
NSW – Natural Resources Commission (NRC)

Review of the NSW Murray and Lower Darling Regulated Rivers Water Sharing Plan¹

RGA Submission – February 2024

Introduction:

Thank you for the opportunity to provide feedback into your review of the *Regulated Murray/Lower Darling WSP*.

Continued, full access to secure and reliable water supplies under the *Regulated Murray/Lower Darling WSP* is a critical underpinning for the nation's rice industry. Virtually all rice grown in Australia is concentrated in the Murray and Murrumbidgee Valleys of southern NSW.

Like most irrigated agriculture, rice offers a dependable source of skilled and high-paid employment in regional and remote areas. Our rice production supports a well-trained and productive workforce across the Riverina – boosting incomes and living standards, and creating opportunities for those communities that rely heavily upon our success.

To illustrate, between 2008-2009 and 2018-2019, an average of 629,000 tonnes of rice was grown each year. Over this time – annually – we've contributed \$400 million into rice-growing communities, and provided 400 jobs across the Riverina.² We've also been recognised as one of the Riverina's major enterprises and key economic drivers, which – along with dairy in the NSW Murray and horticulture in the Murrumbidgee – has traditionally made-up around 75% - 90% of farm businesses.³⁴

In our opening remarks, we're keen to stress that the successful productive use of water is one of the key objectives of the *Regulated Murray/Lower Darling WSP*. We believe that changes are needed to ensure this objective is completely achieved. Every water year, irrigation's use of the shared resource must be optimised up to the full legal limit.

Our advice on the performance of the *Regulated Murray/Lower Darling WSP* and recommended improvements are discussed in some detail below. For certain matters, this advice is outlined more specifically in the track-changes at **Att A**.

¹ This document will be referred to as the *Regulated Murray/Lower Darling WSP* in this submission.

² SunRice, internal commercial data. The figure of '400 jobs' is direct employment; it doesn't reflect secondary employment.

³ [AppendixC_Murrumbidgee_community_profile.pdf \(mdba.gov.au\)](#), p. 899.

⁴ [AppendixC_NSW_Central_Murray_community_profile.pdf \(mdba.gov.au\)](#), p. 964.

1. Has the *Regulated Murray/Lower Darling WSP* Contributed to Environmental Outcomes?

On the whole, we would assume that the answer here is yes; however, the specific data needed to demonstrate the veracity of this statement isn't available.

As we noted in our submission on the NRC's review into the *Regulated Murrumbidgee Water Sharing Plan*⁵ it's virtually impossible to find comprehensive, long-term, monitoring and evaluation data for environmental water-use at any ecological site across the Riverina. Certainly, none is available that has any link back to the specific operation of the *Regulated Murray/Lower Darling WSP*.

As irrigators, all we know is that we've had water taken off us, for the 'environment'; however, advice on what has been done with that water is lacking. To illustrate:

Excessive Water Recovery in the NSW Murray.

The NSW Riverina has done all the heavy lifting when it comes to environmental water recovery. In the order of 4200 GL⁶ has been claimed for the environment, across the southern Murray-Darling Basin, over the lifetime of the *Regulated Murray/Lower Darling WSP*. Of this volume, upwards of 25% can be directly linked back to the NSW Murray.

For the irrigation industry in particular, these types of statistics are incredibly frustrating. We don't know what that recovered water has achieved, or whether it's being administered efficiently – something that should be expected of all users in a system.

Until we know more, and can be in a position to make more informed decisions, we must halt the outmoded concept of permanent transfer to an isolated environmental water holder, resulting in continued permanent shrinking of markets and the consumptive pool.

The *Regulated Murray/Lower Darling WSP* needs urgent amendment to provide for a moratorium on all future water recovery until the questions posed above are answered.

Management Decisions at Menindee.

We note in the NRC's Terms of Reference⁷ that there's an expectation from the Office of the NSW Chief Scientist and Engineer for this independent review to consider the 2023 fish deaths in the Darling-Baaka River at Menindee.

Menindee is a critical part of the southern Murray-Darling Basin shared resource. It has a fundamental role in supporting the reliability of NSW Murray General Security licences.

General Security licence-holders expect their property rights to be protected. The *Regulated Murray/Lower Darling WSP* must enshrine this right – especially where the Office of the NSW Chief Scientist and Engineer advocates for changes to be made in response to the recent fish deaths.

⁵ [NSW Natural Resources Commission Murrumbidgee Water Sharing Plan.pdf \(rga.org.au\)](#), p. 2.

⁶ **2,107 GL** has been recovered under the Basin Plan ([Progress on water recovery | Murray-Darling Basin Authority \(mdba.gov.au\)](#)). Pre-Plan recovery is **875 GL** ([Pre 2009 water recovery table \(mdba.gov.au\)](#)); which omits the **700 GL** Barmah-Millewa Environmental Allowance (<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Water/Water-for-the-environment/annual-environmental-watering-priorities-2020-21-murray-lower-darling-200340.pdf>), and full utilisation of **70 GL** for the Murray under the *Snowy Water Licence* ([2011 Snowy Water licence schedule 4 amendments to River Murray increased flows call out provisions](#)). This high-level snap-shot of large volume recovery over the last 20 years gives us a total of **3,752 GL**, to which we must now add the current Federal Government's additional commitment of **450 GL** – which gives us a total of **4,202 GL**.

⁷ [NSW Murray and Lower Darling WSP Review | NSW Government](#).

Improvements in water management at Menindee also form part of a NSW Government commitment to off-set future environmental water recovery under the *Murray-Darling Basin Plan*. This is a commitment that we expect to see delivered in full. Where the *Regulated Murray/Lower Darling WSP* is able to further bind the Government to this commitment, we would be supportive of this taking place.

2. Has the *Regulated Murray/Lower Darling WSP* Contributed to Social Outcomes?

To be blunt, our answer to this question is a resounding: *None that we can see.*

For a start, the capturing of social priorities for the *Regulated Murray/Lower Darling WSP* is arguably very poor, and should extend further than just the provision of basic stock and domestic access. The *Regulated Murray/Lower Darling WSP* offers no sense of what water means to communities who live in the area that it covers.

We note that, in its own water planning, there's been a language shift in Canberra towards the need for co-design⁸, an approach that places communities at the centre of how resources are managed. We welcome this approach, and will hold the Commonwealth to it. The *Regulated Murray/Lower Darling WSP* would benefit from updated social/cultural objectives, strategies and indicators that also reflect and reinforce the co-design principle.

In addition, we're extremely concerned that the social objectives contained in the *Regulated Murray/Lower Darling WSP* are undermined by cross-priorities that are much more focused on the environment. It's very unclear how mitigating *alterations to natural flow regimes*⁹ and maintaining *longitudinal and lateral connectivity*¹⁰ deliver on any community-identified social priorities. As such, these items should be removed from this particular objective, as they don't belong here.

3. Has the *Regulated Murray/Lower Darling WSP* Contributed to Economic Outcomes?

The high-level economic objective for the *Regulated Murray/Lower Darling WSP* is sound.¹¹ Optimisation of benefits is a sensible priority for irrigated agriculture in particular; however, there are aspects of the *Regulated Murray/Lower Darling WSP* that are preventing this from happening.

To illustrate, what we're seeing at present - across the Murray-Darling Basin - are policies that have 'over-corrected' in their policing of water use, resulting in high-levels of conservatism when it comes to production.

Across the southern Basin, we have a significant under-use problem - as opposed to one of perceived over-use. In the first year of SDL¹² compliance (2019-2020), actual surface water use was 2,175 GL below the annual permitted take. In the second year, this volume increased to 3,848 GL.¹³ This shows that while 'optimisation' is currently not occurring under the Murray-Darling Basin Plan (and hence, also the *Regulated Murray/Lower Darling WSP*) there's still plenty of head-room to chase this outcome.

⁸ [Restoring Our Rivers: Delivering the Basin Plan 2012 Draft framework for delivering the 450 GL of additional environmental water \(storage.googleapis.com\)](#)

⁹ [NSW legislation - Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016](#), p. 15.

¹⁰ [NSW legislation - Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016](#), 15.

¹¹ [NSW legislation - Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016](#), p. 12: (paraphrased) *maintain, and where possible improve water access to optimise economic benefits*

¹² SDL = sustainable diversion limit – the new, enforceable limit on extraction under the *Murray-Darling Basin Plan*.

¹³ [Annual Water Take Report 2020-2021 \(mdba.gov.au\)](#), p. 21.

There must be a specific focus within the next iteration of the *Regulated Murray/Lower Darling WSP* aimed at resolving this specific complex problem. Future water planning and management must embed an expectation that use is optimised, by ensuring access up to full legal limits. Specific track-changes at **Att A** outline how this could be done.

4. Has the *Regulated Murray/Lower Darling WSP* Met Its Objectives?

Our high-level commentary on this question is provided at **Att B**.

5. What Changes are Needed?

From a rice industry perspective, we would list the following:

- Provisions that require the use of water up to legal limits.
- Provisions that protect and where possible improve entitlement reliability.
- Priorities that better reflect the importance of irrigation productivity in this region.
- Committing to no third party impact in current implementation and all future change.

Murray Water Sharing Plan – Essential Priorities

22 May 2020

Introduction

This document outlines the essential changes identified by the NSW Murray irrigator representatives to the Stakeholder Advisory Panel.

This document is provided in addition to the proposed Model NSW Murray-Lower Darling Water Sharing Plan, previously sent to both DPIE and the NSW Minister for Water, The Hon. Melinda Pavey, MP. The matters contained in this document have been identified as the most urgent issues, but should not be interpreted as our only concerns with the draft Water Sharing Plan. The model WSP contains other issues also of concern to the NSW Murray irrigator representatives (stakeholders).

For context we note that the NSW Murray irrigators have been subject to numerous policy changes over the last two decades resulting in cumulative negative impacts to the reliability of NSW Murray general security entitlement. These impacts have critical flow-on impacts for the industries and communities reliant upon general security-based irrigation within our region.

1. SDL 'UNDERUSAGE' MECHANISM

Issue: Stakeholders feel it is fair to have SDL compliance measures for both over-usage and under-usage. The concern is that if there is an emerging under-usage trend, it will take a long time to implement measures to allow additional extraction under the right circumstances (e.g. larger supplementary water volumes). Stakeholders are seeking stronger, more action-based wording to proactively develop and implement these measures if underuse trends become apparent.

Proposal:

- a. Further define the current amendment provision 84(4):

CURRENT s.84(4) This Plan may be amended to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit should an assessment of compliance with those limits made under Part 6 show that total extractions over the long term are in the Minister's opinion significantly less than those limits.

Define 'significantly less': Suggested replacement s84(4):

- (i) *"This Plan may be amended to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit should an assessment of compliance with those limits made under Part 6 show that total extractions over the long term are (REMOVED: 'in the Minister's opinion') significantly less than those limits.*
- (ii) *Total extractions over the long-term will be considered significantly less if:*
 - a. *if average annual extraction from the water source are less than the long-term average annual extraction limit by 3% or more; or*
 - b. *An assessment of compliance with the long-term average sustainable diversion limit, undertaken in accordance with provision 32 of this Plan indicates that the sum of annual actual take in the water accounting periods since 1 July 2019 is*

less than the sum of annual permitted take for those water accounting periods less 20% of the long-term annual diversion limit for the SDL resource unit.

Define rule changes that could be used to 'facilitate total extractions'.

- (iii) *Amendments to the Plan to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit may include, but are not limited to, changes to Division 5 of Part 6 of the Plan ('Available water determinations'):*
- a. *make future available water determinations for supplementary water access licences of more than 1 ML per unit share to the extent the Minister considers necessary to return the average annual extraction to the relevant diversion limit,*
 - b. *in relation to available water determinations for regulated river (general security) access licences, increase the limit under clause 34 (3) to the extent the Minister considers necessary to return the average annual extraction to the relevant diversion limit."*

2. ANNOUNCEMENT OF SUPPLEMENTARY WATER EVENTS

Issue: Stakeholders are concerned about clauses that can prohibit supplementary event announcements. Stakeholders observe that these events are now rarely announced compared to past similar in-flow events (the warming, drying trend of the last decade is noted, but not the only reason supplementary access announcements are less frequent).

Stakeholders understand sub-clauses (e) and (f) below have never been relied upon in the past and are highly subjective. Given that large volumes of water have now been acquired for environmental purposes, stakeholders feel other environmental activities address these sub-clauses. There is also concern that in the hands of a future Minister (who may be less sympathetic to consumptive users), these clauses could be used as an excuse not to announce a supplementary event.

Proposal:

- i. Remove provisions 47(2)(e) and (f):

s.47(2) The Minister must not announce a supplementary water event if, in the Minister's opinion, any of the following apply:

(e) the taking of water will prevent the commencement of a waterbird breeding event or threaten the success of an existing waterbird breeding event,

(f) between 1 April and 30 October each year, the taking of water will prevent significant flow variations in those segments of the water source where flow heights are unaffected by weirs.

Issue: Water use and priorities have changed dramatically since this clause was introduced in 2003. The sharing arrangement must correspondingly to reflect the change in use, so as to not to further erode NSW Murray General Security reliability. There is now excessive overbank delivery through the system and the natural constraints such as the Barmah Choke have been reduced by as much as 21%, reducing instream water delivery significantly.

Proposal: Amend provisions 47(3) and (4) to the following:

(3) The Minister must announce a supplementary water event in the Murray Water Source if:

- (a) *there is an unregulated flow that exceeds channel capacity (as set out below in this document); and*
- (b) *the flow cannot be reregulated downstream.*

(4) The Department must regularly report on the volume of unregulated flows, and the likelihood of the unregulated flows exceeding the channel capacities (as set out below in this document), so that the Minister can announce a supplementary water event when there is likely to be an overbank opportunity.

Issue: The inclusion of the below provision could significantly impact upon the calling of supplementary events and therefore the reliability of supplementary entitlement.

Proposal: Remove clause 16(1)(a)(iii)

(1) Planned environmental water is established in the water sources as follows: (a) the physical presence of water resulting from the following: (iii) ~~the limitations on access to flows for supplementary water access licences specified in Division 2 of Part 8,~~

3. REWORDING OF THE ENVIRONMENTAL AND ECONOMIC OBJECTIVES

Issue: Stakeholders are concerned about the wording of several environmental and economic objectives. The environmental objectives wording could lead to more water than is necessary being “reserved” for specific environmental use. This risks committing the Water Sharing Plan to ambitious objectives, leading to more water recovery being demanded in future.

Strengthening the wording for economic objectives sends an important and positive message that this plan is protecting the reliability of General Security and Supplementary water entitlements.

Proposal:

- a. Amend provision 8 ‘Environmental Objectives’ to remove ambiguity and unrealistic/unachievable objectives:
- i. Include a Targeted Environmental Objective as provision 8(2) providing:
‘contribute to maintenance of bank stability’
 - ii. Remove/amend provision 8(3)(a)
‘reserve all water in excess of the long-term average annual extraction limit and long-term average sustainable diversion limit for the environment’

This provision does not recognize operational water/river losses and could have the effect of reserving any efficiency gained from river operations for environmental purposes
 - iii. Remove/amend the following reference in provision 8(3)(b) and (c)
‘reserve a portion of the natural flow’

This provision could unfairly restrict the announcement of supplementary events.
 - iv. Remove/amend environmental objectives that have been described by DEPI to be ‘ambitious’.
- b. Amend provision 9 ‘Economic Objectives’:
- i. Include a Targeted Economic Objective as provision 9(2) providing:

‘to maintain and where possible improve the reliability of water entitlements’.

- ii. Include the following ‘strateg(ies) for reaching the targeted economic objective’ at provision 9(3):

‘provide for rules to facilitate total extractions reaching the long-term average annual extraction limit or long-term average sustainable diversion limit’.

‘seek to announce a supplementary water event where possible’

- iii. Include two additional ‘performance indicators’ at provision 9(5) as follows:

‘the trends with respect to water entitlement allocations, including total annual allocations and the timing of allocations within the year’

‘the volume of the SDL credit/debit accumulated’.

- iv. Include the following at provision 9(6)) In evaluating the effectiveness of the strategies in meeting the objectives of this clause, the following will be relevant:

‘the extent to which stakeholders have considered the operation of this Plan to be clearly explained and predictable’.

- v. In addition to the above, include clear and measurable metrics for evaluating water entitlement reliability changes in the Monitoring, Evaluation and Reporting Plans.

4. PROPOSED CHANGES TO THE BARMAH MILLEWA ALLOWANCE

Issue: Raising the Barmah-Millewa Allowance payback trigger helps General Security users receive a more timely allocation earlier in the season rather than a “freeze” when allocations reach 30% (for weeks or months), then growth after payback is met. This means General Security water allocations will increase more consistently, providing better certainty and confidence for General Security consumptive and environmental water holders.

Proposal:

- a. Amend provision 39(6), and 57(2) to increase the payback trigger for the BMA borrow from 0.3 (or 0.5 under exceptional circumstances) to 1.0 (or otherwise a figure higher than 0.3/0.5), and/or develop a staged payback trigger.
- b. Include an additional provision 57(6) providing that in the event that the Barmah Millewa Allowance is borrowed, this water will be used for the purpose of both Conveyance and General Security water allocations, as follows:

‘The debit of water made under subclause (4) must be used for the purpose of an Available Water Determination for regulated river (conveyance) access licenses (up to a maximum available water determination of 0.5 ML per unit share) and regulated river (general security) access licenses.’
- c. Add clause 5.6 of the *Barmah Millewa Operating Rules (BMFEWA2007)*.

Issue: Barmah Millewa Allowance environmental borrow - In practice, returns flows in the past were reregulated downstream, and contributed to the consumptive pool for allocation. This may no longer be the practice under the environmental objectives in the WSP, and needs to be now codified lest it results in further erosion of General Security reliability.

- a. Recommendation: Include a clause stating that BMA and BMO water is reregulated into the consumptive pool for general security allocation on leaving the BMF which reflects operational reality.
- b. Under the agreement BMA can, theoretically be borrowed for other environmental purposes although it never has been. Since it has never been used for other environmental uses, we would like the clause removed to reflect the reality. If it isn't removed, then the following limitations should be included to reflect the rules in the agreement just as the rules regarding the pay back of volumes borrowed for allocation are documented in the WSP.

Proposal: That BMA can only be borrowed for other environmental purposes:

- a. When the water has not already been borrowed for consumptive use
- b. When the water is not required for use within the Barmah Millewa forest in that water year
- c. It must be repaid into the account at the beginning of the following water year- 1st July
- d. Can only be borrowed up to the volume necessary to achieve the objective
- e. Can only be borrowed to the volume remaining available in the account

5. RIVER MURRAY INCREASED FLOWS

Issue: Given the background and history with how this water was acquired, stakeholders feel it is fair and reasonable to categorise RMIF as Held Environmental Water, to ensure no (or limited) change to the characteristics of the water entitlements, and so that it is treated the same way as other similar acquired environmental water.

The owner of this water should also pay their fair share of fees instead of this cost effectively being worn by other entitlement holders. Firming up this commitment would be welcomed by stakeholders. If the owner does not pay fees, the licenses should be revoked and those entitlements handed back to the NSW Government for distribution at its discretion.

Proposal: That amendments to clauses in the Water Sharing Plan regarding RMIF are made to recognize that it is Held Environmental Water, the water is excluded from average annual extraction calculations, the original licence type and its attributed characteristics are identified and the current responsible owner is recognized. The previous carryover and spill requirements should be maintained, or alternatively carryover should be limited to 35,000 ML annually.

6. POLICY PRE-REQUISITE MEASURES IMPLEMENTATION

Issue: The Prerequisite Policy Measures needed to deliver the Basin Plan are required to be implemented via the new WSP. NSW has consistently insisted that the founding principle is that 'piggybacking and reuse' will only be implemented to the extent that there are no unmitigated third party impacts, both on other water users' reliability and riparian landholders.

The Draft WSP only refers to the PPMs being implemented as per the PPM Procedures Manual. This founding principle is included in the PPM Manual, however under a future less sympathetic Minister, the manual can be amended at any time by the Department without consultation with stakeholders. We would therefore like to see this founding principle incorporated as a subclause in the WSP

We also want it specified that PPM's can only be implemented for the use of Held Environmental Water and no other water user. If irrigators could declare where their water was to be released from we would have a significant increase in river losses – as delivery efficiencies would reduce.

Proposal: Insert additional provisions 71(6), (7) and (8):

71(6) Prerequisite Policy Measures will only be implemented to the extent of them having no unmitigated third-party impacts.

71(7) Any changes to The Prerequisite Policy Measures Manual must be done in consultation with consumptive water users.

71(8) Prerequisite Policy Measures will only be implemented in the delivery of held environmental water and are not available to other water users.

7. CHOKE CAPACITIES

Issue: Stakeholders feel that it is important that capacity constraint flow rates need to be clearly defined so that river operators understand capacities to work to.

Proposal: Recognise (by including in the text) the following Choke capacities at clause 67 titled 'Water delivery and channel capacity constraints':

- *Hume to Yarrawonga 25000ML/d*
- *Millewa Choke 9200ML/d (was 10600)*
- *Barmah Choke 7000ML/d (was 8500)*
- *Edward R. 1650ML/d + Gulpa ck. 300 ML/d*
- *D/S of Stevens weir 2700ML/d*
- *Colligen/Niemur 800-1000*
- *Yallakool/Wakool 700-800*

8. TRIBUTARY RIVERS INFLOWS

Issue: The Murray-Lower Darling WSP is significantly influenced by inflows from other parts of the basin and this relationship with connectivity needs to be acknowledged.

Proposal: Include the following as an additional clause 4(4):

"Waters in the Murray Lower Darling Water Sharing Plan are reliant on connectivity flows from the Darling and Murrumbidgee Rivers to contribute to South Australia's minimum entitlement flow of 1850GL as specified in the Murray Darling Basin Agreement"

9. WAKOOL SYSTEM ALLOWANCE

Issue: The Wakool System Allowance is a conveyance volume necessary for NSW to operate the system. The volume is usually 70 GL. This needs to be recognised in the Water Sharing Plan

Proposal: Recognise the Wakool System Allowance at Part 10 'System Operation Rules' of the Plan.

10. ADMINISTRATIVE MATTERS:

Issue: This WSP has a very significant impact on the business of our stakeholders and consultation with stakeholders regarding any changes to the WSP is very important.

Proposal:

- a. A requirement for consultation with water users prior to making any changes to this Plan or any documents referred to or developed for the purpose of this plan; and
- b. Inclusion of the review dates for this Plan – five years and ten years.

OTHER KEY ISSUES:

- **Deliverability:** It is critical that this be addressed as part of the Regional Water Strategies, including consideration of:
 - the requirement for an additional Murray trading zone;
 - the need for 'exchange rates' for downstream water trade; and
 - acknowledge current choke restrictions and maintain operational flows within these constraint limits.

Has the *Regulated Murray/Lower Darling WSP* Met Its Objectives¹? RGA Commentary.

OBJECTIVES	RGA COMMENTARY
<p>1. The broad environmental objective of this Plan is to protect, and contribute to the enhancement of, the ecological condition of the water sources and their water-dependent ecosystems over the term of this Plan.</p>	<p>Appropriate data-sets aren't currently available, that are capable of answering this question. While this data is gathered, the Plan should place a moratorium on all future water recovery.</p>
<p>2. The broad economic objective of this Plan is to maintain, and where possible improve, access to water to optimise economic benefits for agriculture, surface water-dependent industries and local economies.</p>	<p>As a high-level objective for economic output, this is sound. There are aspects within the Plan that need to be addressed to ensure economic water use takes place up to full legal limits.</p>
<p>3. The broad social and cultural objectives of this Plan are to provide access to surface water to support surface water-dependent social and cultural values.</p>	<p>These objectives are poorly drafted. They're not informed by priorities identified by communities living in the Plan area. Relevant Plan content must be updated, underpinned by the principle of co-design. All content in this objective focused solely on ecological outcomes should be removed.</p>

¹ [NSW legislation - Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016](#)