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Lachlan Valley Water Inc

Sustainable, productive and efficient water use in the Lachlan Valley

Submission to

Productivity Commission on

Murray Darling Basin Plan: Five year assessment

July 2023

SUBMISSION – BASIN PLAN: FIVE YEAR ASSESSMENT

Executive Summary

The implementation of sustainable diversion limits for Basin rivers has now been undertaken, although the NSW WRPs have not yet been accredited, so Lachlan Valley Water recommends that on-ground outcomes and socio-economic outcomes are the objectives going forward, rather than further water recovery targets.

Recommendation 1:

- a. That purchases for Bridging the Gap be deferred until the NSW WRPs are accredited.
- b. If further water recovery is required in the Lachlan, that this should be recovered through infrastructure or off-farm efficiency projects.

Recommendation 2:

That the WESA funding for efficiency projects should be re-invested into complementary measures to achieve on-ground outcomes.

There should be a re-commitment to no negative socio-economic impacts from the 450 GL recovery.

Recommendation 3:

- a. LVW supports the NSWIC Recommendation 2A in relation to Water Resource Plans.
 - That the MDBA and Commonwealth Government recognise the terminology clash and be cognisant of this in assessing the NSW WRPs.
 - NSW to undergo the same due process and assessment standards as the MDBA required of other Basin states to identify PEW.
 - NSW changes the state's terminology to avoid conflict and confusion with Commonwealth terminology.
- b. That environmental planning and water management should also consider how undertaking complementary measures can enhance the outcomes of environmental management.

Recommendation 4:

That the SDL Compliance Reports be issued in a timely manner.

That it is important to identify and report on the actual outcomes of held environmental water over and above what is achieved by the existing WSPs, and the legislative framework providing for planned environmental water.

Recommendation 5:

That Basin Plan modelling for climate change should account for both severe rain events and flood as well as droughts.

Recognise that the NSW allocations process already manages the variability of climate change as reflected in inflows.

Recommendation 6:

That the NSW Department of Planning and Environment consult with Aboriginal communities on required strategies to deliver on cultural objectives within the NSW water sharing plans.

Recommendation 7:

Lachlan Valley Water supports the NSWIC recommendation that there should be a shift from top-down to bottom-up consultation.

SUBMISSION – BASIN PLAN: FIVE YEAR ASSESSMENT

Introduction

Lachlan Valley Water (LVW) welcomes this opportunity to make a submission on the Commission's Draft Report on the implementation of the Basin Plan after five years.

Lachlan Valley Water is the peak valley-based industry organisation representing surface water and groundwater users in the Lachlan and Belubula valleys. Our members represent all categories of licences except for those held by environmental water managers.

Our submission primarily addresses the questions presented by the Productivity Commission Report that apply to the Lachlan region. We also strongly support the issues raised in the NSW Irrigators Council submission.

Question 1

What needs to change to ensure water recovery targets are met and that supply and efficiency measures are delivered? What lessons can be learned from past experiences?

Water recovery targets

In order to ensure the water recovery targets can be met it is important to assess the actual SDL compliance that is already being achieved. While the SDL Compliance Report for 2021/22 has not yet been released, the 2020-21 SDL Report¹ issued by the MDBA identifies all NSW rivers as meeting the SDL compliance requirements except the Barwon-Darling.

The Lachlan was identified as 27.7 GL under the annual permitted take for 2020/21 and 32.8 GL under the cumulative permitted take since 2019. On the basis that most rivers in NSW, including the Lachlan, are already meeting the SDL compliance requirements, LVW therefore recommends that further purchases for Bridging the Gap should be deferred until the NSW Water Resource Plans (WRPs) are accredited.

LVW also notes that 33 GL (93.5%) of the 35.3 GL of water recovered by the Commonwealth in the Lachlan was purchased² between 2008 to 2010, before the Basin Plan was legislated and the SDL reduction target was set, which indicates that the SDL reduction target was set at the volume of water already recovered³. Therefore, when the Lachlan Water Resource Plan is accredited, if it confirms that 0.9 GL of the Long Term Average Annual Yield is still to be recovered in the Lachlan, LVW recommends that this should be recovered through infrastructure projects or off-farm efficiency projects rather than further water purchases.

Recommendation 1:

- a. That purchases for Bridging the Gap be deferred until the NSW WRPs are accredited.
- b. If further water recovery is required in the Lachlan, that this should be recovered through infrastructure or off-farm efficiency projects.

Efficiency measures

Section 7.09 (e) of the Basin Plan is clear that the extra 450 GL of environmental water is to *“allow enhanced environmental outcomes as set out in Schedule 5”*. As identified in Schedule 5, (refer Attachment A) these are focused on the Lower Lakes, keeping the mouth of the River Murray open and primarily on South Australia. Part 2AA, Section 86AA of the Water Act 2007 are also clear that these are the targets for the Water for the Environment Special Account. Also the hydrologic modelling report referenced in section 7.09 of the Plan refers to river operating

¹ 2020-21 Sustainable Diversion Limit Accounts, Registers of Take, MDBA, May 2022

² <https://www.mdba.gov.au/publications-and-data/publications/web-summary-water-recovery-estimates>

³ P117, Hydrologic modelling to inform the proposed Basin Plan, MDBA 2012.

constraints in the southern connected system - inundation events in the southern Basin, flow indicator targets in the River Murray, outcomes at Barmah-Millewa Forest, Gunbower-Koondrook-Perricoota Forest, Hattah Lakes and Riverland-Chowilla Floodplain, and improvement in Coorong, Lower Lakes and Murray Mouth flow and salinity indicators.

Clearly, water recovered from the Lachlan and northern valleys will have very limited capacity to meet these outcomes. The Lachlan is also identified as a disconnected tributary by the MDBA and therefore any water recovered in this valley will not be able to contribute to outcomes in South Australia or the southern connected river system in any year other than a major flood year.

We also note that the 450 GL is required to have neutral or positive socio-economic outcomes.

LVW therefore recommends that projects to recover the 450 GL should actually focus on the requirements on Section 7.09 (e) and Schedule 5 of the Basin Plan. As the Productivity Commission 5-Year Assessment Report back in 2018 noted, *“Recovering water through efficiency measures has become increasingly divorced from the environmental outcomes it is meant to achieve. The current focus of the program is on meeting the legislated target of recovering an additional 450 GL by 2024. There is little evidence that it has been designed to recover water in the places need to effectively achieve the enhanced environmental outcomes.”*

The situation now is still the same, and therefore LVW supports the NSWIC recommendation that the WESA (Water for the Environment Special Account) funding for efficiency projects should be re-invested into complementary measures. Simply buying back more water will not contribute to on-ground environmental outcomes without also taking action on other requirements, eg, the control of carp and other non-native fish, improving fish passage, improving habitat restoration etc. Additionally, buying additional water will now come at a very significant cost.

Recommendation 2:

That the WESA funding for efficiency projects should be re-invested into complementary measures to achieve on-ground outcomes.

There should be a re-commitment to no negative socio-economic impacts from the 450 GL recovery.

Question 2

Are the current arrangements for implementing the Murray-Darling Basin Plan operating effectively? How could the arrangement be improved around?

- **Developing, accrediting and reporting on water resource plans**
- **Water quality**
- **Critical human water needs**
- **Environmental water planning and management.**

In terms of accrediting and reporting on water resource plans, an ongoing issue for NSW has been the delays in completing the water resource plans, and that planned environmental water (PEW) has been identified in the water sharing plans as the water remaining in the source after water has been taken pursuant to basic landholder rights and access licences. However, this means that what is described as PEW in the NSW water sharing plans also includes water that is required for recreational and other purposes as well as transmission losses, end of system flows and replenishment deliveries, ie, the water required simply to run the river.

For the Lachlan the basic river operational requirements are 180,000 ML/year simply to run the river before any licensed water is delivered. We consider it is impractical to consider all operational requirements as PEW when this does not recognise that there can be long-term benefits from improving the operational efficiency of a river.

Whereas the Water Act 2007 definition of PEW is “*water that is committed by the Basin Plan or water resource plan, or a plan made under a State water management law to either or both of the following purposes: achieving environmental outcomes, or other environmental purposes that are specified in the plan or instrument, and cannot, to the extent to which it is committed by that instrument to that purpose or those purposes, be taken or used for any other purpose.*”

Therefore, while the terminology for planned environmental water may be the same in NSW and the Water Act, LVW does not consider that this means the exact same definition of the wording. LVW supports the NSWIC recommendations that the MDBA and the Commonwealth Government recognise this terminology clash, that NSW should undergo the same due process and assessment standards as required of other Basin States to identify PEW, and that NSW changes the terminology of PEW.

In regard the environmental water planning and management, LVW believes there also needs to be a focus on how there can be environmental outcomes achieved not only from water management but whether complementary measures such as improving fish passage, improved control of non-native fish species, dealing with cold water pollution, control of feral species and weeds that are causing degradation of wetlands, infrastructure to improve the delivery of water to environmental sites and improving the management of riparian zones will produce a better overall outcome from the management of environmental water.

Recommendation 3:

- a. LVW supports the NSWIC Recommendation 2A in relation to Water Resource Plans.
That the MDBA and Commonwealth Government recognise the terminology clash and be cognisant of this in assessing the NSW WRPs.
NSW to undergo the same due process and assessment standards as the MDBA required of other Basin states to identify PEW.
NSW changes the state’s terminology to avoid conflict and confusion with Commonwealth terminology.
- b. That environmental planning and water management should also consider how undertaking complementary measures can enhance the outcomes of environmental management.

Question 3

Have the governance and institutional arrangements for the Plan proved effective? What changes would you recommend?

In regard to reporting on water resource plans, while the NSW WRPs are not yet accredited we consider that there has been authentic reporting to date by the MDBA in regard to the compliance with the SDL requirements, and therefore request that the Inspector-General Water Compliance finalise and issue the SDL Compliance Report for 2021/22 to enable an assessment of the current compliance.

LVW also considers it is important to report on the actual outcomes achieved from the environmental watering, and that it should be a requirement that monitoring and evaluation programs clearly identify the additional environmental outcomes achieved as a result of the use of held environmental water, as distinct from what has occurred as a result of state-based water sharing plans and legislative frameworks providing for planned environmental water and specifying the environmental share of total river flow.

Recommendation 4:

That the SDL Compliance Reports be issued in a timely manner.

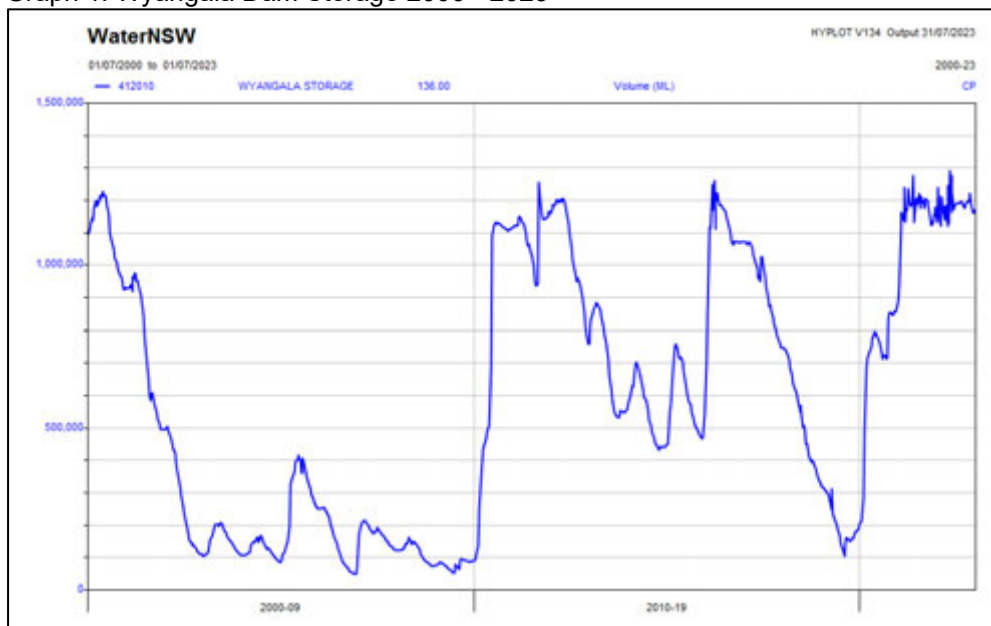
That it is important to identify and report on the actual outcomes of held environmental water over and above what is achieved by the existing WSPs and the legislative framework providing for planned environmental water.

Question 4

How well is the Plan responding to a changing climate? How should this be improved?

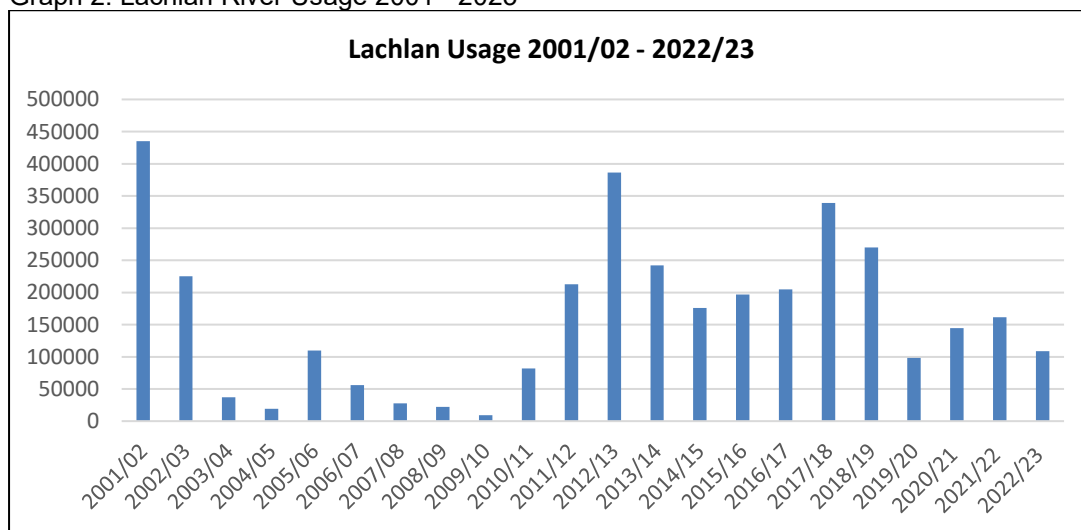
In addressing climate change, the Plan also needs to recognise there will continue to be severe rain events⁴, as have been experienced over the last 3 years, as well as long, dry sequences, as indicated in Graph 1 below, which indicates the extreme variability of inflows to Wyangala Dam, which has capacity of 1,217,000 ML, and therefore water availability.

Graph 1: Wyangala Dam Storage 2000 - 2023



Graph 1 above indicates the severe drought that the Lachlan experienced from 2003 to 2010, which was also reflected in usage as can be seen from the graph 2 below.

Graph 2: Lachlan River Usage 2001 - 2023



⁴ State of the Climate 2022, pages 7, 8, CSIRO and Bureau of Meteorology

In addition, it should be understood that in a long river like the Lachlan the variability of rainfall will affect the availability of water for all assets along the river, not just irrigation licence holders. The availability of water for local water utilities, ie, critical human needs, is always prioritised and following the severe water shortage from 2007 – 2010 in the Lachlan, there has been a move over last 10 years towards providing improved groundwater access for local water utilities.

The NSW allocations process, as incorporated in the Lachlan and Belubula WSPs, already reflect and manage the variability of system inflows to the extent that they can be managed by requiring that water be reserved for essential requirements and losses, evaporation and high priority licences for 19 – 30 months ahead depending on the time of year, and require that the sharing of water be managed within the limits of water availability on a long-term basis.

Recommendation 5:

That Basin Plan modelling for climate change should account for both severe rain events and flood as well as droughts.

Recognise that the NSW allocations process already manages the variability of climate change as reflected in inflows.

Question 5

How well is the Plan addressing the interests of Aboriginal people?

It is disappointing that the \$40 million that was allocated in 2018 to purchase water for Aboriginal people has not yet been spent. It is important that access to water for economic purposes must be met through the existing market to maintain the integrity of water entitlements, and we encourage that a process be implemented to enable Aboriginal communities to proceed with the expenditure of this \$40 million.

In regard to supporting cultural objectives, under the December 2022 amendments to the Lachlan WSP, clause 10 in relation to Aboriginal cultural objectives states:

(2) The targeted Aboriginal cultural objectives of this Plan are as follows:

- (a) to provide access to water in the exercise of native title rights,*
- (b) to provide access to water for Aboriginal cultural uses,*
- (c) to protect, and where possible improve, identified surface water-dependent culturally significant areas, including important riparian vegetation communities,*
- (d) to contribute to the maintenance of water quality within target ranges to ensure suitability of water for Aboriginal cultural uses.*

LVW considers it is important that the NSW Department of Planning and Environment consult with Aboriginal communities to identify what are required strategies to deliver these cultural objectives.

Recommendation 6:

That the NSW Department of Planning and Environment consult with Aboriginal communities on required strategies to deliver on cultural objectives within the NSW water sharing plans.

Question 6

How well has community consultation and engagement been conducted? How can this be improved?

Overall LVW believes the community consultation and engagement has been conducted poorly. While people and organisations such as LVW have attended numerous meetings and made numerous submissions to the MDBA on a range of issues, there has been very limited response to these and our view is that the MDBA has not listened to the feedback from communities about

their actual views on the impact of the Basin Plan and other issues that affect the Murray-Darling Basin.

We are also concerned that the community engagement has not actually been about listening to communities throughout the Basin but about simply complying with a requirement to 'consult' communities rather than listen to them. There also appears to be little recognition that organisations like LVW represent a range of stakeholders within the Basin catchments and are not simply one voice.

Recommendation 7:

Lachlan Valley Water supports the NSWIC recommendation that there should be a shift from top-down to bottom-up consultation.

Question 8

Does the implementation of the Plan reflect a commitment to the best available scientific knowledge? How well is this knowledge communicated? What improvements should be made?

There will always be ongoing improvements in scientific knowledge as more monitoring is undertaken and more research is instigated, and we welcome the Commonwealth Government's commitment to additional resources to update the science. Continuing and open communication of the scientific knowledge is therefore also important.

It is also disappointing that the 2018 Productivity Commission Review made a number of legitimate and well-researched recommendations about the way forward for the Basin Plan which were not implemented, and LVW hopes that the current review will be more acknowledged.

Please do not hesitate to contact me if there are any queries about matters raised in this submission.

Kind regards

Mary Ewing
Policy Officer

Attachment A.

Schedule 5—Enhanced environmental outcomes referred to in paragraph 7.09(e)

Note: See paragraph 7.09(e).

- (1) *The outcomes listed below are ones that will be pursued under the Commonwealth's program to increase the volume of water resources available for environmental use by 450 GL per year.*
- (2) *The outcomes that will be pursued are:*
 - (a) *further reducing salinity levels in the Coorong and Lower Lakes so that improved water quality contributes to the health of macroinvertebrates, fish and plants that form important parts of the food chain, for example:*
 - (i) *maximum average daily salinity in the Coorong South Lagoon is less than 100 grams per litre; and*
 - (ii) *maximum average daily salinity in the Coorong North Lagoon is less than 50 grams per litre; and*
 - (iii) *average daily salinity in Lake Alexandrina is less than 1000EC for 95% of years and 1500EC all of the time;*
 - (b) *keeping water levels in the Lower Lakes above 0.4 metres AHD for 95% of the time and above 0.0 metres AHD at all times to help maintain flows to the Coorong, prevent acidification, prevent acid drainage and prevent riverbank collapse below Lock 1;*
 - (c) *ensuring the mouth of the River Murray is open without the need for dredging in at least 95% of years, with flows every year through the Murray Mouth Barrages;*
 - (d) *exporting 2 million tonnes per year of salt from the Murray-Darling Basin as a long-term average;*
 - (e) *increasing flows through the barrages to the Coorong and supporting more years where critical fish migrations can occur;*
 - (f) *in conjunction with removing or easing constraints, providing opportunities for environmental watering of an additional 35,000 ha of floodplain in South Australia, New South Wales and Victoria, improving the health of forests and fish and bird habitat, improving the connection to the river, and replenishing groundwater; and*
 - (g) *achieving enhanced in-stream outcomes and improved connections with low to middle level floodplain and habitats adjacent to rivers in the southern Murray-Darling Basin.*

Note: The environmental outcomes in this Schedule reflect the results of the 3200 GL per year modelling with relaxed constraints scenario reported in: MDBA (Murray-Darling Basin Authority) 2012, *Hydrologic modelling of the relaxation of operational constraints in the southern connected system: Methods and results*, MDBA publication no: 76/12, Murray-Darling Basin Authority, Canberra. <http://download.mdba.gov.au/altered-PBP/Hydrologic-modelling-relaxed-constraints-October-2012.pdf>