



## **Submission in relation to Barwon-Darling Watercourse Water Resource Plan**

prepared by

**EDO NSW  
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## Introduction

Water resource plans (**WRPs**) (and the water sharing plans (**WSPs**) they incorporate) are a key tool to deliver the outcomes sought by the Water Act 2007 and *Basin Plan 2012*. In that regard, it is very disappointing that the NSW Government has not, in the seven years that have elapsed since the Basin Plan commenced, developed a plan for the Barwon-Darling that complies with the requirements of the *Water Act 2007 (Cth)* and *Basin Plan 2012*.

EDO NSW is a community legal center specialising in public interest environmental law. We have many years' experience engaging with water law and policy processes at both the State and Commonwealth levels. We also have experience advising a broad range of clients including irrigators, community groups and peak conservation organisations in relation to the *Water Act 2007 (Cth)*, *Basin Plan 2012* and related policies.

Our expert legal analysis has identified legal flaws in the preparation of the *Barwon-Darling Watercourse Water Resource Plan*, particularly in the key area of meeting the environmental watering requirements of the Barwon-Darling's priority environmental assets and ecosystem functions. The flaws are fundamental and so we do not recommend individual amendments to remedy them. Instead, our key recommendation is that the second stage of the risk assessment, being the identification of strategies to mitigate risks, be repeated to identify strategies (including new rules under the water sharing plan) that will actually meet environmental watering requirements and comply with sections 10.17 and 10.43 of the *Basin Plan 2012*.

Our other key recommendation is that the NSW Government prepare, and publish, a report outlining the extent to which the draft WRP implements the recommendations of the recent reports of the Natural Resources Commission and of the Independent Inquiry into the 2018/19 fish kills. The failure to provide this type of basic information (beyond a brief and unilluminating 4 page document) is quite an extraordinary failure of the consultation process, particularly given that any member of the public trying to engage with that process would need to make their way through the almost 900 pages that make up the draft WRP and its Appendices and Schedules to try to understand for themselves whether the NSW Government has accepted the recommendations of these independent experts.

Our remaining recommendations are highlighted in bold throughout this report and include the need for SMART objectives that comply with the prioritisation requirements of the *Water Management Act 2000 (NSW)*, strategies to actually address the impacts of climate change (which are already being felt in the Barwon-Darling) and the release of an analysis of the protection afforded to Planned Environmental Water under the draft plan as compared to the assumptions incorporated into the modelling behind the Sustainable Diversion Limit.

## Summary of Recommendations

### **Recommendation:**

- **The NSW Government should provide a report which, for each relevant recommendation of the NRC report and Vertessy et al (2019):**
  - **Identifies whether the recommendation has been adopted, adopted in part or not adopted;**
  - **For recommendations adopted and adopted in part, identify the relevant provisions of the WRP/WSP that implement the recommendation; and**
  - **For recommendations that have not been adopted or have been adopted only in part, explain the rationale for the decision not to adopt (or to only partially adopt) the relevant recommendation.**
- **An independent agency should be engaged to provide a, publicly released, peer review of the NSW Government's report.**
- **The NSW Government must adopt, as standard practice, the release of such reports each time a water sharing plan is made or amended.**

### **Recommendation:**

- **The environmental objectives in the draft WSP and WRP must be amended to reflect the requirements of both s5(3) of the Water Management Act 2000 (NSW) and the objectives of the Commonwealth Water Act 2007 and Basin Plan 2012. This should be achieved by, at the very least, replacing the language of "protect and, where possible, enhance" with "protect and restore".**

### **Recommendation:**

- **The draft WSP and WRP should implement recommendation 4 of the NRC report by replacing the current vague objectives with SMART objectives. In the case of environmental objectives, this may involve adopting objectives set in the LTWP and should include specific flow targets that the plan is aiming to achieve (as recommended by the NRC).**

### **Recommendation:**

- **The draft WSP be amended to identify prioritisation among the environmental, social and economic objectives which is consistent with the prioritisation required by sections 5(3) and 9 of the Water Management Act 2000 (NSW).**

### **Recommendations:**

- **Figure 1-1 should be amended to remove the misleading suggestion that the relationship between the LTWP and the WRP is indirect only.**
- **A number of other provisions of the draft WRP will need to be amended to ensure that the LTWP and the broader Environmental Watering Plan are properly integrated into the WRP (this is discussed further below).**

### **Recommendation:**

- **The decisions under section 10.43 of the Basin Plan, as outlined in the Risk Assessment, must be put aside and decisions about how to respond to each risk must be re-made in a way that accords with s10.43(1) and (3) of the Basin Plan 2012.**

### **Recommendations:**

- **The Risk Assessment must be re-done in a lawful manner to identify strategies to manage to environmental watering requirements, with a view to seeking to reduce all High and Medium risks to a rating of Low.**
- **The resulting strategies must be implemented through amendments to the draft WSP and WRP.**

**Recommendation:**

- **All risk mitigation strategies need to be re-visited and new mechanisms developed which actually address and mitigate the identified risks, particularly in relation to climate change.**

**Recommendation:**

- **The text on page 20 of the draft WRP should be amended to clarify that the 'non-statutory' environmental water is, in fact, held environmental water (HEW).**

**Recommendation:**

- **The NSW Government should prepare and publicly release analysis comparing the level of protection of PEW under the amended WSP with the level of protection built into the modelling used to inform the development of the SDL and the Basin Plan 2012.**

**Recommendation:**

- **The draft WRP and WSP must be amended to include rules to avoid compromising environmental watering requirements. This will involve rules to reduce risk ratings for risks to EWRs from High or Medium to Low.**

**Recommendation:**

- **The NSW Government must repeat the risk assessment for water quality issues with a view to mitigating at least those risks to water quality that can be addressed through flow management.**

**Recommendation:**

- **The draft WSP be amended to remedy issues identified in this submission relating to account carry over rules, the protection of active environmental water, A class licence thresholds and other matters.**

## NRC report - Reconciliation and transparency

The current *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 (BD WSP)* was reviewed by the Natural Resources Commission (**NRC**) earlier this year, with the final report issued in September 2019.<sup>1</sup> The report included 17 detailed recommendations and 14 suggested actions, some of which were for immediate implementation and some of which were for implementation in 2023.

The Independent Inquiry into the fish kills which occurred over the summer of 2018/19<sup>2</sup> (**Vertessy et al, 2019**) also contained a number of recommendations relevant to improving the effectiveness of the BD WSP.

The findings of both reports should have been a valuable input into the production of a WRP and associated amendments to the water sharing plan. We acknowledge that some improvements appear to have been made in the draft amendments to the BD WSP (in particular the implementation of IDELS and, to a degree, the amended rules for take under A class licences – although more needs to be done to materially improve outcomes<sup>3</sup>). However, the extent to which the recommendations have been otherwise implemented remains unclear.

The sole NSW Government response to both reports<sup>4</sup> is a brief (4 page) and high-level plan with actions across three stages (with only the first stage relevant to the current draft WRP and the third stage to occur in 2023). The plan does not specifically address:

- Which recommendations have been adopted and which have not been adopted (or adopted only in part);
- A response and rationale for those recommendations which have not been adopted (or adopted only in part); or
- A clear discussion of the extent to which, and process through which, the adopted recommendations have been implemented.

This is quite an extraordinary lack of transparency. The purpose of independent inquiries should be not only to provide the government with recommendations but also to ensure that the recommendations, and the extent to which they have been delivered, forms part of the public conversation when laws and policies are changed or implemented. As it stands, there is little to no information available to inform the public about the extent to which the NSW Government has implemented these reviews.

We are informed by the Department that it is not its practice to provide a reconciliation of amendments to water sharing plans against recommendations from the NRC. This practice must change if the NSW Government is to restore public trust in its ability to manage this community-owned resource (the loss of which being, coincidentally, one of the issues discussed in the NRC's report).

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<sup>1</sup> Available at: <https://www.nrc.nsw.gov.au>

<sup>2</sup> Available at: <https://www.mdba.gov.au/managing-water/drought-murray-darling-basin/fish-deaths-lower-darling/independent-assessment-fish>

<sup>3</sup> Amended rules may still be inadequate to address increasingly long periods of low and no flows downstream of Bourke (as measured at Wilcannia gauge, for example), and improvements are needed ensure more accurate modelling of low flows. See: <https://www.mdba.gov.au/sites/default/files/pubs/ecological-needs-low-flows-barwon-darling.pdf>

<sup>4</sup> Available at: [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0008/279080/NSW-Government-response-to-NRC-report.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0008/279080/NSW-Government-response-to-NRC-report.pdf)

**Key recommendation:**

- ***The NSW Government should provide a report which, for each relevant recommendation of the NRC report and Vertessy et al (2019):***
  - ***Identifies whether the recommendation has been adopted, adopted in part or not adopted;***
  - ***For recommendations adopted and adopted in part, identify the relevant provisions of the WRP/WSP that implement the recommendation; and***
  - ***For recommendations that have not been adopted or have been adopted only in part, explain the rationale for the decision not to adopt (or to only partially adopt) the relevant recommendation.***
- ***An independent agency should be engaged to provide a, publicly released, peer review of the NSW Government's report.***
- ***The NSW Government must adopt, as standard practice, the release of such reports each time a water sharing plan is made or amended.***



## WRP Section 1.3: Objectives and guiding principles

Section 1.3.1 of the draft WRP states that the Objectives of the water sharing plans (**WSP**) incorporated into the draft WRP “are guided by” sections 3 and 5 and Part 3 of the *Water Management Act 2000 (NSW)*. This mis-states the effect of the relevant provisions - an error which may be related to the defects in the WSP objectives discussed below.

Sections 5(3) and 9 of the Act have the effect that, in preparing a water sharing plan, the Minister is required to exercise their functions in accordance with the water management principles in section 5 of the Act and, in relation to the principles for water sharing set out in section 5(3) of the Act, to give effect to those principles in the following order of priority:

- a) sharing of water from a water source must protect the water source and its dependent ecosystems; and
- b) Sharing of water from a water source must protect basic landholder rights; and
- c) Sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

The Natural Resources Commission summarised the effect of these provisions by saying, in its report on the current WSP for the Barwon-Darling, that “*the Act explicitly prioritises the protection of the environment and basic landholder rights over extractive use in the making of the plan..... - the needs of the river must come first.*” The NRC went on to conclude that this prioritisation is not achieved by the current WSP and to make recommendations to try to bring the WSP into compliance with this **requirement** of the Act.<sup>5</sup>

The suggestion in the WRPs that this provision is guidance only is misleading and wrong at law and should be removed.

However, it would appear that this error of law has flowed into the setting of environmental objectives in the amended draft WSP for the Barwon-Darling.

The objectives identified in the amended WSP are to “*protect and, where possible, enhance the ecological condition of the water source and its dependent ecosystems*”.<sup>6</sup>

Our concern is firstly that protecting ecosystems in their current degraded condition is unlikely to be adequate to ensure the long-term health of the system and, more importantly, that the language of ‘where possible’ appears to be a tacit acknowledgement that the environmental health of the system is being traded off for the benefit of extractive users.

In that regard, **we do not believe that the objectives of the draft amended WSP are consistent with the requirements of the *Water Management Act 2000 (NSW)*.**

The objectives of the draft WSP are similarly inconsistent with the Objectives of the Commonwealth *Water Act 2007* and *Basin Plan 2012*, despite section 1.3 of the draft WRP claiming that the objectives and outcomes of the *Basin Plan 2012* are ‘refined for the Barwon-Darling’ in clauses 9 - 12 of the amended WSP.

The **overall objectives** of the *Water Act 2007 (Cth)* include, in section 3(d):

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<sup>5</sup> See section 4, from page 52.

<sup>6</sup> Draft *Water Sharing Plan for the Barwon-Darling Unregulated River Water Sources 2012*, ss10(1) (Broad environmental objective) and 10(2)(a) and (b).

*“to **protect, restore** and provide for the ecological values and ecosystem services of the Murray-Darling Basin (taking into account, in particular, the impact that the taking of water has on the watercourses, lakes, wetlands, ground water and water-dependent ecosystems that are part of the Basin water resources and on associated biodiversity).”*

This overall objective is reflected in section 21 of the Act, which sets out the general basis upon which the Basin Plan is to be prepared:

*“promote the sustainable use of the Basin water resources to **protect and restore** the ecosystems, natural habitats and species that are reliant on the Basin water resources and to conserve biodiversity.”*

These objectives then cascade down into the environmental objectives and outcomes for the Basin set out in section 5.03 of the *Basin Plan 2012* which include **‘protecting and restoring’ water-dependent ecosystems and ecosystem function**.

By contrast to these clear statutory objectives to **both protect and restore** the Basin’s natural environment, the draft WSP uses the language of *“protect and, where possible, enhance”* in relation to both its broad environmental objective and its targeted environmental objectives.

The language of *‘enhance’* in the draft WSP is certainly a lower level of ambition than the language of the Act and the *Basin Plan 2012* which have the objective of *‘restoring’* ecosystems and ecological function.

The language of *‘where possible’* is more troubling, including because it misleadingly suggests that it may not be *‘possible’* to enhance the health of the water dependent ecosystems and ecosystem functions of the Barwon-Darling. There is no doubt that it is *possible* to enhance the ecological health and functioning of the Barwon-Darling’s ecosystems. The barrier to this is the willingness of governments to set limits on the water being taken for consumptive use and to manage the flows of the rivers in a way that supports ecological functioning, both of which can be achieved with an appropriately drafted WSP.

This **drafting is misleading and inconsistent with the objectives of both the Acts and Basin Plan** and appears designed to disguise the fact that any failures by these plans to restore the ecological health of the Basin will be the result of a discretionary choice by government not to do so.

***Recommendation:***

- ***The environmental objectives in the draft WSP and WRP must be amended to reflect the requirements of both s5(3) of the Water Management Act 2000 (NSW) and the objectives of the Commonwealth Water Act 2007 and Basin Plan 2012. This should be achieved by, at the very least, replacing the language of “protect and, where possible, enhance” with “protect and restore”.***

## SMART objectives

This section of the draft WRP incorporates objectives from the draft WSP into the draft WRP.

Recommendation 4 of the NRC report (which was identified in recommendation 1 as an action for immediate implementation) was for the revised WSP to implement ‘*clearly linked objectives, outcomes and performance indicators that meet the SMART criteria (specific, measurable, achievable, realistic, time-bound) and are tracked to ensure progress*’. SMART objectives are also an essential component of the adaptive management approach of the *Basin Plan 2012*.<sup>7</sup>

Our concern, in addition to the concerns above and elsewhere in the submission, is that the objectives and performance indicators in the amended WSP fall down at the first hurdle through the lack of specificity and measurability.

This recommendation should have been implemented, in the case of environmental objectives, through:

- objectives and performance indicators in the draft WSP (which reflect the EWRs identified in the LTWP); and
- a monitoring regime in the Monitoring, Evaluation and Reporting Plan (**MER plan**) contained in schedule D of the draft WRP.

As discussed above, the ‘broad environmental objective’ in s10(1) of the draft WSP is to protect and, where possible, enhance the ecological condition of the water source and its water dependent ecosystems (such as instream riparian and floodplain ecosystems).

The ‘targeted environmental objectives’<sup>8</sup> for the above broad environmental objective include, for example, s10(2)(a):

“(a) to protect and, where possible, enhance the following over the term of this plan:  
(i) the recorded distribution or extent, and the population structure of, **target ecological populations** including native fish, native vegetation and low flow macro invertebrate communities.”

The notes to section 10(2)(a)(i) of the draft WSP identify some species of which **may** be included as ‘target ecological populations’, but no definite list.

‘Target ecological populations’ is defined in the Dictionary of the draft WSP to mean “*communities or one or more species that are monitored to evaluate the success of target objectives for the environment.*” This, rather circular and unilluminating definition provides no information about which populations will be ‘target ecological populations’ or which document might shed further light on the populations to be monitored for the purposes of this objective.

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<sup>7</sup> The objectives for the Basin as a whole set out in section 5.02 include the establishment of a sustainable, long-term adaptive management framework for Basin water resources. The elements of adaptive management, which include setting clear objectives, are set out in section 1.07 of the *Basin Plan 2012*.

<sup>8</sup> Note that ‘target objectives’ is defined in the Dictionary of the draft WSP as “*specific outcomes that can be achieved by the strategies in the plan, and can be directly measured so that the success or failure to achieve the objectives can be quantified.....are used to evaluate progress towards achieving the broad objectives of this Plan.*”

This target environmental objective is similarly silent as to:

- The baseline against which progress will be assessed; and
- A measurable target to be monitored to identify whether progress is being made against the objective.

The MER plan similarly fails to shed any light on the issue.

The performance indicators to be used to measure the success in achieving the targeted environmental objectives are identified in s10(5) as “*changes or trends in ecological condition during the term of this plan, including the recorded range or extent of target ecological populations, the recorded condition of target ecological populations.....*”. Once again, the specific “changes or trends” are not defined and the degree of change sought is not stated. These performance indicators are poorly defined and lacking in specificity and would seem to enable a regulator to pick and choose from among the available evidence to select a convenient indicator and ignore inconvenient data.

To take the example of Native Fish:

- The Basin-wide Environmental Watering Strategy (**BWEWS**) and Long-term watering plan (**LTWP**) (discussed further below) contain objectives for native fish, most of which are specific, measurable and time bound, with clear baselines against which to measure progress. By contrast, this objective of the WSP contains a vague goal of protecting and, where possible enhancing the condition of unidentified ‘target ecological populations’ of native fish which may (or may not) include the golden perch, silver perch, eel-tailed catfish, Murray cod or olive perchlet. The WSP objective is similarly silent as to whether progress should be measured against the current degraded state of many of these species, against the conditions which existed when the LTWP was prepared or against pre-2007 conditions (ie. prior to major losses from extreme drought) which is a measure used for some objectives in the BWEWS;
- The MER plan monitoring activities in relation to fish in Table 3 don’t shed any additional light on the particular indicators to be monitored and, in any event, don’t seem to extend beyond 2020;
- The exercise in Appendix A of the MER plan of aligning the Basin Plan, LTWP and WRP objectives appears to misleadingly suggest that this target environmental objective from the draft WSP aligns with the more detailed, specific and measurable objectives for native fish identified as NF1 - NF6 in the LTWP.

The other targeted environmental objectives in s10 of the draft amended WSP are similarly deficient.

Overall, it is not at all clear why the operational document which will actually control the critical flows in this part of the system (ie. the WRP/WSP) has identified its own vague and unmeasurable objective instead of adopting the specific and measurable objectives set out in the LTWP. Such an approach is not consistent with the NRC report, which recommended (at page 58) that a revised suite of objectives be developed for the WSP to fully align with the objectives of the LTWP.

In the absence of clearly defined SMART objectives which can be consistently monitored to allow the performance of the plan to be evaluated, it will be almost impossible to identify whether the plan is having its intended effect.

The NSW Government should ensure that its draft WRP and WSP contains targets that:

- allow the community to easily understand the environmental outcomes they are trying to achieve; and
- can be consistently monitored to inform discussions on whether amendments are required to the plan to enable it to achieve its own objectives.

**Recommendation:**

- ***The draft WSP and WRP should implement recommendation 4 of the NRC report by replacing the current vague objectives with SMART objectives. In the case of environmental objectives, this may involve adopting objectives set in the LTWP and should include specific flow targets that the plan is aiming to achieve (as recommended by the NRC).***

## Prioritisation of objectives

Recommendation 2 of the NRC's report was to ensure that the plan rules, objectives and outcomes fully recognise and are consistent with the prioritisation specified in the *Water Management Act 2000 (NSW)*. That means, as outlined above, that the sharing of water prioritise water for the environment first, followed by water for basic landholder rights, with any remaining water to be made available for sharing under water access licences.

Section 5 of the NRC's report further explains the intent of this recommendation in relation to objectives by explaining that the objectives of the plan should, among other things, address the prioritisation of environmental, social and economic outcomes.

The current provisions of the draft amended WSP do not establish any prioritisation among the environmental, social and economic objectives in sections 10 - 12A of the draft WSP. Such an omission would seem to tacitly authorise environmental outcomes to be traded-off for short term economic gains in an unauthorised 'balancing' exercise.

**Recommendation:**

- ***The draft WSP be amended to identify prioritisation among the environmental, social and economic objectives which is consistent with the prioritisation required by sections 5(3) and 9 of the Water Management Act 2000 (NSW).***

## WRP Section 1.4: Relationship with Long-Term watering plan

We agree with the statement in section 1.4 of the draft WRP that water resource management in NSW is complex - it is indeed difficult to navigate the interrelationships between the various plans which exist under the State and Commonwealth Acts.

While we commend the attempt to visually represent some of these relationships in Figure 1-1, the resulting figure is highly misleading to the extent that it suggests that there is only an indirect relationship between the Long-term watering plan (**LTWP**) and the WRP (and WSP).

To put this discussion in context, the plans relevant to environmental watering under the Commonwealth *Water Act 2007* are as follows:

- Section 22 of the Act provides that the mandatory content of the Basin Plan includes an environmental watering plan that complies with the content requirements of section 28;
- Chapter 8 of the *Basin Plan 2012* is the environmental watering plan (**EWP**) required by ss22 and 28 of the primary Act. The EWP sets the overall environmental objectives for the Basin Plan and provides for them to be given effect by a Basin-Wide Environmental Watering strategy<sup>9</sup> (**BWEWS**) (to be prepared by the MDBA) and Long-Term watering plans (to be prepared by the relevant state government);
- The BWEWS sets the high-level framework for environmental watering, including of regionally significant priority environmental assets (**PEAs**) and priority ecosystem functions (**PEFs**);
- Long-term watering plans are then prepared by the states for each WRP area to identify PEAs and PEFs for the area, the objectives and targets for the management of those PEAs and PEFs and the environmental watering requirements for meeting those objectives.

The key things to note about this cascade of plans are that:

- They are intended to coordinate the management of both Held Environmental Water (**HEW**) (ie. entitlements held for environmental purposes, including those acquired by government to achieve the sustainable diversion limit (**SDL**)) and Planned Environmental Water (**PEW**) (rules-based environmental water which is created by, and governed by, State water plans) (s28(1)(c) *Water Act 2007 (Cth)*); and
- They set the detailed environmental objectives which need to be met in order to achieve the higher level environmental objectives of the Act and the *Basin Plan 2012*; and
- Given that WRPs are the key operational documents which establish PEW and manage the flow regimes of the rivers, they are a key and essential tool for achieving the objectives of the LTWP, the EWP, the *Basin Plan 2012* and the Act itself.

As a consequence, there are a number of provisions of the *Basin Plan 2012* (including sections 10.17 and 10.26)<sup>10</sup> that require water resource plans to be consistent with and reflect the environmental watering plans, particularly the LTWP, and to meet the environmental watering requirements of PEAs and PEFs.

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<sup>9</sup> *Basin Plan 2012*, ss8.13 - 8.17.

<sup>10</sup> See also s10.01(2)(e), 10.27, 10.41(2)(a).

We will return to this point in discussing subsequent sections of the WRP, however, it is clear that this **mistaken interpretation of the role of LTWP has infected, and created legal error in, other provisions of the draft WRP.**

***Recommendations:***

- ***Figure 1-1 should be amended to remove the misleading suggestion that the relationship between the LTWP and the WRP is indirect only.***
- ***A number of other provisions of the draft WRP will need to be amended to ensure that the LTWP and the broader Environmental Watering Plan are properly integrated into the WRP (this is discussed further below).***

## WRP Section 3: Risks to water resources - Risk assessment

This section of the draft WRP purports to deliver the requirements of ss10.41 - 10.43 of the *Basin Plan 2012*.

Section 10.41 of the *Basin Plan 2012* provides that WRPs must be prepared having regard to current and future risks to the condition and continued availability of the water resource, including the risks to the capacity to meet **environmental watering requirements**. Each risk must be assessed as low, medium or high (or another category, if appropriate).

“Environmental watering requirements” is defined to mean the environmental watering requirements of a **priority environmental asset (PEA)** or **priority ecosystem function (PEF)**.<sup>11</sup> PEAs and PEFs (and their environmental watering requirements) are identified in the Basin-wide Environmental Watering Strategy<sup>12</sup> and the relevant LTWP<sup>13</sup> (see discussion above).

Section 10.43 goes on to require that, if a risk is assessed as medium or higher, then the WRP must either:

- a) describe a strategy for the management of the water resources of the water resource plan area to address the risk in a manner commensurate with the level of risk; or
- b) explain why the risk cannot be addressed by the water resource plan in a manner commensurate with the level of risk.

Section 10.43(3) goes on to provide that a WRP must be prepared having regard to the strategies listed in section 4.03(3). The strategies in section 4.03(3) include implementing key elements of the Basin Plan including the EWP (which, as outlined above, encompasses the BWEWS and LTWPs<sup>14</sup>).

The strategies listed in section 4.03(3) will be relevant considerations in developing strategies under s10.43(1) to manage risks to environmental watering requirements identified in the risk assessment under s10.41.

The overall effect of these provisions is that, in preparing the draft WRP, the NSW Government is required to undertake a risk assessment which includes risks to meeting the environmental watering requirements identified in the BWEWS and LTWP and risks to water quality. In respect of any risks which are assessed to be medium or higher, the NSW Government must (having regard to the strategies in s4.03(3)) either:

- a) develop strategies to manage the water resources to address the risk in a manner commensurate with the level of risk; or
- b) explain why the risk **cannot** be addressed by the WRP in a manner commensurate with the level of risk.

It is important to note that the second option is available in circumstances where the risk ‘cannot’ be addressed in a suitable manner - this option is not available merely because the NSW Government would prefer not to address the risk.

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<sup>11</sup> *Basin Plan 2012*, s1.07.

<sup>12</sup> Section 8.14(2)(a)(i).

<sup>13</sup> Section 8.19.

<sup>14</sup> The requirements for the BWEWS and LTWPs are in Divisions 2 and 3 of Chapter 8 (which is the Environmental Watering Plan).



The draft WRP incorporates the Risk Assessment in schedule D, which addresses risks to environmental watering requirements (s4.3.3), risks from climate change to meeting environmental watering requirements (s4.6.4), risks to water-dependent ecosystems from poor water quality (s5), and risks from climate change to other water uses (s7.3).

Section 8 and Table 1 of the Risk Assessment is incorporated by reference into the draft WRP to address the requirements of section 10.43(1) (ie. developing strategies to manage High and Medium risks or explaining why they cannot be addressed).

In this section we discuss:

- the legal flaws in the approach the NSW Government has taken to decisions under s10.43 of the Basin Plan 2012, particularly in relation to developing strategies to address the identified risks or deciding that a risk cannot be addressed; and
- the outcomes of the risk assessment which demonstrate the results of the above flawed process in the failure to reduce the initial risk rating of risks across the four categories relevant to the environmental health of the system and climate change.

## Development of strategies to address High and Medium Risks

Section 8.3 and Figure 8-1 of the Risk Assessment outline the approach the NSW Government has chosen to take for addressing risks given an initial rating of High or Medium.

There are two steps in the process outlined in Figure 8-1 which demonstrate that errors of law were incorporated into the process the NSW Government implemented in purported compliance with section 10.43.

The discussion in section 8.3 reveals that multiple errors of law were made and several irrelevant considerations were taken into account in identifying strategies to manage risks for the purposes of section 10.43.

### Figure 8-1

Figure 8-1 is a flow chart showing the decision-making process used to purportedly meet the requirements of section 10.43 of the *Basin Plan 2012*. There are two elements of this flow chart that could lead the NSW Government into legal error.

Figure 8-1 identifies a step (called 'Element 3') during which an assessment is undertaken of whether the identified strategy (ie. risk mitigation measure) is assessed to determine if the strategy affects another risk or 'results in a third party impact'<sup>15</sup> (which we take to mean an impact on a consumptive water user). In such cases, the figure appears to allow the NSW Government to decide that the economic, social or cultural 'trade-offs' of a strategy are not acceptable and to return to a point in the decision-making process at which a decision can be made that mitigation of the risk is not possible.

This means that decision-making process would, for example, allow the NSW Government to elect not to meet environmental watering requirements established in the BWEWS or LTWP on the basis that impacts on third parties were not considered 'acceptable' (it is not clear what criteria were used to judge whether such impacts would be acceptable). **We do not believe that this complies with the requirements of section 10.43.**

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<sup>15</sup> See s8.2.3 Risk Assessment on page 74.

The second element of concern is ‘Element 2’, which asks whether the outcome of a risk mitigation strategy is to reduce the level of risk to a ‘tolerable’ level and, if not, to prepare an explanation of why the risk cannot be mitigated. Our key concern with this element is that it does not appear to require additional attempts to mitigate a risk through alternative means in the event the first solution is not successful. **This seems to be a quite limited approach to generating mitigation solutions and one that does not seem to provide a sufficient basis for a conclusion that a risk ‘cannot’ be mitigated for the purposes of section 10.43.**

### Section 8.3

Section 8.3 of the Risk Assessment outlines the approach taken to addressing risks for which mitigation is considered possible.

This section of the Risk Assessment goes on to state that there are a number of “*overarching principles which guide the development of WRPs in NSW*” and states that those principles have been considered in the development of strategies to address the identified risks. This indicates that these ‘*overarching principles*’ were considerations that the NSW Government believed to be ‘relevant considerations’ for administrative law purposes.

The ‘*overarching principles*’, which are identified in table 8-3, demonstrate that, in approaching the mitigation of risks, the NSW Government has:

- failed to have regard to relevant considerations;
- had regard to irrelevant considerations; and
- misdirected itself as to the law in its interpretation of both the *Basin Plan 2012* and the *Water Management Act 2000 (NSW)*.

### Commonwealth *Water Act 2007*

Table 8-3 of the Risk Assessment identifies the following as the relevant principles from the Commonwealth *Water Act 2007*:

- there will be no net reduction in the protection of planned environmental water;
- the Commonwealth is responsible for funding the gap between existing limits and the Sustainable Diversion Limit (**SDL**);
- WRPs will meet the requirements set out in the Basin Plan.

This list is not incorrect, as far as it goes, though the second bullet point is largely irrelevant for the purposes of drafting a WRP.

However, the list **fails to have regard to the objectives of the *Water Act 2007* and *Basin Plan 2012*** which should be used to guide and interpret the other obligations, in particular in undertaking the difficult task of preparing a WRP.

### *Basin Plan 2012*

The sole principle identified as drawn from *the Basin Plan 2012* is:

*“Nothing in the Basin Plan requires a change in the reliability of water allocations of a kind that would trigger Subdivision B of Division 4 of Part 2 of the Act (s 6.14).”*

This not only **neglects all of the objectives of the *Basin Plan 2012*, it also identifies a provision that has no current function and applies an interpretation of that provision that is incorrect at law.**

The NSW Government appears to have assumed that section 6.14 of the *Basin Plan 2012* means that it ca not (or need not) alter any rules in the WSPs that may affect the reliability of supply under Water Access Licences (**WALs**). This is wrong at law. When a WSP is made or amended or a WRP (incorporating a WSP) is made, it may well be appropriate to make new rules that affect the reliability of WALs if, for example, the previous rules were not achieving the outcomes required by the primary legislation.

Section 6.14 of the *Basin Plan 2012* must be read in the context of the relevant provisions of the Primary Act. Subdivision B of Division 4 of Part 2 of the *Water Act 2007 (Cth)* has the following general effect:

- It applies where there is a “change to the Basin Plan”.<sup>16</sup> That means it does not apply to the original Basin Plan - only to subsequent changes. Section 6.14 merely has the effect of recording that there have not yet been any changes to the Basin Plan that trigger the operation of this subdivision.
- If a change to the Basin Plan results in a change to the reliability of a water allocation, then there may be a right to claim compensation from the Commonwealth if “*the change is reasonably attributable to the Commonwealth’s share of the change in reliability*”<sup>17</sup>;
- If the Basin Plan contains a relevant change, then it must specify the extent to which the changed reliability is attributable to changes in Commonwealth Government Policy (the ‘Commonwealth Government Policy Component’) and the extent to which the changed reliability is “*attributable to improvements in knowledge about the environmentally sustainable level of take for the water resources of the water resource plan area*” (this is the ‘new knowledge component’)<sup>18</sup>;
- The ‘Commonwealth’s share’ of the change in reliability is then calculated using the method in the National Water Initiative and the Regulations (if any).<sup>19</sup>

The key points to be taken from these provisions are that:

- Neither the *Water Act 2007* nor the *Basin Plan 2012* (or indeed state laws) prevent WRPs (or WSPs) from changing the reliability of WALs - in fact some changes to reliability may be necessary to meet the requirements of the *Basin Plan 2012* and the *Water Management Act 2000 (NSW)* through the ordinary application of good policy processes (given the very poor outcomes of the current WSP);
- The Basin Plan has not been subject to a change which engages the operation of section 6.14. As a consequence, that section has no relevance to the current process; and
- The relevant provisions of the *Water Act 2007 (Cth)* are about allocating compensation risk between the States and the Commonwealth - they do not constrain the content of a WRP.

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<sup>16</sup> See *Water Act 2007*, s80(2) and 81(1) and (2).

<sup>17</sup> *Ibid* s80(4).

<sup>18</sup> *Ibid* s81(3).

<sup>19</sup> *Ibid* s81(4).

Overall this means that:

- **To the extent that the NSW Government has assumed that, in preparing its WRP and addressing the risks identified in the risk assessment, it cannot lawfully change the reliability of WALs - it has erred at law;**
- The assessment of how to respond to the identified risks must be undertaken anew on a lawful basis and without the assumption that reliability cannot be affected;
- The assessment of how to respond to the identified risks should be undertaken having proper regard to the Objectives of the Basin Plan and the state's obligations under s10.43;
- If this error of law has infected the NSW Government's approach to other elements of the WRP and WSPs, they should similarly be revisited and drafted in accordance with the law.

### **NSW Water Management Act 2000**

Table 8-4 of the Risk Assessment identifies the following as a principle of the *Water Management Act 2000 (NSW)*:

*"WSPs are required to balance social, cultural, economic and environmental needs of the community and catchments (this is a fundamental objective of water management in NSW and is described in the objects of the Act)."*

This is wrong at law. The *Water Management Act 2000 (NSW)* does not, in any sense, authorise or require the environmental health of the system to be traded-off for economic or social objectives in some sort of 'balancing' exercise - in fact quite the opposite.

Section 3 of the *Water Management Act 2000 (NSW)* includes environmental, economic and social Objectives, however, it does not require or authorise those Objectives to be weighted equally. When read in the context of the balance of the Act (which is a fundamental requirement of statutory interpretation), it is clear that the Act recognises that the environmental health of the system must be protected in order to achieve its social and economic objectives (this is a pragmatic recognition of, among other things, the fact that the agricultural productivity of Basin is dependent upon healthy and functional natural systems and processes which provide services vital to water quality and availability).

This can be seen particularly in sections 5(3) and 9 of the Act which place a duty on decision-makers under the Act to give effect to the following priority order in making decisions about water sharing:

1. sharing of water from a water source must protect the water source and its dependent ecosystems, and
2. sharing of water from a water source must protect basic landholder rights, and
3. sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

These provisions make it clear that, in preparing a water sharing plan, both the volumes of water allowed to be taken and the flow regimes created must firstly protect the water source and its dependent ecosystems, then ensure that basic landholder rights can be satisfied. Only after that process has been undertaken can any remaining water be made available for sharing under a bulk access regime (ie. under WALs).

These prioritisation requirements have been considered by the Court of Appeal<sup>20</sup> and, more recently by the Natural Resources Commission<sup>21</sup>.

**The *Water Management Act 2000 (NSW)* does not require any system of ‘balancing’ environmental, economic and social needs. To the extent the NSW Government has assumed that it does in responding to identified risks, it has erred at law and the resulting decisions may be invalid.**

### ***Non-statutory considerations***

Table 8-4 of the Risk Assessment also identifies the following principles from a document called 'Delivering WRP Plans for NSW Roadmap 2016-2019':

- “WRPs are cost neutral for NSW licence holders,” and
- “Development of WRPs minimises change to NSW WSPs within their initial ten year terms.”

**These are not considerations which are relevant under the framework of either the *Water Act 2007 (Cth)* or the *Water Management Act 2000 (NSW)*.**

While it may be lawful for the NSW Government to use these concepts as guidance in choosing between options which have been developed in a lawful way (ie. in accordance with s10.43 of the Basin Plan and having regard to relevant considerations only), they cannot be primary considerations and certainly ca not be used to avoid taking steps required by the statutory framework or to override other obligations under either state or Commonwealth legislation.

#### ***Recommendation:***

- ***The decisions under section 10.43 of the Basin Plan, as outlined in the Risk Assessment, must be put aside and decisions about how to respond to each risk must be re-made in a way that accords with s10.43(1) and (3) of the Basin Plan 2012.***

<sup>20</sup> *Tubbo Pty Ltd v Minister Administering the Water Management Act 2000; Harvey v Minister Administering the Water Management Act 2000* [2008] NSWCA 356 per Spigelman CJ at [31].

<sup>21</sup> See section 4.1 of *Natural Resources Commission, 2019, Final Report: Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*.

## Outcomes of Risk Assessment

Table 1 of the Risk Assessment summarises the outcomes of the process undertaken in section 8, in purported compliance with section 10.43 of the *Basin Plan 2012*.

As outlined above, section 10.43 of the *Basin Plan 2012* requires the NSW Government, in relation to risks with an initial rating of High or Medium to:

- a) describe a strategy for the management of the water resources of the water resource plan area to address the risk in a manner commensurate with the level of risk;
- b) explain why the risk cannot be addressed by the water resource plan in a manner commensurate with the level of risk

The outcomes of this process, in relation to risks relevant to environmental watering requirements, ecosystem health and climate change, can be summarised as follows, based on our analysis of Table 1:

Risk type	Total risks	Total risks with initial rating of High or Medium	Total risks mitigated to a lower risk rating
Risks to water available for the environment and capacity to meet environmental watering requirements	31	High: 12 Medium: 16	High: 0 Medium: 0  Note that all High and Medium risks retain the same rating which is identified in the Table as 'Not tolerable'
Risks to water available for the environment due to climate change	3	High: 2 Medium: 1	High: 0 Medium: 0  Note that Table 1 appears to define the 'Tolerable' risk level as the same as the existing risk rating in each case
Risks to the health of water dependent ecosystems from poor water quality	37	High: 12 Medium: 14	High: 0 Medium: 0  Note that Table 1 appears to define the 'Tolerable' risk level as the same as the existing risk rating in each case
Risks to water available for other uses due to climate change	3	High: 0 Medium: 1	High: 0 Medium: 0

Of all of the risks identified in the Risk Assessment across these four categories, **not one single risk was mitigated down to a lower risk rating.**

In the case of the latter three categories, the Risk Assessment appears to suggest that the initial risk rating is 'tolerable'. This appears to amount to the NSW Government purporting to argue in each case that the implementation of strategies which fail to reduce the risk is 'commensurate with the level of risk' for the purposes of section 10.43(1)(a). We have serious doubts that this is lawful, particularly when applied to such a large proportion of the identified risks.

In the case of the risks to water for the environment and capacity to meet environmental watering requirements, the Risk Assessment doesn't even purport to argue that the identified risks are tolerable. The part of Table 1 which appears intended for explanation of either the level of risk identified as tolerable or the reason the risk cannot be addressed, instead contains the following text in each case:

*"Risks are intolerable (Not tolerable). The hydrologic (likelihood) model for the Barwon-Darling is based on surveyed use of water (not full development). Therefore the impacts on the hydrograph are not potential impacts, but reasonable estimates of real impacts. This suggests that Key Ecosystem Assets and Functions are likely to be impacted by medium and high simulated changes, which are reflected in the risks associated with the flow metric."* (our emphasis)

We think this makes it clear that **the NSW Government has not complied with section 10.43(1) of the Basin Plan, in that it has neither implemented a strategy to mitigate any of the High or Medium risks to environmental watering requirements nor identified that the risks cannot be addressed.**

***Recommendations:***

- ***The Risk Assessment must be re-done in a lawful manner to identify strategies to manage to environmental watering requirements, with a view to seeking to reduce all High and Medium risks to a rating of Low.***
- ***The resulting strategies must be implemented through amendments to the draft WSP and WRP.***

## WRP Section 3.3 Strategies for addressing risks

Section 3.3 of the draft WRP sets out a list of the strategies that have been implemented pursuant to section 10.43 (noting, from the discussion above, that these strategies do not appear to be effective in addressing the identified risks).

Table 3-1 of the draft WRP contains a list of 15 strategies which have purportedly been developed pursuant to section 10.43 of the *Basin Plan 2012*. The strategies are stated quite briefly and, in order to understand the actions which make up each strategy, it is necessary to go to table 8-6 of the Risk Assessment.

Our concerns with this aspect of the draft WRP are that certain of the strategies appear to be misleading and either inadequate or ineffective.

### Strategy 4: Environmental Watering Requirements

Strategy 4 in table 3-1 of the draft WRP is to:

*“Manage environmental water to meet Environmental Water Requirements specified in the Barwon-Darling LTWP.”*

The analysis set out above indicates that the Risk Assessment is actually predicting that many of the environmental watering requirements will not be met.

Some of the actions identified in table 8-6 of the Risk Assessment as making up this strategy are certainly positive steps for the Barwon-Darling (eg. IDELS, TDELS and new commence/cease to pump rules). However, **the fact that the Risk Assessment appears to demonstrate that they are insufficient to meet environmental watering requirements, means that including a statement like this in draft WRP is misleading.**

We also note that the actions making up this strategy include “strategic use of held environmental water” which, when viewed in the context of the failure of these strategies to reduce risks, demonstrates that even the deployment of HEW by the Commonwealth Environmental Water Holder and NSW Government is inadequate to protect the environmental assets and ecosystem functions of the Barwon-Darling.

### Strategy 11: climate change

Strategy 11 in table 3-1 of the draft WRP is to:

*“Protect the environment and water users from changes in flow attributable to climate change.”*

The mechanisms that make up this strategy are:

- A. Reserving water above the long-term average annual extraction limit (**LTADEL**) as planned environmental water;
- B. Available water determinations (**AWDs**) which adjust extractive use according to water availability;
- C. The Sustainable Diversion Limit;
- D. Protection of HEW through proposed new water take restrictions;
- E. Strategic use of HEW guided by the LTWP.



**None of these measures are actually directed towards addressing the impacts of climate change.**

The LTAAEL (which essentially allocates water to the environment above a defined extraction limit) is an existing approach based on the average of *historical* extractions and is not a strategy for addressing the risks of lower water availability and a hotter, drier climate under climate change affected conditions. It is also a misleading indicator of the amount of water actually available for the environment, in that it is an average over many years. This has the result that the large amounts of water available in flood years disguises the fact that inadequate amounts of water may be available in normal to dry years.<sup>22</sup>

Available Water Determinations (**AWDs**) are an existing tool under which licence holders are given access to a proportion of the nominal volume or shares available under their licence, depending upon the relative availability of water in the particular year. It is an existing mechanism used to address climate *variability*; it is not a mechanism to address the long-term changes we can expect to experience (and are already experiencing<sup>23</sup>) as a result of climate change.

The Sustainable Diversion Limit under the Commonwealth *Water Act 2007* was expressly based on *historical* record and does not incorporate climate change projections.<sup>24</sup> It is not a tool that addresses climate change risk.

Held Environmental Water (**HEW**) is water available under an entitlement that held is for the purposes of achieving environmental outcomes.<sup>25</sup> While the NSW Government has some HEW available in the Barwon-Darling system<sup>26</sup>, the majority of HEW available for this system is held by the Commonwealth Environmental Water Holder<sup>27</sup> and was acquired through programs aimed at achieving the SDL. Given that the SDL was calculated in a way that did not address climate change, it is misleading to suggest that the availability of HEW (the volume of which is largely a function of the SDL) is a climate change measure.

In our view, it is misleading to suggest that protection of HEW from consumptive take is a climate change measure. Such provisions merely ensure that the rules contained in the WSP/WRP don't permit holders of water access licences to extract HEW (which has been bought and paid for by the taxpayer to achieve environmental benefits) for consumptive purposes such as irrigation. This merely corrects a rather extraordinary defect in the current WSP which has the effect that releases of HEW can actually increase flows to the point of triggering commence-to-pump rules. While the correction of this flaw is welcome (and overdue), it is certainly not a climate change measure.

As a consequence, the discussion above of the failure of this strategy to effectively mitigate climate change related risks is perhaps unsurprising.

The inclusion of this strategy in the WRP is misleading in that it suggests that there are mechanisms in place to specifically address climate change risks, when clearly there are not.

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<sup>22</sup> See discussion on pages 4 and 53 of: Natural Resource Commission, 2019, Final Report: Review of the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*.

<sup>23</sup> See Findings 8 - 10 of Vertessy et al (2019).

<sup>24</sup> See Young WJ, Bond N, Brookes J, Gawes B & Jones GJ, 2011, Science Review of the estimation of an environmentally sustainable level of take for the Murray-Darling Basin: final report to the MDBA, CSIRO

<sup>25</sup> *Water Act 2007 (Cth)*, s4.

<sup>26</sup> See: <https://www.environment.nsw.gov.au/topics/water/water-for-the-environment/about-water-for-the-environment/current-water-holdings>

<sup>27</sup> See: <https://www.environment.gov.au/water/cewo/about/water-holdings>

The findings of the recent independent inquiry into the fish kills that occurred over the summer of 2018/19<sup>28</sup> included:

- Finding 8: the fish death events in the lower Darling were preceded and affected by **exceptional climatic conditions, unparalleled in the observed climate record**;
- Finding 9: the recent hot-dry weather events in the northern Basin have been **amplified by climate change**. Future changes in the global climate system are likely to have an **even more profound impact on the hydrology and ecology** of the Murray-Darling and increase the risk of fish deaths in the future; and
- Finding 10: Runoff responses to rainfall in the northern Basin appear to have been more severely reduced during recent droughts when compared to previous droughts, compounding the impacts of drought on downstream long-term water availability.

The final report of the NRC similarly found that reduced inflows due to factors including climate change were already affecting flow patterns in the Barwon-Darling<sup>29</sup> and documented that the recent fish kills were also accompanied by similarly devastating, though less visible, kills of river mussels and river snails.<sup>30</sup>

Given that climate change is already being felt in the Barwon-Darling and that further fish kills are expected this summer, it is extraordinary that the NSW Government has used the seven years which have elapsed since the *Basin Plan 2012* commenced to prepare a plan which relies upon tools based on the historical record. This is a disservice both to the already degraded biodiversity of the Barwon-Darling but also to water users who will, no doubt, need to adjust to further changes to water rules when these rules are shown (as predicted in the Risk Assessment) to be ineffective to protect the biodiversity and natural processes upon which agriculture in the Basin depends.

**Recommendation:**

- **All risk mitigation strategies need to be re-visited and new mechanisms developed which actually address and mitigate the identified risks, particularly in relation to climate change.**

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<sup>28</sup> Vertessy et al, 2019, Final Report of the Independent Assessment of the 2018-19 fish deaths in the Lower Darling.

<sup>29</sup> See page 64.

<sup>30</sup> See pages 73 – 74.

## WRP section 4.1: ‘Non-statutory environmental water’

The introductory text of section 4.1 is followed by explicit discussions of Planned Environmental Water (**PEW**) in section 4.1.1 and Held Environmental Water (**HEW**) in section 4.1.2.

The introductory text includes the following discussion of water access licences held for ‘non-statutory’ environmental purposes:

*“In addition to environmental water defined under section 8 of the WM Act 2000, the NSW Department of Planning, Industry and Environment recognises that a significant number of water access licences are purchased and/or held for environmental purposes. This type of licensed environmental water is described as having a ‘non-statutory’ environmental purpose. A licence is classified as having a non-statutory environmental purpose by agreement between the NSW Department of Planning, Industry and Environment and the holder of the licence.”*

When read in the context of the section of the WRP (which is a document made under the Commonwealth *Water Act 2007*), this text suggests that there is a third category of environmental water beyond the PEW (which is a creation of NSW statute) and HEW (which is a key concept under the *Water Act 2007* and *Basin Plan 2012* and includes the portfolio established under the Commonwealth statute).

Given that HEW is, in large part, a portfolio of water established under the *Water Act 2007 (Cth)* and that this draft WRP is prepared under the same statute, it is inaccurate to describe HEW as ‘non-statutory’.

However, our search of the Environmental Water Register for ‘non-statutory’ water access licences in this plan area revealed 14 water access licences in this category, all of which were held by the Commonwealth Environmental Water Holder, the NSW Department of Planning, Industry and Environment or one of those agencies jointly with NSW National Parks and Wildlife. These licences have a cumulative share of 28,871, which (together with one licence for ‘adaptive environmental water’ with a share of 1488) is the precise number of shares discussed in section 4.1.2 as the total volume of HEW available in the system.

This would appear to indicate that **the ‘non-statutory’ environmental water discussed in the above excerpt is, in fact, HEW.**

### **Recommendation:**

- **The text on page 20 of the draft WRP should be amended to clarify that the ‘non-statutory’ environmental water is, in fact, held environmental water (HEW).**

## WRP section 4.5: No net reduction in the protection of PEW

Section 21(5) of the *Water Act 2007 (Cth)* provides as follows:

*“The Basin Plan must ensure that there is no net reduction in the protection of planned environmental water from the protection provided for under the State water management law of a Basin State immediately before the Basin Plan first takes effect.”*

This is reflected in the requirements for WRPs set out in section 10.28 of the *Basin Plan 2012*:

*“A water resource plan must ensure that there is no net reduction in the protection of planned environmental water from the protection provided for under State water management law immediately before the commencement of the Basin Plan.”*

This requirement is reflected in section 4.5 of the draft WRP and explained further in the report in Appendix C.

The intent of this requirement is explained in the report in Appendix C in the following way:

*“This is because the environmental outcomes of the Basin Plan are based on modelling that incorporates the planned environmental water (PEW) rules that existed as at 23 November 2012. Any change to PEW rules, or rules that were designed for an environmental purpose, could potentially undermine the environmental outcomes that the Basin Plan is seeking to achieve. The Basin Plan requirement (s10.28) for no net reduction in the protection of PEW ensures this doesn't occur.”*

As this excerpt conceded, the intent behind the rule in sections 21(5) of the Act and 10.28 of the *Basin Plan 2012* is that a minimum level of protection of PEW be maintained on the assumption that this is the level of protection that was modelled as existing when the key settings of the *Basin Plan 2012* (including the Sustainable Diversion Limit (**SDL**)) were established.

However, this is not the case for the Barwon-Darling.

The modelling that sits behind the SDL, and the amendments made to it following the Northern Basin Review, both incorporate the level of development and rules which were in effect in the Barwon-Darling in 2007/2008 and not on the rules which came into effect in the current *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*<sup>31</sup>.

This means that the exercise set out in Appendix C compares the level of protection of PEW under the draft WSP not with the level of protection included in the modelling for the Basin Plan 2012, but with the reduced levels of protection in effect under the current water sharing plan.

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<sup>31</sup> Murray-Darling Basin Authority, 2016, Hydraulic Modelling for the Northern Basin Review, at pages 21 - 22, found here: [https://www.mdba.gov.au/sites/default/files/pubs/NB-modelling-report\\_0.pdf](https://www.mdba.gov.au/sites/default/files/pubs/NB-modelling-report_0.pdf)  
See also the discussion on pages 438 - 439 of the South Australian Murray-Darling Basin Royal Commission Final report, found here: <https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>

As a consequence, while the exercise that has been undertaken in Appendix C of the draft WRP may demonstrate compliance with the **legal** requirement, it is of no **practical** relevance in that it does not assess whether the assumptions about protection of PEW incorporated into the modelling for the *Basin Plan 2012* have remained the same (or improved).

In that regard, the report does not inform the public or the Murray-Darling Basin Authority about whether the proposed level of protection for PEW will, as the report itself explains, “*potentially undermine the environmental outcomes that the Basin Plan is seeking to achieve.*”

The overall effect is, therefore, that the report in **Appendix C, while complying with the letter of the law, is both misleading and fails to accord with the purpose of the law.** The assessment in that report has nothing to say about whether the level of protection of PEW is the same as that which was modelled in the development of the *Basin Plan 2012*.

In light of this failing, and to ensure transparency, the NSW Government must:

- acknowledge that the intended practical effect of s10.28 of the *Basin Plan 2012* is not met by the exercise Appendix C; and
- provide additional analysis comparing the level of protection of PEW under the amended WSP with the level of protection in effect in the 2007/2008 (ie. assumed in the modelling that sits behind the SDL).

We also note that the report in Appendix C relies heavily on achieving the Long-Term Average Annual Extraction Limit (**LTADEL**) as a measure of protection of PEW. This is despite the fact that the NRC found the LTADEL to be a highly misleading indicator to use as a measure of environmental outcomes, particularly in such a highly variable system as the Barwon-Darling.

**Recommendation:**

- ***The NSW Government should prepare and publicly release analysis comparing the level of protection of PEW under the amended WSP with the level of protection built into the modelling used to inform the development of the SDL and the Basin Plan 2012.***

## WRP section 4.2: rules to meet the environmental watering requirements of PEAs and PEFs

This section of the draft WRP purports to respond to section 10.17 of the *Basin Plan 2012*. This is a key section because it ensures that the high level objectives of the *Water Act 2007 (Cth)* in relation to restoring the ecological health of the system (which are fleshed out in the BWEWS and LTWP) are integrated into WRPs (as the operational documents that actually govern the flows in the rivers).

A failure to comply with this requirement could seriously compromise capacity to achieve the overall objectives of the *Water Act 2007 (Cth)*.

Section 10.17 of the *Basin Plan 2012* requires the NSW Government, in preparing the WRP, to have regard to:

*“whether it is necessary for it to include rules which ensure that the operation of the plan does not compromise the meeting of environmental watering requirements of priority environmental assets and priority ecosystem functions”*

If the outcome of that assessment is that such rules are necessary, they **must** be included in the WRP (s10.17(3)).

As discussed above, PEAs and PEFs, and their respective environmental watering requirements, are defined in the BWEWS and LTWPs.

The draft WRP doesn't contain a document setting out a separate assessment to meet the requirements of section 10.17. It instead relies upon the Risk Assessment to comply with that obligation.

As discussed above:

- The Risk Assessment predicts that a significant number of the environmental watering requirements will not be met; and
- Does not include rules (ie. the strategies discussed above) which are effective to mitigate such risks.

The Risk Assessment is probably adequate to comply with the first step of section 10.17 (that being to assess whether it is necessary to include rules which ensure that the operation of the plan does not compromise meeting environmental watering requirements).

However, **we do not believe that the second step of section 10.17 has been complied with**. In our view, the High and Medium risk ratings across many of the environmental watering requirements identified in the LTWP strongly suggest that rules are required to avoid compromising environmental watering requirements. That means **the NSW Government is under an express obligation under s10.17(3) to include rules to avoid compromising environmental watering requirements. It has not done so.**

Our conclusions in this section appear to be reinforced by the following excerpt from Appendix C of the draft WRP, which discusses the level of protection of PEW:

*“Proposals to change water sharing plan rules have been developed in close consultation with the Department of Planning, Industry and Environment Biodiversity and Conservation (DPIE B&C) and NSW Department of Primary Industries—Fisheries (DPI F) consistent with WSP objectives **and where***

***possible using environmental water requirements (EWR) in the draft LTWPs to ensure the best environmental outcomes.” (our emphasis)***

The report doesn't elaborate on the criteria used to identify what is 'possible' in this context, however, it does appear to:

- demonstrate the NSW Government's awareness that the objectives of the draft WSP are not consistent with the environmental watering requirements of the LTWP; and
- indicate that the decision-making process leading to the WSP water sharing rules was not consistent with s10.17 of the *Basin Plan 2012*.

***Recommendation:***

- ***The draft WRP and WSP must be amended to include rules to avoid compromising environmental watering requirements. This will involve rules to reduce risk ratings for risks to EWRs from High or Medium to Low.***

## WRP section 6: Water Quality Management

The key provisions of the *Basin Plan 2012* in relation to water quality for surface water are sections 10.29 - 10.35, which require each WRP to include a water quality management plan. Sections 10.41 and 10.43 (discussed above) also require the risk assessment to include “risks arising from elevated levels of salinity or other types of water quality degradation”<sup>32</sup>, while s10.31 links the risk assessment to the water quality management plan.

Water quality is significant (as discussed in the Risk Assessment) to both the ecological health of the system and its ability to provide water suitable for domestic, stock watering, cropping and other uses.

We acknowledge that some water quality issues (such as the effects of flow management on water quality) are susceptible to management under water-related legislation, while others - in the absence of legislation implementing integrated catchment management – are not (such as deforestation and other land use issues). Others still are being addressed in part through related tools (such as the salt interception schemes and Basin Salinity Management Plan 2030, which partially address the issue of salinity in the Basin). In that regard, we acknowledge that not all risks to water quality can be addressed through the WSP/WRP alone. However, flow management is critically important to addressing some water quality issues (in particular providing for connectivity and blue-green algae suppression), with the consequence that the flow regime created by the WSP is a key tool in managing water quality issues.

The fact that the Risk Assessment appears to define the ‘tolerable’ risk level as the same as the initial risk rating for each water quality-related risk would seem to suggest that **there has not been a legitimate attempt to mitigate any of the risks.**

### ***Recommendation:***

- ***The NSW Government must repeat the risk assessment for water quality issues with a view to mitigating at least those risks to water quality that can be addressed through flow management.***

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<sup>32</sup> See 10.41(2)(d).



## Draft Water Sharing Plan

We also raise the following issues in relation to the particular provisions of the draft WSP:

- The **account carry-over rules** in effect under the current WSP<sup>33</sup> were found by both *Vertessy et. al. (2019)*<sup>34</sup> and the Natural Resources Commission<sup>35</sup> to have contributed to excessive take under A class licences, particularly during ecologically important low flows and to have extended cease-to-flow events. The rules in section 42 of the draft WSP would appear to allow this situation to persist (subject to some mitigation by IDELS), despite the recommendations of these independent reports. In our view, the protection of the critically important low flow events warrants reductions in permissible carry-over.
- Section 42A of the draft WSP implements an Individual Daily Extraction Component (**IDEC**) which limits the water that can be taken under a water access licence on any day. Section 42A(4) provides the Minister with a *discretion* to reduce the IDEC on any day to protect '**Active Environmental Water**' (which is water, such as HEW, that is to be protected from consumptive take to facilitate environmental outcomes). The difficulty with this provision is that there is no certainty that this discretion will be exercised, and therefore no certainty that HEW (purchased with public funds for environmental purposes) will be allowed to have its intended effect. This discretion must be replaced by clear rules to ensure that Active Environmental Water is protected from consumptive take.
- **Section 49(3)** of the draft WSP, which is intended to facilitate the protection of Active Environmental Water through the adjustment of flow classes, is similarly reliant upon the Minister exercising a discretion and therefore provides uncertain protection for Active Environmental Water.
- The **Note to section 45A** appears to be inconsistent with recommendation 13 of the NRC report, in that it continues to rely on the exercise of Ministerial discretion under section 324 of the *Water Management Act 2000 (NSW)*. The qualifications in section 84(1)(h) of the types of changes that can be made in response to updates to the *Interim Unregulated Flow Management Plan for the North-West* appear to be inconsistent with recommendation 13 and suggested action G(a) of the NRC report.
- The Minister's note on page 48 - 49 of the draft WSP is troubling for two reasons. Firstly, because it outlines a decision not to accept a recommendation of the NRC, in relation to **A Class licence thresholds**, that was aimed at protecting low flows which are important ecologically, for connectivity and for water quality. Secondly, the inclusion of a note to justify departure from one recommendation implies that the other recommendations have been adopted, which is not the case.

### **Recommendation:**

- ***The draft WSP be amended to remedy each of the above issues.***

<sup>33</sup> Which were among the controversial changes inserted into the WSP after the last publicly available draft WSP.

<sup>34</sup> See Finding 16 on page 65 and recommendation 1 on page 72.

<sup>35</sup> See section 8.4 and recommendation 10.