of the volumes of water that were being taken in 2009.

Concern was raised and ignored

By 2018 it was clear that NSW intended to account for and regularize FPH take (which was historically largely unregulated) by increasing the BDLs (and therefore the SDLs) for its WRPA. This was raised before the South Australian Royal Commission into the Murray Darling Basin Plan. Commissioner Walker SC found the following:

Ultimately, the MDBA’s proposal to increase the SDLs by reference to increases to BDLs is unjustifiable... Any proposal to do so necessarily assumes that the ESLT can be determined (to increase) by reference to changes in consumptive use. That is plainly wrong. The ESLT must be established independently from consumptive use, not because of it.²³

¹⁷ Water Act, s 23A(2)(c)-(d).

¹⁸ s 23A(3)(b).

¹⁹ See *Basin Plan Amendment Instrument (No 1) 2018* (Cth) and the *Explanatory Statement to the Basin Plan Amendment Instrument (No 1) 2018*.

²⁰ Authority, *Water Resource Plan Requirements, Position Statement 3D, Changes to BDL* (available at <https://www.mdba.gov.au/sites/default/files/publications/wrp-position-statement-3d-changes-to-bdl0.pdf>).

²¹ *Ibid*, p 1.

²² *Ibid*, p 2.

²³ Royal Commission Report, p 605.

The issue was raised again before the Commonwealth Senate Committee on the Multi-Jurisdictional Management and Execution of the Murray Darling Basin Plan established in July 2019. A submission to the Committee by Slattery & Johnson set out in detail the ways in which NSW's proposed BDL adjustments were inconsistent with the Water Act.²⁴ It came up again before the NSW Legislative Council Select Committee on Floodplain Harvesting established in June 2021 which addressed the issue in some detail in its final report. The Committee found that:

Mr Bret Walker SC's evidence that the MDBA's proposal to increase SDLs by reference to increases to BDLs was ultimately 'unjustifiable', and that the law stipulates the SDL cannot be adjusted, was particularly compelling...

...[T]he committee finds that the process the NSW Government is undertaking to amend the Sustainable Diversion Limit, as described by NSW Department of Planning, Industry and Environment, has the potential to be unlawful.²⁵

NSW and MDBA Position

NSW has defended its approach by asserting that it is not increasing SDLs but simply revising its BDL based on best available information.²⁶ To the extent that the BDL revisions influence the SDL, NSW points out that "the responsibility for amending SDLs rests with the Commonwealth Government who administer the Basin Plan."²⁷ This position is disingenuous considering NSW has provided the MDBA with reports relying on updated BDLs to identify increased SDLs.²⁸

NSW and the Authority have also defended their approach on the basis that updated BDLs simply reflect improved understandings of the volumes of water that were being taken in 2009.²⁹ The Authority commissioned an independent review by consultants Fifteen50 that concluded NSW's revised BDLs were based on the latest available modelling data and provided better estimates of the BDL from the Basin Plan's 2012 BDL estimates.³⁰

However, the question of whether the revised BDL estimates are indeed more accurate misses the point. That the new BDL estimates are more accurate does nothing to justify an increase in total diversions. Discovering that even more water was previously being taken than previously accounted for puts baseline diversions even further above the SDL than we first thought. And so, in order to reach the modelled SDL (and to balance the BDL equation in Schedule 3), there must be a further reduction in total diversions.

²⁴ Multi-Jurisdictional Management and Execution of the Murray Darling Basin Plan Submission 62, Slattery & Johnson, *Licensing Floodplain Harvesting in Northern NSW: Analysis & Implications*. Available at <https://www.parliament.nsw.gov.au/committees/listofcommittees/Pages/committee-details.aspx?pk=274#tab-submissions>.

²⁵ Select Committee on Floodplain Harvesting, Report 1, p 86-87.

²⁶ NSW Government Response to Select Committee on Floodplain Harvesting Report, p 7.

²⁷ NSW Government Response to Select Committee on Floodplain Harvesting Report, p 7.

²⁸ See for example, Gwydir Surface Water Resource Plan, Sustainable Diversion Limit Scenario Model for the Gwydir Regulated River System, Appendix C to Schedule F (first published October 2018).

²⁹ See for example the MDBA webpage, here: <https://www.mdba.gov.au/water-use/water-limits/changing-limits>.

³⁰ Fifteen50 Consulting, Report for the Murray Darling Basin Authority, *Independent Review of Proposed NSW Baseline Diversion Limits for Floodplain Harvesting: Border Rivers and Gwydir SDL Resource Units* (18 August 2022), p 58 (**Fifteen50 Report**).

To quote a joint memorandum of advice prepared by Bret Walker SC and Sebastian Hartford-Davis, provided to the NSW Select Committee on Floodplain Harvesting (emphasis added):

The notion that the “environmentally sustainable” limit on take could be *increased* by recourse to changed historical data would contradict the dynamic in s 21(2)(a)(i) of the Water Act, which relevantly provides that the Basin Plan must be prepared having regard to the fact that the historical use of Basin water resources “has had, and is likely to have, significant adverse impacts on the conservation and sustainable use of biodiversity”. Section 21(2)(a)(ii) provides that Basin water resources “require, as a result, special measures to manage their use to conserve biodiversity”. The SDL is one such measure: it establishes an environmentally sustainable limit on take. It would not be consistent with these provisions to construe the Basin Plan as tolerating ad hoc *increases* to the SDL merely because of new historical data on take, unless that also produced a corresponding increase in the deductions used to calculate the SDL.³¹

NSW continued with a potentially unlawful approach

Despite leading Australian legal experts, the South Australian Royal Commission and a NSW Parliamentary Inquiry finding that NSW’s proposed BDL adjustments had the potential to be unlawful, the NSW Government has carried on with adjusting its BDLs in relevant WRPA.

The practical effect of this is that, after NSW recalculated FPH take as at 2009, it has relied on this to increase the BDLs for the relevant WRPA and to subsequently increase the SDLs for those areas. While NSW is yet to have the relevant WRPA accredited, the Authority appears to have accepted NSW’s revised figures for the purposes of SDL compliance under the bilateral agreement between the Authority and NSW.³² For example, at the time of preparing this submission, the MDBA website identifies the 2012 BDL in the Gwydir WRP area as 450.2GL, whereas the current (revised) BDL is 579.8GL, with a corresponding increase in the SDL. That is, since the Basin Plan commenced, the BDL in the Gwydir WRP areas has increased by 129.6GL. Reports prepared by NSW indicate that revised FPH estimates account for 126.1GL of this increase.³³

Conclusion

As is well known, the Water Act arose from recognition that overextraction across the Basin could not be sustained and that diversions needed to be returned to environmentally sustainable levels.³⁴

³¹ NSW Inquiry Into Floodplain Harvesting, Supplementary Submission No 149a (Southern Riverina Irrigators, 2 November 2021) (available at <https://www.parliament.nsw.gov.au/lcdocs/submissions/76500/Southern%20Riverina%20Irrigators.pdf>).

³² Agreement between the Murrumbidgee Basin Authority and New South Wales, 28 February 2019.

³³ The 126.1GL figure is derived from subtracting the original FPH estimate of 17.8GL from the revised estimate of 143.9GL. These figures are shown together on page 23 of the Fifteen50 Report. They can also be found in the following documents prepared by NSW: NSW Department of Planning, Industry & Environment, *Gwydir Surface WRP – Modelling – Annual Permitted Take Scenario Report (update) Attachment B to Schedule F* (November 2019), p 6, and *Sustainable diversion limit scenario model for the Gwydir regulated river system, Appendix C to Schedule F* (October 2018), p 10.

³⁴ Water Act s 3.

The Water Act acknowledges as a fact that the use of Basin water resources “has had, and is likely to have, significant adverse impacts on the conservation and sustainable use of biodiversity” and that Basin water resources require, as a result, “special measures to manage their use and conserve biodiversity”. It requires the Basin Plan be prepared having regard to these facts.³⁵

The MDBA itself has acknowledged that “Whilst BDL re-estimates are not directly relevant to accreditation requirements under Chapter 10, it is important that the proposed WRP deals with them as they impact on the sustainable diversion limits (SDL)...”³⁶ If the MDBA and Basin States adopted interpretations of the Basin Plan that gave effect to legal obligations set out in the Water Act, and were true to the core objectives of the Act and Plan, the adjustments of SDLs via adjustments to BDLs in the manner discussed above simply would not be contemplated.

The Productivity Commission must ensure that its assessment of Basin Plan implementation is conducted through a lens that prioritises the core objectives of, and lawful obligations established by, the Water Act.

Reporting on WRPs

The delays in WRP accreditation, particularly in NSW, have attracted significant attention. This is illustrated by the “progress reporting” section on the MDBA’s website which focusses exclusively on the development and accreditation of WRPs.³⁷ Similarly, the MDBA’s Basin Plan Report Cards have tracked and reported on the progress in the accreditation of WRPs since 2018. The most recent report card (June 2023) simply identifies WRPs in all jurisdictions except NSW as “on track” and those in NSW as at “high risk” – i.e. it says nothing as to the substance of effect of those WRPs that are in effect.

While it has been necessary to focus on getting WRPs accredited, it is vital to note that WRPs were always intended to evolve and be adapted over time. The MDBA itself has emphasised that WRPs must be continuously monitored and adapted to keep pace with the challenges of a changing climate.³⁸

The Basin Plan establishes ongoing obligations to report on WRP compliance and effectiveness. It is critical that these processes provide meaningful insight into the effectiveness of accredited WRPs in achieving positive outcomes for the MDBA. The effectiveness of these reporting mechanisms is discussed below and recommendations made as to how they may be improved to ensure the long-term resilience of WRPs in the face of a swiftly changing climate.

Schedule 12 reporting (Matters 18 and 19)

Chapter 13, Part 4 of the Basin Plan describes reporting requirements. Schedule 12 of the Basin Plan sets out a list of 21 “Matters” that, pursuant to Basin Plan s 13.14, must be reported on –

³⁵ Water Act s 21(2).

³⁶ MDBA Assessment Report of the Victorian Murray Water Resource Plan, p ii.

³⁷ <https://www.mdba.gov.au/water-management/basin-plan/water-resource-plans>

³⁸ MDBA, 2020 Basin Plan Evaluation, p 120.

either annually or 5-yearly.³⁹ The “Matters” are categorised into several topics, one of which is “water resource planning”. Each Matter is to be reported on by the identified “reporter/s” (being one or several of the Authority, Basin States, DCCEEW, and the Commonwealth Environmental Water Holder (**CEWH**)).

Matters 17-21 relate to “Water resource planning”:

Item	Matter	Reporter
	<i>Water resource planning</i>	
17	The certainty of access to Basin water resources.	Authority
18	The efficiency and effectiveness of the operation of water resource plans, including in providing a robust framework under a changing climate.	Basin States, Authority
19	Compliance with water resource plans.	Basin States
20	The prioritisation of critical human water needs.	Basin States
21	The accountability and transparency of arrangements for water sharing.	Basin States

For current purposes, we have confined our comments to Matter 18 and 19.

Matter 18 reports: The efficiency and effectiveness of the operation of WRPs (Authority and Basin States)

Matter 18 requires the Basin States and the Authority to report 5-yearly on: “The efficiency and effectiveness of the operation of water resource plans, including in providing a robust framework under a changing climate.”

The Productivity Commission noted in its Five-year Assessment of the Basin Plan (**PC 5-year Assessment**) that the first of the Matter 18 reports were due in 2020. The Commission identified this as an opportunity for the Basin States and the Authority to assess the utility of WRPs in implementing the Basin Plan.⁴⁰

Several other Schedule 12 reporting requirements arose for the Authority that year, as did the requirement for the Authority to give advice to the Murray Darling Basin Ministerial Council on the impacts of the Basin Plan.⁴¹ To meet these legislative requirements, the MDBA prepared a single

³⁹ Basin Plan, cl 13.13 & Schedule 12.

⁴⁰ PC 5-Year Assessment, pp 182, 198.

⁴¹ Water Act s 49A.

report, the “2020 Basin Plan Evaluation” (**2020 Evaluation**).⁴² This was prepared based on the 2019 “Framework for Evaluating the Murray-Darling Basin Plan” (**2019 Evaluation Framework**).⁴³

Unfortunately, although the 2020 Evaluation claimed that it “fulfils legislative requirements for the Murray-Darling Basin Authority (MDBA) to prepare five-yearly reports on matters listed in Schedule 12 of the Basin Plan (section 13.14)...”,⁴⁴ on our review the MDBA’s approach of preparing a single report to address multiple legislative obligations resulted in a failure to adequately address each of the relevant Schedule 12 items – including Item 18. For example, while WRPs and climate change were given substantive consideration in the 2020 Evaluation, there was no specific focus on the extent to which WRPs themselves provide a robust framework for addressing the challenges of climate change. This was the specific point which item 18 of Schedule 12 of the Basin Plan required the MDBA (along with the Basin States) to report on. Instead, the 2020 Evaluation includes general statements, such as the following:

While there are mechanisms embedded within the Basin Plan and water resource plans to respond to the implications of climate change, these instruments need to be continuously monitored and adapted to keep pace with the challenges of climate change.⁴⁵

Further, the 2020 Evaluation also failed to provide specific recommendations on *how* such continuous monitoring and adaptation of WRPs could take place. The MDBA also indicated that the timing of the 2020 Evaluation as against five-yearly reports due from other agencies hindered its review, as it made it “difficult to draw...on five-yearly reports from other agencies”.⁴⁶

It is notable that in the PC 5-Year Assessment, the Commission specifically recommended that the Authority make public the terms of reference for the five-yearly WRP evaluations be finalized and published as a priority⁴⁷ - and yet the 2020 Evaluation Framework failed to clearly identify how Matter 18 was to be addressed. Had the Commission’s recommendation been followed, perhaps the reporting would have been more satisfactory and useful.

In terms of the obligation of Basin States to also prepare Matter 18 reports, at the time of preparing this submission the Basin States Matter 18 reports did not appear to be available on the MDBA website nor the respective State Government agency websites. The MDBA is required under section 13.18(1) to take all reasonable steps to publish Schedule 12 reports on its website (unless otherwise published separately by the preparer of the report). We have sought clarification on this point with the MDBA. We also note that although the PC 5-year Assessment states that the first of the Matter 18 5-yearly reports were due in 2020, the Basin Plan allows for reporting dates to be

⁴² 2020 Evaluation Report (available at https://www.mdba.gov.au/sites/default/files/publications/bp-eval-2020-full-report_0.pdf).

⁴³ 2019 Evaluation Framework (available at <https://www.mdba.gov.au/sites/default/files/publications/basin-plan-evaluation-framework-2019-2.pdf>).

⁴⁴ 2020 Evaluation, p 3.

⁴⁵ 2020 Evaluation, p 120.

⁴⁶ The 2020 Basin Plan Evaluation – Plan Implementation Evidence Report, p 169 (available at <https://www.mdba.gov.au/sites/default/files/publications/bp-eval-2020-evidence-pack-basin-plan-implementation.pdf>).

⁴⁷ PC 5-year Assessment, pp 182, 198.

agreed upon between the MDBA and Basin States.⁴⁸ The agreements underpinning Schedule 12 reporting do not appear to be publicly available, and we have been unable to find any summary of when reports may be due.

It is worth acknowledging that most Queensland, Victorian, South Australian and ACT WRPs only commenced operation in 2019. This limits the depth of ability to report on their “efficiency and effectiveness” as required by Item 18. Nevertheless, Item 18 also requires specific consideration of whether WRPs provide a robust framework under a changing climate. Since the next iteration of Item 18 reports were 5 years away at the time, we consider that the MDBA ought to have addressed Item 18 in 2020, notwithstanding the fact that most WRPs were recently accredited (and some not yet prepared).

While the timing in the accreditation of WRPs is no doubt a major factor, it is a failure of the current reporting structure that by 2023 the MDBA has not conducted a review that in fact satisfies the requirements of Matter 18. Further, to the extent any Basin States have conducted such reviews, they do not appear to be available online. The extent to which WRPs provide a robust framework to address climate change is an issue which must be addressed and reported on as a priority. Matter 18 reports were intended to ensure this occurred in a timely manner.

Matter 19 Reports: Compliance with WRPs (Basin States)

Matter 19 requires the Basin States to report annually on “Compliance with water resource plans”.

The Authority publishes these reports on its website and relies on them in the preparation of its annual reports prepared pursuant to section 52A of the Water Act.⁴⁹

However, under the current arrangements the information regarding compliance provided by Basin States in their Matter 19 reports does not appear to be subject to any analysis or review. For example, the MDBA’s 2021-22 Annual Report includes only two paragraphs discussing the Matter 19 reports in very general terms.⁵⁰

The Commonwealth Inspector-General of Water Compliance (**IGWC**) would be ideally placed to review the Basin States Matter 19 reports. The IGWC has legislated functions that include monitoring and providing independent oversight of the performance by agencies of the Basin States of their obligations in relation to the management of Basin water resources under water resource plans.⁵¹ The Inspector General recently relied on its audit powers under section 73L of the Water Act to conduct an audit of the management of overland flow harvesting in the Lower Balonne (Queensland). This audit included detailed examination of the relevant WRP and “identified six weaknesses in systems and processes that may reduce the effectiveness of compliance arrangements.”⁵² This audit was narrow in focus and restricted to a single WRP.

⁴⁸ Basin Plan, s 13.15(2).

⁴⁹ Water Act s 52A requires the Authority to report annually to the Minister on the effectiveness of the Basin Plan.

⁵⁰ Authority, Annual Report 2021-22, page 11.

⁵¹ Water Act, s 215C(b)(iv).

⁵² IGWC, Audit of the Management of overland flow harvesting in the Lower Balonne, p 2. For the avoidance of doubt, the IGWC did not consider that the six identified weaknesses constituted non-compliance with the WRP.

In our opinion, oversight of WRP reporting compliance by the IGWC would improve issue identification and facilitate responsive recommendations to be made and actions taken in response. It would also assist the IGWC to readily identify areas of concern that may warrant further investigation pursuant to its audit and enforcement powers under the Water Act.

Reviews of WRPs

Section 22(3)(j) of the Water Act, which identifies matters that must be included in the Basin Plan, states that WRPs must include requirements in relation to reviews of WRPs and amendments arising from those reviews. Although one might infer from this that WRP reviews will be required and regulated by the Basin Plan, this is not the case. Part 11 of the Plan, titled “Reviews of water resource plans”, merely applies requirements that are to be followed *if* a WRP is reviewed (e.g. s 10.47 provides that if a WRP is reviewed, a report of that review must be given to the Authority within 30 days of its completion). Further, although reporting on Matters 17-21 of Schedule 12 under Basin Plan s 13.13 establishes requirements to report on some specific aspects of WRPs, it does not require review of WRPs individually (as opposed to generally, or as a whole), nor does it require review against particular or key objectives or matters (e.g. the objectives of the Act and the Plan). As is suggested from the earlier discussion, the existing requirements provides scope for the Authority and Basin States to submit broad reports that don’t engage in the specifics of each WRP.

For these reasons, EDO recommends that the Basin Plan incorporate regular review of and reports against individual WRPs, by reference to the objectives of the Basin Plan and the Act.

Critical human water needs

The Commission has asked whether critical human water needs (**CHWNs**) are effectively managed in the Basin and whether there are opportunities to simplify or otherwise improve the framework for managing these needs, including in response to climate change. The Commission specifically notes concerns about drinking water availability in Walgett in northern NSW.

As the Commission would be aware, Australia is the driest inhabited continent on earth. The northern Murray-Darling Basin (**MDB**) in particular is characterised by highly variable river systems that are vulnerable to the impacts of drought, climate change and over-extraction.

Planning for the survival of rural communities in the whole of the Basin is therefore of utmost importance. We understand that there are at least several communities⁵³ across the Basin who once relied on the river for their drinking water and are now forced to source their water from bore water because there is not enough water flow in the rivers.

In this section, we describe the legal provisions that apply to CWHN. We then evaluate their effectiveness via two case studies.

⁵³ See for example, ABC News, ‘Saltwater solution for drought towns battling brackish drinking water’, (News Report, 22 July 2020) <https://www.abc.net.au/news/2019-07-22/saltwater-solution-for-drought-towns-brackish-drinking-water/11326154>.

Role and effectiveness of the Water Act and Basin Plan

“Critical human water needs” is defined in s 86A(2) of the Water Act:

Critical human water needs are the needs for a minimum amount of water, that can only reasonably be provided from Basin water resources, required to meet:

- (a) core human consumption requirements in urban and rural areas; and
- (b) those non-human consumption requirements that a failure to meet would cause prohibitively high social, economic or national security costs.

The Water Act requires that the Basin Plan “specify” the “arrangements for monitoring matters relevant to CHWNs” and the “risk management approach for inter-annual planning relating to arrangements for critical human water needs in future years”.⁵⁴

In turn, the Basin Plan requires a WRP to describe how the water resources of a water resource plan area will be managed, during certain types of events (including in an extreme dry period)⁵⁵ to meet critical human water needs.⁵⁶

In our view, the provisions of the Basin Plan relating to CHWN are inadequate – as is demonstrated in practice by water insecurity issues experienced on the ground, including as described in our case study below. In our opinion, merely determining whether a WRP has described rules that intend to protect CHWNs is insufficient. This is all the more so in the context of climate change – where pressures on the satisfaction of CHWN will increase – and where water management laws are complex (such as in NSW). Indeed, in the PC 5-year Assessment, the Commission itself found that communities across the Basin are justifiably concerned about the management of critical human water needs during periods of low flow in the lower Darling.⁵⁷

There is a notable distinction when it comes to protecting CHWN under the Basin Plan as between regulation of the River Murray System and regulation elsewhere. In the River Murray System, the Basin Plan accounts for set volumes of conveyance water to be protected for the delivery of water for CHWN. In 2018, the Commission reported that while these provisions had not been tested under a significant dry period, participants in the inquiry reported confidence in these provisions.⁵⁸

In contrast, across the rest of the Basin there is no assurance of conveyance water, or any other form of base flows, for delivering CHWNs. This is troubling because the Water Act states that the Basin Plan must be prepared having regard to the fact that the Commonwealth and Basin States have agreed that water for CHWNs is the highest priority for communities who are dependent on

⁵⁴ *Water Act 2007* (Cth), 86C(1)(a),(c).

⁵⁵ ‘Extreme dry period’ is not defined in the Basin Plan.

⁵⁶ BP 10.51 (2).

⁵⁷ Productivity Commission, *Inquiry Report – Murray Darling Basin Plan: Five-year assessment ...* (Report, 19 December 2018), finding 9.2, p 47 <https://www.pc.gov.au/inquiries/completed/basin-plan/report/basin-plan.pdf>.

⁵⁸ *Ibid*, 237.

Basin water resources.⁵⁹ It is all the more troubling from an implementation perspective where, as described below, experiences on the ground show that the on-paper intimations at protecting CHWN are not translating into actual protection of CHWN.

Case Study: Drinking water in Walgett

For some of EDO's clients, communities that have historically relied on river water are now forced to rely on bore water. Walgett, in northern NSW, is one example.

Dharriwaa Elders Group (**DEG**) is a group of Aboriginal Elders who live in Walgett and is a longstanding client of the EDO. DEG believes that Aboriginal people make up approximately 60% of the Walgett community.

Walgett is situated at the junction of two significant rivers, the Namoi and the Barwon. Historically, the Namoi and Barwon Rivers have been the primary source of drinking water for the Walgett Community. When there is insufficient water in the Barwon and Namoi Rivers, Walgett uses bore water as alternative sources of drinking water.

The Walgett Shire Council has a town water supply licence for the provision of drinking water for over 2,271 ML per year of surface water. This license has the highest priority compared to other categories of water access licences in NSW. This means that, theoretically, in times of water shortage the Council's water share pursuant to that license will be diminished at a lesser rate than lower priority licences⁶⁰ - and, importantly, that water for CHWN will be protected.

Between 2017 and late 2020, the Namoi Valley experienced its lowest inflows on record since 1918.⁶¹

In 2018, Walgett switched to bore water to source its drinking water and the DEG became greatly concerned about the reliability and quality of this water for the community and sought expert advice. DEG received the following advice in relation to the bore water in Walgett:⁶²

- The sodium levels in Walgett “are concerning” and that the Australian Drinking Water Guidelines state that “Medical practitioners treating people with severe hypertension or congestive heart failure should be aware if the sodium concentration in the patient’s drinking water exceeds 20mg/L”. The sodium content of the Walgett tap water is 15 times this amount.

⁵⁹ *Water Act 2007* (Cth), s 86A.

⁶⁰ *Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2016*, cl 45(a). The NSW Water register shows that the Council Licence has enjoyed a share allocation of 100% of its licence share each year since at least 1 July 2004, up to July 2023.

⁶¹ ‘Upper and Lower Namoi Valley snapshot’, *New South Wales Department of Planning, Industry and Environment, Allocations and Availability* (Fact Sheet, September 2021) https://www.industry.nsw.gov.au/_data/assets/pdf_file/0008/469250/Namoi-Valley-snapshot-drought-2017-20-20210914.pdf.

⁶² Statement, *Dharriwaa Elders Group* (30 November 2018) <http://www.dharriwaaeldersgroup.org.au/images/downloads/FinalDEGSaltWaterStatement30November2018.pdf>.

- High salt intake can lead to a number of adverse health outcomes but most notably high blood pressure which in turn is one of the biggest contributors to premature death from heart disease and stroke... Aboriginal communities suffer disproportionately high rates of heart disease, stroke, diabetes and kidney disease and poor diets are the key risk factor that needs to be addressed.
- The sodium levels in Walgett are nearly two times higher than the palatability threshold in the Australian Drinking Water Guidelines.

Since 2018 the only time that drinking water has been sourced from the river was between May and June 2023 after the Eastern Australian floods.⁶³ At the time of this submission the drinking water in Walgett is being sourced from the emergency bore water once again.

In 2022, Yuwaya Ngarra-li, a partnership between the DEG and the University of New South Wales, undertook a survey of 251 people in Walgett and found that around 44% of respondents reported water insecurity and 46% food insecurity.⁶⁴

The failure to provide a quality of drinking water that the Walgett community is able to safely drink is demonstrative of the need for more rigorous provision for CHWNs which cover the whole of the MDB. It is also an example of Aboriginal water dispossession in the MDB, and an infringement of numerous established human rights, of which the right to water is derivative.⁶⁵ However, for the purpose of this submission we confine our comments to the issue of CHWNs as contemplated by the Water Act and Basin Plan

In addition to the clear issues as to CHWN, this case study and the experiences in Walgett highlight another issue of implementation of the Basin Plan that goes to the heart of the Water Act and Basin Plan: the need to reduce extraction to a sustainable level of extraction so as to support healthy environmental and community outcomes. The Walgett example highlights that flows are not sufficient to sustain a healthy river that the community can access and draw drinking water from.

Case study: Water sharing rules in NSW undermine the protection of CHWNs

In our experience, complex and inconsistent water management rules and practices undermine the efficacy of provisions that are intended to protect water for CHWNs.

⁶³ ABC News 'Walgett to have safe drinking water access after more than five years of bore reliance', (News Article, 4 May 2023, <https://www.abc.net.au/news/2023-05-04/walgett-drinking-water-now-being-sourced-from-namoi-river/102301424>).

⁶⁴ Yuwaya Ngarra-li Community Briefing Report: Key Findings from the Food and Water Security Surveys in Walgett, (Report, February 2023), <https://www.igd.unsw.edu.au/sites/default/files/documents/Walgett%20Food%20and%20Water%20Security%20Survey%20Report%20Feb23.pdf>; as reported in the editorial of the International Journal of Science, Nature, Vol 620, 3 August 2023.

⁶⁵ *International Covenant on Economic, Social and Cultural Rights*, opened for signature 16 December 1966, art 11 (the right to an adequate standard of living), art 12 (the right to the highest attainable standard of health); *International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, art 6 (the right to life).

NSW water laws provide for the protection of CHWNs in two main ways:

- The *Water Management Act 2000* (NSW) sets out the priority for different types of water access licences (**WALs**). It provides that local water utility access licences as well as licences for domestic and stock use have priority over all other licences.⁶⁶ High security WALs are the next priority category, followed by general security and supplementary WALs.
- The NSW Water Minister may suspend the operation a Water Sharing Plan if the Minister is satisfied that there is “an extreme event in relation to a particular Basin management area or part of the Basin water resources”.⁶⁷ This in turn allows for alternative water sharing provisions to be implemented, with the first priority to be delivery of water for “critical human water needs,”⁶⁸ which includes town water supply (but does not include the environment, which is relegated to a third order priority).

However, these provisions are undermined by other rules in NSW Water Sharing Plans. This includes the following:

- Minimum daily flow rates in many river systems are too low. For example, in the Namoi Water Sharing Plan end of system flows are only required to be delivered between June-August when there is more than 120MLs in Keepit Dam and Split Rock Dam.⁶⁹ The required level of flow is only equivalent to 75% of the natural 95th percentile daily flow for each month.⁷⁰ Put differently, and in contrast to the provision of conveyance water in the River Murray System (discussed below), the end of system flow rule requires delivery of a minimum of three-quarters of the lowest five percent of flows for three months of the year. There is no requirement in the Water Sharing Plan to deliver flows in the other nine months.
- Decision making, for example in relation to the volume of water held in dams for drought reserves is based on historic inflow data that often fails to account for the worst drought on record (which occurred between 2017 and 2021) and climate change is not taken into account.⁷¹
- Similarly, when available water determinations (**AWDs**) are made (which provide for the license share that a WAL holder can access in any given year), these are based on historical inflow data that does not consider the worst drought on record and climate change is not taken into account.⁷²

⁶⁶ *Water Management Act*, s 58(1)(a), (2).

⁶⁷ *Water Management Act*, s 49B.

⁶⁸ *Water Management Act*, s 60(3A).

⁶⁹ *Water Sharing Plan for the Upper Namoi and Lower Namoi River Regulated Water Sources 2016*, cl 14(3).

⁷⁰ *Ibid*, cl 14(2).

⁷¹ See for example, *Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2016* cll 34(2), 35 (2), 36 (2); *Water Sharing Plan for the Border Rivers Regulated River Water Source 2021*, cl 57 (1)-(3).

⁷² See for example, *Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2016* cll 34 (1), 35 (1), 36 (1); *Water Sharing Plan for the Border Rivers Regulated River Water Source 2021*, cl 57 (1)-(3).

- Trade between water sources that are not hydrologically connected can have adverse impacts on the water source from which the water is traded that is not properly accounted for.
- Carryover of water allocation credits in certain circumstances may also undermine the Licence Priority Provisions.

These issues that are threaded through NSW water law undermine the delivery of CHWN. They are also relevant more generally in that they undermine the achievement of the core objective of the Water Act and Basin Plan, including protecting, restoring and providing for the ecological values and ecosystem services of the Murray Daring Basin (Water Act s 3; see also s 21(2)(b)).

Reflecting on the above, EDO considers that the legal framework would benefit from amendments that clarify and strengthen provisions in relation to CHWNs, particularly those that do not relate to the River Murray System.⁷³

EDO also considers that CHWN could be better protected in practice if the MDBA or – preferably – the IGWC took on a substantial compliance and oversight role in relation to the delivery of water for CHWNs.

The reporting requirements at Schedule 12 of the Basin Plan could be amended to establish express requirements to report on the delivery of CHWN.

It should not be left to community groups, like the DEG, to advocate for the protection of water that relates to CHWNs alone. State and Federal governments must take a more proactive role, especially in the context of climate change.

Finally, as noted in the second case study, issues with the delivery of CHWN directly link to and reflect other fundamental implementation issues that point to an actual or likely failure to achieve core objectives of the Water Act and the Basin Plan.

Environmental water planning and management

The Commission has indicated an interest in whether environmental water management is working effectively, and how it might be improved. We have not provided a specific response to this Key Question. We point the Commission to previous EDO publications that consider these issues:

- EDOs of Australia, *Inquiry into the management and use of Commonwealth environmental water* (12 April 2018)
- EDOs of Australia, *Submission responding to the Productivity Commission’s Draft Report on the Murray-Darling Basin Plan: Five year assessment* (10 October 2018) (Part 6)

⁷³ As defined in the *Water Act 2007* (Cth), s 86A(2).

- EDO NSW, *Submission in relation to Barwon-Darling Watercourse Water Resource Plan* (29 October 2019)

We also note that our discussion in response to Key Question 4 raises issues of relevance to environmental water planning and management and look forward to considering this issue further in response to the Commission’s draft report.

KEY QUESTION THREE: Governance and institutional arrangements

The Commission asks: Have the governance and institutional arrangements for the Plan – including the arrangements for compliance and monitoring, evaluation and reporting – proved effective? What changes would you recommend?

The Water Act and the associated regulatory framework it underpins now imposes obligations on numerous governments, agencies, stakeholders and individuals. The successful operation of this regulatory framework requires best practice governance and institutional frameworks.

We refer the Commission to two recent articles relevant to governance and institutional arrangements:

- Kate Chipperfield & Jason Alexandra (2022): *Water governance, the rule of law and regulating risks to the Murray–Darling Basin*, *Australasian Journal of Water Resources*.
- Jamie Pittock, Samantha Corbett, Matthew J. Colloff, Paul Wyrwoll, Jason Alexandra, Sara Beavis, Kate Chipperfield, Barry Croke, Patrick Lane, Andrew Ross & John Williams (2023): *A review of the risks to shared water resources in the Murray–Darling Basin*, *Australasian Journal of Water Resources*, 27:1, 1-17.

We also urge that due regard be had to submissions made by the authors of the above articles to the Commission.

KEY QUESTION FOUR: Climate change

The Commission has asked whether the Basin Plan is sufficiently robust and adaptable to deal with the challenges of climate change. EDO’s longstanding position is that the Basin Plan does not adequately or appropriately deal with the challenges of climate change. Climate readiness necessitates risk anticipation and mitigation; it requires ecological and socio-economic resilience, and systems capable of adapting and functioning within the context of reduced water availability. This logically requires a firm resolve to live within our hydrological means.

Basin communities, including many of our clients, have experienced fish kills, floods and water insecurity. The MDBA's website states that the climate models by the CSIRO predict that average annual runoff will decrease by 20%, or in an extreme scenario by 40%.⁷⁴

EDO has written extensively about the impacts of Climate Change and water laws. Below, we extract what we consider are key elements of climate-ready water laws, as set out in EDO's 2020 submission to the Commission's National Water Initiative Reform Inquiry.⁷⁵

Key elements of climate-ready water laws

- An evidence-based cap on extractions at catchment and basin scales which is informed by climate projections.
- An adaptive water allocation scheme with an embedded climate projection signal.
- Protecting environmental flows from extraction.
- Protecting different components of the flow regime (from no flows to overbank flows), each of which is required to maintain ecosystem function.
- Promotion of longitudinal and latitudinal connectivity. To clarify, this requires catchment-based legal instruments to speak to one another.
- In regulated river systems, managing public storages on the basis of climate projections, not historic climate data.
- Accurately measuring and reporting water extractions (noting the difficulty of enforcing the law at the licence holder and catchment levels in the absence of reliable evidence).
- Fulsome monitoring of groundwater resources, and appropriate limits on extractions which take into account connectivity with surface water, as well as the tendency to shift to consumption from aquifers during periods of water scarcity.
- Accurate water accounting which, *inter alia*, takes into account return flows, water theft and floodplain harvesting.
- Appropriate governance arrangements for subsidised irrigation modernisation projects, including a requirement to demonstrate that they are actually saving water.
- A requirement to ensure modelling for compliance purposes is based on latest levels of development and its assumptions are transparent and communicable.
- The inclusion of clear duties to, for example, act on the basis of best-available evidence and protect water resources from over-extraction.

⁷⁴ Murray Darling Basin Authority, 'Climate Change' (Web Page, 29 June 2023) <https://www.mdba.gov.au/climate-and-river-health/climate/climate-change>.

⁷⁵ EDO, *Submission to the Productivity Commission on the National Water Reform Inquiry* (21 August 2020) (available at <https://www.edo.org.au/wp-content/uploads/2020/08/EDO-Submission-to-PC-on-NWI-210820.pdf>).

- Appropriately drafted civil and criminal offence provisions supported by an independent regulator, such as the NSW Natural Resources Access Regulator.
- Third party standing (this is particularly important given the virtual impossibility of obtaining a writ of mandamus compelling the government to enforce its own laws).
- More generally, provisions that are justiciable. While there is a clear need to furnish Ministers and their delegates with some discretion, broadly drafted powers can make it all but impossible for clients to seek judicial review of environmentally foolish decisions, which is deeply problematic. In short, hydro-denialism should give rise to the possibility of legal action.

We encourage the Commission to consider these elements when assessing the implementation of the Basin Plan and WRPs for the purposes of the current inquiry.

We look forward to providing further comments in response to the Commission's draft report. For current purposes, we make a small number of Basin-specific observations:

- The SDL does not must represent an evidence-based cap on extractions at catchment and basin scales that reflects an ESLT. This must be informed by climate projections.
 - It is no secret that climate change did not inform the SDL and the setting of the ESLT at the time the Basin Plan was prepared, despite the clear advice of the CSIRO. We agree with the findings of the South Australian Murray Darling Basin Royal Commission, that this failure is a breach of the Water Act.⁷⁶ This is because the purpose of recovering water for the environment is to maintain ecosystem function, which in turn builds system resilience as water availability diminishes. This requires the environment's long-term share of a water resource to include a pre-emptive 'climate change' component. This is precisely what the CSIRO recommended when the Basin Plan was being developed.⁷⁷
- Building in adaptability is critical in the face of climate change. Adaptability is necessary, for example, to ensure that water allocation decisions account for the most up to date scientific information, and to ensure that water management decisions can respond to extreme weather events (see above, discussion regarding critical human water needs). However, care needs to be taken when developing and implementing adaptiveness. Adaptiveness must be truly and directly responsive to changing climatic conditions, including variability; must centre the core objectives of the Water Act and Basin Plan; and must ensure that water extraction does not exceed an ESLT.
 - It could be argued, for example, that flexibility within the Plan has facilitated the approach taken by NSW and the Authority to modifying the BDLs and SDLs to

⁷⁶ Brett Walker SC, 'Murray Darling Basin Royal Commission Report', (Report, 29 January) p, 267 (**Royal Commission Report**).

⁷⁷ Murray-Darling Basin Authority, *Guide to the proposed Basin Plan, Technical background Part I*, p. 122.

account for and regularise FPH (discussed earlier). However, if the Act and Plan's core objectives are centred then this pathway would not be taken since, as many have observed, increasing the SDL because more water was being taken than previously understood runs counter to the goal of reducing extractions to an ESLT.

- Government decision-making with respect to water resources must be based on demonstrated best available scientific knowledge. This must necessarily incorporate climate change projections.
 - The scientific information underpinning decision-making must be accessible, intelligible and peer reviewed. Lack of transparency has been an ongoing issue in the context of the Basin and undermines good decision making and accountability of decision makers and regulators.

KEY QUESTION FIVE: Addressing the interests of Aboriginal people.

The Commission has asked how well is the Plan addressing the interests of Aboriginal people?

EDO does not seek to speak for or on behalf of any First Nations Peoples or groups. Our observations draw on our history of assisting First Nations clients in NSW and seek to elevate issues raised and experienced by our clients. We urge the Productivity Commission to engage directly with First Nations people and groups to thoroughly explore these issues.

Broad observations

- The regulatory framework must prioritise First Nations participation in water regulation and management decisions, including by embedding mechanisms to scaffold this. Publicly available information about the NSW WRP development and accreditation process describe serious and troubling shortcomings in this respect.
- The Basin Plan incorporates a process for First Nations review of proposed WRPs (see the 'note' to Chapter 10 Part 14, referred to below), and the Authority has endorsed a 'Nations based' approach to First Nations engagement. However, when the rubber hit the road in NSW, the substantial and material issues raised in the First Nations assessments as to compliance with the Basin Plan appear to have made little to no difference to the accreditation decisions.
- The focus to date has largely been on participation in the process of developing WRPs. What comes next? Does the Basin Plan safeguard First Nations participation in the WRP implementation phase, or ensure that WRPs will evolve in a positive direction over time to scaffold deepening First Nations participation and water access rights?
- Where there are mechanisms for First Nations to participate in water regulation and management decisions, it is critical that the correct people are able to speak for Country, and that those with the relevant cultural authority are determined by First Nations people themselves.

- Water law is extremely complex. Deep participation by First Nations in regulatory decision making that affects their Country requires resourcing that will facilitate and scaffolds such participation. This must account for and address the many actual and potential barriers to participation.
- Participation and recognition of First Nations in water management and regulation is one thing. Taking meaningful steps to reverse Aboriginal water dispossession is also critical. The Commonwealth Government made a commitment to return \$40m worth of water rights to First Nations across the Basin in 2018 and yet this is still to be achieved. Meanwhile, the price of water has increased such that the real value of the proposed acquisition has materially decreased.

NSW WRPs and Basin Plan Chapter 10, Part 14

Chapter 10, Part 14 of the Basin Plan addresses WRP requirements in relation to “Indigenous values and uses”. The requirements can be simplified for current purposes as follows:

- WRPs must **Consult with** “relevant Indigenous organisations” – which NSW and the Authority have taken to mean/include individual Nations, in order to:
 - **Identify**, in the WRP:
 - the **objectives** of Indigenous people in relation to managing the water resources of the WRP area; and
 - the **outcomes** for the management of those water resources.
 - In **identifying** the above matters in the WRP, also **have regard to**:
 - the social, spiritual and cultural values of Indigenous people that relate to the water resources of the WRP area (**Indigenous values**); and
 - the social, spiritual and cultural uses of those water resources (**Indigenous uses**).

(Basin Plan cl 10.52)

- In preparing a WRP, **have regard to the views of “relevant Indigenous organisations”** with respect to:
 - the matters identified under section 10.52 (i.e. **objectives, outcomes, values and uses**); and
 - the matters listed in s 10.53(1)(a)-f).
- In preparing a WRP, **have regard to** the views of **Indigenous people** with respect to cultural flows (Basin Plan s 10.54).

- That a WRP must provide **at least the same level of protection of Indigenous values and uses** as provided in a transitional WRP or interim WRP (i.e. its predecessor).

A note at the beginning of Part 14 also identifies an expectation that, where a WRP is prepared by a Basin State, “the Authority will consult with relevant Indigenous organisations in relation to whether the requirements of this Part have been met”.

We understand that assessments of proposed WRPs have been prepared for the Authority by the Murray Lower Darling Rivers Indigenous Nations (**MLDRIN**), Northern Basin Aboriginal Nations (**NBAN**), and i2i Global.⁷⁸ We have accessed publicly available copies of the reports that relate to four WRPs that have been accredited: Darling Alluvium WRP (i2i),⁷⁹ Fractured Rock WRP (MLDRIN),⁸⁰ Porous Rock WRP (MLDRIN),⁸¹ and Border Rivers Alluvium WRP (NBAN).⁸² We urge the Commission to read these reports, in particular the very detailed assessments prepared by MLDRIN. These reports contain important insights as to substantial issues with Basin Plan implementation in NSW. By way of example, we note the following:

- The Fractured Rock WRP area covers the entire NSW portion of the MDB. MLDRIN’s assessment of that WRP – prepared following an assessment workshop and further correspondence with Traditional Owners – concluded that none of the requirements of Ch 10 Pt 14 had been satisfied. The assessment also concluded there was a failure to satisfy the requirements set out in the Authority’s own Part 14 Assessment Template. Yet, the Authority recommended accreditation and the Minister accredited the WRP in the form assessed by MLDRIN. Issues raised in that assessment includes (but are not limited to) the following:
 - NSW’s failure to further engage with Nations following the “major flaws, gaps and oversights in the initial WRP engagement that occurred during 2018 and 2019”.⁸³
 - NSW’s failure to provide Nations with any “updates, notification, or engagement opportunities in regard to the WRP being revised”.⁸⁴

⁷⁸ i2i Development Global Pty Ltd.

⁷⁹ https://www.mdba.gov.au/sites/default/files/publications/attachment-d-darling-alluvium-wrp-first-nation-advice-i2i-development-global_redacted_0.pdf.

⁸⁰ <https://www.mdba.gov.au/sites/default/files/publications/attachment-d-nsw-mdb-fractured-rock-wrp-first-nations-advice.pdf>.

⁸¹ <https://www.mdba.gov.au/sites/default/files/publications/first-nations-advice-on-nsw-mdb-porous-rock-wrp.pdf>.

⁸² <https://www.mdba.gov.au/sites/default/files/publications/attachment-d-nsw-border-rivers-alluvium-wrp-first-nations-advice.pdf>.

⁸³ MLDRIN, Fractured Rock Assessment Report, cover letter p 3 (available at <https://www.mdba.gov.au/sites/default/files/publications/attachment-d-nsw-mdb-fractured-rock-wrp-first-nations-advice.pdf>).

⁸⁴ MLDRIN, Fractured Rock Assessment Report, cover letter p 3.

- Reports from Traditional Owners that some Nations were not consulted, or did not understand that they were being consulted, in relation to groundwater water resources (being the resources that are the subject of the Fractured Rock WRP).⁸⁵
- Concern that NSW “frequently suggests it had regard to numerous matters ... by deferring to *future* activities and commitments” where Traditional Owners report that NSW “has a poor track record of delivering on past commitments, including in this WRP” such that confidence was low.⁸⁶
- Concerns that “[s]ome of the WRP text appeared exaggerated and, in some cases, untruthful”.⁸⁷
- The failure to conduct consultation at all with some Nations, and the exclusion of Nation consultation reports in relation to some others.
- Concerns as to the quality and quantity of information provided to First Nations during engagement, including:
 - that some of the consultants facilitating the engagement on behalf of the NSW Government did not have a detailed understanding of the relevant water planning mechanisms and processes;⁸⁸ and
 - that there was not always enough time or provisions of appropriate information to enable Nations to participate fully and in an informed way.⁸⁹

KEY QUESTION EIGHT: Best available scientific knowledge

The Commission asks: Does the implementation of the Plan reflect a commitment to the best available scientific knowledge? How well is this knowledge communicated? What improvements should be made? Without going into further detail for current purposes, we cross reference our earlier discussion in relation to climate-ready water laws and also note that, whereas the Water Act requires the Basin Plan to be developed on the basis of the best available scientific knowledge, the SDL:

- is a well-known compromise;
- fails to account for climate change projections; and

⁸⁵ MLDRIN, Fractured Rock Assessment Report, cover letter p 3; assessment table pp 2-3; 9, 12, 15, 20, 22, 39-40, 48-49, 52; see also MLDRIN, Porous Rock Assessment cover letter and assessment table ([Murray Lower Darling Rivers Indigenous Nations advice on the NSW Murray–Darling Basin Porous Rock water resource plan \(mdba.gov.au\)](https://www.mdba.gov.au/murray-lower-darling-rivers-indigenous-nations-advice-on-the-nsw-murray-darling-basin-porous-rock-water-resource-plan))

⁸⁶ MLDRIN, Fractured Rock Assessment Report, cover letter, p 5.

⁸⁷ MLDRIN, Fractured Rock Assessment Report, cover letter p 6; assessment table pp 13-14.

⁸⁸ MLDRIN, Fractured Rock Assessment Report, assessment table p 12.

⁸⁹ MLDRIN, Fractured Rock Assessment Report, assessment table pp 12, 13.

- fails to adopt a proactive, precautionary approach to water availability in anticipation of the future impacts of climate change.

We urge the Commission to consider the extensive analysis on the failure of the Basin Plan to rely on the best available scientific knowledge that is set out in the South Australian Royal Commission Report.⁹⁰

⁹⁰ Royal Commission Report, see particularly p 605.