



Healthy Rivers Dubbo

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The Productivity Commission

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SUBMISSION

The Productivity Commission's Five Year Assessment of the Murray-Darling Basin Plan Draft Report

Healthy Rivers Dubbo is a community grass roots group dedicated to providing a strong voice for our local rivers, the Macquarie and Castlereagh, and for the Murray-Darling Basin as a whole. As ambassadors for healthy rivers, wetlands and groundwater, we have been active in our community calling for transparency and accountability in all aspects of water management.

Introduction

Healthy Rivers Dubbo is very pleased to have the opportunity to write a submission to the Productivity Commission (PC) draft five year assessment of the Murray-Darling Basin Plan, and we are strongly encouraged by the Productivity Commissions' draft findings and recommendations that reflect the need for a return to strong management practices. We have found some opportunities in your draft report, and offer suggestions that we propose would strengthen the PCs position on some elements of Murray-Darling Basin Plan implementation.

Recovering water for the environment

The statement in **Draft Finding 3.1** that 2,075 GL is needed to meet the adjusted SDL is at odds with the Basin Plan 2.7.19, which states 2,137 GL of surface water must be recovered by 1 July 2019. The 62 GL that the PC is missing is to be recovered through efficiency measures and is required by the Basin Plan to limit SDL adjustment to 5% of the overall SDL.

We are alarmed at the Commission's **DRAFT RECCOMENDATION 3.1** referring to the over-recovery of water for the environment. There is no possibility to determine a figure of over-recovery until a reconciliation in 2024 when the actual contribution of supply projects is known.

Water take by floodplain harvesting (FPH) has been extracting vast unrecorded and unlicensed volumes of water ever since irrigation was developed. While this practice is basin wide, the NSW government has begun the process of measuring and licencing this type of take in the Northern Basin. It was assumed in 2012 when the basin plan was developed that the entire FPH take in the whole basin would be 210 GL per year. Recent work in the Gwydir Valley has revealed that 614 GL is eligible for new licences in that one valley alone.

In the Macquarie Valley, for example, the Water Sharing Plan (WSP) does not detail any volume of take by FPH. Therefore water extracted by FPH has been considered 'losses' to the system, in other words it has been considered water for the environment. The NSW Department of Industry has begun work to determine the actual volume of FPH take in the Macquarie Valley. Given the significant volume determined for the Gwydir Valley, it is reasonable to expect the volume of water taken by FPH in the Macquarie will be significant.

When the Northern Basin Review was conducted, there was no new science conducted in the Macquarie Valley to determine the health and resilience of the river and the internationally significant Macquarie Marshes. Modelling was used to determine, on a very tight timeline, that the Macquarie Valley was over-recovered. The Northern Basin Amendments have determined that both the Macquarie Valley and Gwydir Valley (also home to internationally significant wetlands) will face a reduction of their existing environmental water accounts as a part of a total reduction in the SDL of the Northern Basin by 70 GL to 320 GL.

As work is completed around the Northern Basin to determine how much water is eligible for licenses as FPH take, it is crucial that the modelling used during the Northern Basin Review to determine the amended SDL of 320 GL be revisited.

The detrimental impact of the reduced volume of environmental water in the Northern Basin to cultural and community life will be significant; the economic impacts to floodplain grazing, tourism and recreation fishing will be sharply felt. The Macquarie Marshes support an extensive cattle grazing industry. Sustainable grazing is encouraged by the Macquarie Marshes Environmental Landholders Association, and the majority of landholders are acutely aware of the environmental needs of the wetland, and undertake appropriate management to ensure environmental assets are not compromised while undertaking sustainable beef production.

Conversely, there has been no assessment by the Murray-Darling Basin Authority (MDBA) of the socio-economic win-fall the irrigation industry has received in the Northern Basin by having access to significant volumes of free water taken by FPH and used for turning profits.

The Murray-Darling Basin Plan and the Water Act 2007 directs that environment should take priority over industry.

The environmental impact on less environmental water in the Macquarie River and Marshes will be sharply felt. The river channels and the Marshes will become drier for longer, cracks in the ground will become deeper, meaning when water does come along a greater volume will be required to 'prime' the channels as the cracks must all fill with water and the spongy soils expand and hold moisture. Less water is required to water a river and/or marshes environment that is already holding water in its soils, than is needed to water a parched landscape.

A parched system means it is less likely that a connection flow from the Macquarie River to the Barwon-Darling can occur, meaning fewer species of native fish will be naturally present in our river. The Macquarie is a winter fed system, as opposed to most of the other rivers in the Northern Basin that report to the Barwon-Darling system which are fed by monsoonal falls in summer. This means the flows that come from the Macquarie River, through the natural filter of the Macquarie Marshes, are among the only flows to reach the communities along the Barwon-Darling, like Brewarrina and Bourke, in late

winter and spring. Fewer flows out of the Macquarie Marshes are felt hard by these communities.

The Macquarie Marshes is unique both economically (as above) and environmentally. Research indicates it is the most important colonial nesting waterbird breeding site in Australia for species diversity and nesting density (Kingsford & Auld 2000). The Macquarie Marshes Nature Reserve, U Block and 'Wilgara' Wetland are listed on the Ramsar Convention of Wetlands on International Importance. The Nature Reserve is also listed on the Japan-Australia Migratory Bird Agreement (JAMBA) and the China-Australia Migratory Bird Agreement (CAMBA).

Key Environmental Objects of the Water Act 2007 (Commonwealth) include:

- to give effect to *relevant international agreements* (to the extent to which those agreements are relevant to the use and management of the Basin water resources) and, in particular, to provide for special measures, in accordance with those agreements, to address the threats to the Basin water resources
- 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 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)

Relevant international agreement means the following:

- (a) the Ramsar Convention; Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar 1971
- (b) the Biodiversity Convention; Convention on Biological Diversity, Rio de Janeiro 1992
- (c) the Desertification Convention; United Nations Convention to Combat Desertification, Paris 1994
- (d) the Bonn Convention; Convention on the Conservation of Migratory Species of Wild Animals, Bonn 1979
- (e) CAMBA; Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment, Canberra 1986
- (f) JAMBA; Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment, Tokyo 1981
- (g) ROKAMBA; Agreement with the Government of the Republic of Korea on the Protection of Migratory Birds, Canberra 2006

(h) the Climate Change Convention; United Nations Framework Convention on Climate Change, New York 1992

(i) any other international convention to which Australia is a party and that is:

- (i) relevant to the use and management of the Basin water resources; and
- (ii) prescribed by the regulations for the purposes of this paragraph.

The Commonwealth Government notified the Ramsar Secretary-General in 2009 that the Macquarie Marshes were likely to experience a change in ecological character, therefore by its own admission falling short of its legal obligations (as set out above) to maintain the health and resilience of the Macquarie Marshes.

Claims that the Macquarie and Gwydir Valleys are over-recovered have fed a rushed decision based on flawed modelling and incomplete data to reduce the environmental accounts of these rivers. This decision will have significant cultural, social and economic impacts on communities and environments from Burrendong Dam to Bourke and beyond.

DRAFT FINDING 3.3, we are very concerned that the overall impact of improved irrigation efficiency on water resources is not precisely known. Many experts are concerned that reductions in return flows due to irrigation efficiency projects (both on and off-farm) have not been taken into account¹, leading to an over-estimation of environmental water recovery. We therefore suggest that the PC recommends an audit of environmental water savings to date to ensure that all water recovery is genuine.

DRAFT FINDING 3.4 we ask the PC to recommend that funding be made available to communities to help them transition to a future and an economy with less irrigation. This funding should be found by not proceeding with the package of 36 supply measures that were agreed to in May 2018 with a budget of up to \$1 billion, and instead lifting the 1,500 GL cap on buy backs and purchasing water for environmental accounts. A change in tactic in this way would mean significant monetary savings that could be used to help communities.

We support **DRAFT FINDING 3.5** on the lack of value in strategic water purchases and the premium paid for water recovery through infrastructure projects. We strongly urge

¹ Grafton, Williams et al (2018) in Science *The paradox of irrigation efficiency*
<http://science.sciencemag.org/content/361/6404/748.full>

the 1,500 GL cap on buybacks be lifted, reinstating buy backs as a means of equitable and efficient water recovery.

Supply Measures and Toolkit

We are concerned with the lack of rigorous assessment of the 36 supply projects agreed to in May 2018. They currently fall well short of meeting the proposed 12 criteria points for approval described by the Wentworth Group of Concerned Scientists². We would like the PC to recommend the 1,500 GL cap on buybacks be lifted so that water can be recovered for the environment through purchases, without the need for expensive, poorly planned, poorly described and very unpopular efficiency projects.

While we support **DRAFT RECOMMENDATION 4.5** on toolkit measures in the Northern Basin, and believe the recommendation should be strengthened by requiring legislative change to ensure the toolkit measures are delivered, we strongly believe the Northern Basin Amendments should be reversed, and have previously show reason why we think this. Toolkit measures in the Northern Basin, including projects to address cold water pollution and fish passage should not be contingent on a reduction in environmental water accounts.

Efficiency Measures

We agree with the PC assessment that there is a significant risk that the 450 GL of upwater will not be recovered by 2024 and that constraints projects are way behind schedule and may not be achieved at all. This situation is the result of the lack of commitment and cooperation between partner governments noted by the PC and a refusal by them to agree and progress projects.

We again ask the PC to recommend re-establishing buyback as a means of water recovery and call for the lifting of the 1500GL cap.

² Wentworth Group of Concerned Scientists (2018) *Requirements of SDL adjustment projects to ensure they are consistent with the Water Act 2007, Basin Plan 2012, MDBA policies and intergovernmental agreements.*

Water Resource Planning

We strongly agree with **DRAFT RECOMMENDATION 6.1** and call for Basin Governments to “immediately negotiate a pathway for granting extensions to the timelines for accrediting Water Resource Plans where there are outstanding issues to give sufficient time for adequate community engagement.”

It has been confirmed by NSW Department of Industry (DPI) at a FPH consultation meeting in Dubbo on Monday 8th October 2018 that is not likely the work on assessing the volumes for FPH licences to be issued on the Macquarie will be done in time for the information to feed into the Water Resource Plan (WRP) for the Macquarie. This will also be likely the case in several of the other valleys where NSW DPI is part way through completing this work. According to the department, the WRP will have to be accredited without the important details about FPH take included, and a process for revising the WRP and retrofitting the FPH volumes will be required.

An extension of time for the accreditation of the WPS would allow this important work to continue without being rushed, and still be included in the WSP when it is presented for public comment.

We agree with the PCs **DRAFT RECOMMENDATION 6.2 and 6.3** calling for more guidance from the MDBA on content and compliance of the WRPs.

Indigenous values and uses

The draft report has two findings but no recommendations on Indigenous values and uses. This is because First Nation’s rights, interests and cultural obligations receive only a passing mention in the objectives and outcomes contained in the Basin Plan itself. The Productivity Commission has unfortunately mirrored this lack of focus and action required to support the Plan outcome of ‘sufficient and reliable water supplies that are fit for a range of intended purposes including...cultural use.’³

This failure is particularly apparent in two areas:

- Water Resource Plan (WRP) development and accreditation – the failure of some states to design and implement appropriate strategies for consultation with First Nations is a critical risk to the timely completion and accreditation of WRPs. The

³ Basin Plan s5.02 (2)(a)

PC alludes to this problem in **DRAFT FINDING 7.1** but does not make any recommendation on how to resolve it.

- Supply projects - the prospect of these projects failing to meet predicted environmental outcomes, generating unintended environmental and cultural impacts and failing to meet conditions required in the Basin Plan, represents a major risk to successful implementation. MLDRIN is also concerned about the danger of unforeseen cultural heritage impacts.

We refer to MLDRIN's submission for suggestions on how to resolve these issues.

Water quality

We agree with **DRAFT RECOMMENDATION 8.1**, and refer to Environment Victoria's submission for suggestions on how to resolve this issue.

Critical human water needs

We share grave concern of the management of critical human water needs during periods of low flow in the Lower Darling. We look for a recommendation for the Northern Basin Amendments to be reversed, providing more environmental water to this part of the basin, thereby reversing the dire outlook for life and economy on the Lower Darling.

Water trading rules

DRAFT RECOMMENDATION 10.2 should allocate responsibility for avoiding damage to rivers as a result of trade. A limit on downstream water delivery should be set to prevent irreversible damage to rivers and to avoid undermining the benefits of environmental watering. We do experience in the Macquarie River erosion of the river banks when irrigation releases at constant high volumes are delivered for extended periods. Constant flow isn't the natural (pre-dam) state of our river, increased sedimentation and erosion have had a channelising effect on our river. The impact of these changes should be recorded.

Environmental water planning and management

DRAFT RECOMMENDATION 11.1 it is important for the PC to recognise that there is not enough water available in the environmental accounts with the now adjusted SDL to

'include a secondary objective that environmental watering should seek to achieve social or cultural outcomes.' For example, the Northern Basin connectivity release in early 2018 was a reaction to the dire conditions in the Darling River caused by over extraction and poor WSP rules. While there was some measurable environmental gains from this flow, it took water away from the environmental water holdings in the Border Rivers and Gwydir systems.

'Priority for achieving flow connectivity at the system scale relative to watering within an individual WRP Area.' – We would like more discussion from the PC on the relationship between shared volumes of SDL in each water source with adjusted (reduced) volumes, and the likelihood/possibilities of achieving connectivity.

If the 1,500 GL cap on buy backs was lifted, more water could be secured for the environment to achieve connectivity.

DRAFT RECOMMENDATION 11.2 We would like the PC to acknowledge that the relationship of the constraints projects to SDL adjustment and the current volumes of environmental water are not enough to satisfy the aim of the MDBA publishing 'realistic long-term objectives to be achieved from the available environmental water portfolio through watering activities within current operational constraints.'

If the 1,500 GL cap on buy backs was lifted, the purchasing of more water for the environment would allow enough water to be held in public accounts and to meet the overall environmental objectives of the Basin Plan.

DRAFT RECOMMENDATION 11.3 we would like to see expanded to outline:

- Annual Basin wide watering priorities should be produced in a timely manner in conjunction with key environmental water managers.
- Rolling multi-year plans should reflect annual priorities
- Annual priorities should work towards the achievement of the 5 year BWEWS

DRAFT RECOMMENDATION 11.4 we support the formalisation of the Southern Connected Basin Environmental Watering Committee, and the formulation and formalisation of Northern Basin Environmental Watering Committee.

Additionally, we would like to see a mechanism for committees to work together for the achievement of Basin Plan objectives regrading salinity at the Murray Mouth.

DRAFT RECOMMENDATION 11.5 Healthy Rivers Dubbo recommends the establishment of Environmental Water Advisory Groups (EWAGS) in all water sources, enabling the CEWH and stakeholders to connect. We strongly believe that EWAGS provide the best avenue for CEWH engagement and consultation on watering decisions.

DRAFT RECOMMENDATION 11.6 while we agree that consultation with Traditional Owners is vital to achieve social and cultural outcomes from environmental water, it is important that cultural flows are not replaced by environmental water. It is also important that social outcomes do not override environmental watering priorities.

The PC should to recognise that there is not enough water in environmental accounts to service environmental assets in most valleys, before we look to potentially incorporating social outcomes.

DRAFT RECOMMENDATION 11.7 this recommendation should emphasise the importance of Basin Governments committing to adequate funding of natural resource management programs.

Compliance

Healthy Rivers Dubbo welcomes the PC's recommendations to improve compliance. We particularly appreciate the PC's commitment to reviewing the effectiveness of compliance reforms by the states as part of their next assessment in 2023.

Reporting, monitoring and evaluation

We strongly endorse **DRAFT FINDING 13.1** and **DRAFT RECOMMENDATION 13.1** on inter-governmental agreements to implement the Basin Plan. Partner governments must be held to account for their actions (or lack of action) and clearly defined milestones are an essential tool. Independent assessment of whether milestones have been reached and full transparency and disclosure are essential to restoring public confidence in the Basin Plan.

Institutions and governance

We strongly endorse **DRAFT FINDING 14.1** on the shortcomings of current institutional and governance arrangements and agree that these have had really serious consequences for Basin Plan implementation. We acknowledge the need for Basin

Governments to demonstrate strategic leadership and take joint responsibility for the implementation of the Basin Plan (**DRAFT RECOMMENDATION 14.1**).

However we are less convinced by the recommendations for achieving this outcome. Enhancing the role of the Basin Officials Committee risks undermining the independence of the MDBA. The functions of the MDBA are clearly spelt out in the Commonwealth Water Act⁴ and the Authority was established as an independent expertise-based statutory authority designed to take the heat out of inter-jurisdictional disputes. Whether it has been successful is arguable, but handing back control and responsibility for implementing the Plan to the Basin Officials Committee and ultimately the states is not necessarily the best way forward.

We support the need to separate the compliance/regulatory functions of the MDBA from its river management and Basin Plan implementation roles to avoid conflicts of interest (**DRAFT RECOMMENDATION 14.2**). However again we believe the proposed model could be improved. Our preferred solution would be to establish a federal Environment Protection Authority which would conduct monitoring, compliance and enforcement actions, including compliance with the Murray-Darling Basin Plan, in addition to transparent environmental assessments and inquiries. The MDBA would then continue to manage the river system on behalf of the partner governments and to provide independent leadership in Basin Plan implementation. **DRAFT RECOMMENDATION 14.3** is a threat to that independent role and should be deleted.

For further information regarding this submission, please contact:

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⁴ Water Act 2007, Part 9