

South Australian Select Committee on the Murray Darling Basin

**Submission to inquiry into Findings of
the Murray-Darling Basin Royal
Commission and Productivity
Commission**

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September 2019

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ISSN: 1836-9014

Introduction

The Australia Institute welcomes the opportunity to make a submission to the South Australian Select Committee on the findings of the South Australian Murray Darling Basin Royal Commission and the Productivity Commission's five-year assessment of the Plan.

Public commentary frequently blames the Basin Plan for the economic, social and environmental demise of much of the Basin. Industries such as dairy, rice and citrus in some valleys have suffered serious decline and many remaining businesses will be lucky to survive this drought.^{1,2,3} However, we agree with the Royal Commission's finding that the Basin Plan is only one of many contributors to this failure.

We support most of the findings of the Royal Commission. However, we disagree with recommendations that essentially ask for the Basin Plan settings – the Environmentally Sustainable Level of Take, Sustainable Diversion Limits (SDL), SDL Adjustment Mechanism, the Northern Basin Review, etc., to be remade without an initial pause.

If Australia wants the Basin to remain as a food bowl and wants resilient and healthy regional communities, urgent measures need to be put in place to ensure the survival of agricultural businesses through this drought. Comprehensive policies should be developed for resilient regions. Much of the hydrology research used to establish the Basin Plan is now out of date because of changes such as increases in permanent plantings, especially nuts in the south, and floodplain harvesting for cotton in the north. The Plan needs to be paused and all the settings validated before proceeding with the Royal Commission's recommendations.

¹ Jeffery and Laxton-Koonce (2019) *Last day for a Deniliquin dairy in southern NSW as drought forces farmers out*, <https://www.abc.net.au/news/rural/2019-04-07/last-day-of-dairy-at-deniliquin/10974882>

² Jeffrey (2018) *Sunrice axes 100 jobs at Deniliquin and Leeton mills*, <https://www.abc.net.au/news/rural/2018-11-30/sunrice-axes-100-jobs-at-deniliquin-and-leeton-mills/10571666>

³ Testa, Gooch and Mabin (2019) *End of fruit cropping along lower Darling River a 'big loss' for industry, as growers pushed to brink*, <https://www.abc.net.au/news/2019-09-29/citrus-industry-mourns-end-fruit-cropping-lower-darling-river/11556106>

Water recovery

‘THE 450’

Under the Basin Plan, there is a requirement for the Commonwealth to acquire an additional 450 gigalitres through water savings created by improving irrigator efficiency. The Australia Institute does not support any more water being acquired through efficiency projects, because:

- they are expensive
- the impact on downstream users and the environment
- they can be used to fund the development of new dams and increase the irrigation footprint
- claimed water savings are not verified
- they do not buffer communities from water being removed from production because irrigators are buying water to pass onto the Commonwealth, rather than passing on water savings.

A forthcoming Australia Institute report, *Dam Shame: The hidden new dams in Australia*, will outline issues with the program that were not raised by the Royal Commission.⁴

The Australia Institute does not agree with the Royal Commission’s recommendation that the 450 gigalitres water recovery through buy-back should proceed immediately, because we believe that every volumetric measure that underpins the Basin Plan is highly questionable and renders any additional water recovery meaningless until all numbers can be independently verified. Those measures include the Baseline Diversion Limit (BDL) and Sustainable Diversion Limit (SDL); water recovery; consumptive water use; and environmental water use. We call for a genuinely independent audit of volumes of water recovered, extracted and used.

The Murray-Darling Basin Ministerial Council supported a package of measures at the December 2018 Council meeting, that included a set of socio-economic criteria that must be met before any of the 450 gigalitres can be recovered. The criteria are so stringent, that it is hard to imagine any project that could possibly meet the criteria, if they were properly applied.⁵ Project veto is effectively given to anyone who claims any kind of social or economic impact.

⁴ Slattery and Campbell (2019) *Dam Shame*, forthcoming

⁵ Campbell (2019) *So long, fish, and thanks for nothing, Murray Darling planners*, <https://www.smh.com.au/national/so-long-fish-and-thanks-for-nothing-murray-darling-planners-20190109-p50qdo.html>

BASELINE DIVERSION LIMIT AND SUSTAINABLE DIVERSION LIMITS

Baseline Diversion Limits are being increased for political expediency and do not represent 2008 level of take in all valleys. Increases in BDLs are being passed onto increases in the Sustainable Diversion Limits (SDL).

The BDL and SDL in the Murrumbidgee valley were increased by 62 gigalitres to allow water that was purchased to count towards water recovery, despite that it was not originally in the BDL because it was already environmental water.⁶

The MDBA has said that new floodplain harvesting licences issued by NSW will increase the BDL and the SDL by the licence volumes. No evidence has been made publicly available to demonstrate that the new floodplain harvesting volumes will be limited to either:

- 2008 level of take, that is, the level of development reflected in the BDL; or
- 1993/94 level of development, per the Water Management Act (NSW).

The hydrology of the Basin Plan has changed significantly since the BDL was made based on 2008 level of development, due largely to floodplain harvesting works funded under the Commonwealth's efficiency programs. For example, there are several new private dams in the Murrumbidgee valley built under the efficiency program to capture supplementary flows.⁷ The reduction of removal of Murrumbidgee supplementary flows into the Murray will result in less natural flows into Lake Victoria. This will negatively impact the reliability of Murray water holders and reduce the opportunities for environmental water because of increased bulk transfers.

WATER RECOVERY TARGETS

Water recovery targets have been manipulated and do not represent real water in all valleys. Cap factors serve as an exchange rate to measure water recovery and add different types of water recovery targets. The Cap factors have been overstated in some valleys to meet water recovery targets on paper. The water recovery targets are the most overstated in the Murrumbidgee valley, which in a forthcoming report we estimate to be hundreds of gigalitres.

⁶ Slattery (2018) *South Australia Murray-Darling Basin Royal Commission: Submission*, <https://www.tai.org.au/sites/default/files/The%20Australia%20Institute%20submission%20to%20the%20Murray-Darling%20Basin%20Royal%20Commission.pdf>

⁷ Slattery and Campbell (2019) *Dam Shame*, forthcoming

CONSUMPTIVE WATER USE

The transitional Cap reporting by MDBA lacks transparency and accountability. The annual reports were independently reviewed by an independent panel from 1995 until 2010. There has been no published independent review of the Cap reports since then. Environmental water use is not treated consistently between states when MDBA calculates how much water is used compared with the annual Cap target. We are not aware of any public explanation justifying that difference. The treatment of environmental water seems to be based on the preference of each State. The treatment of environmental water use has contributed to the unexplained growth in cumulative Cap credits.⁸

Without an independent review of Cap reporting (and the SDL under the Basin Plan), the amount of reported water use is unaccountable. The selective treatment of environmental water use, and the proliferation of Cap credits cast serious doubts on the credibility of Transitional Cap reports.

ENVIRONMENTAL WATER USE

Environmental water use data does not necessarily reflect how much environmental water is used. Flows that are already in rivers are often simply labelled as environmental water. For example, in 2016/17, unregulated flows at the South Australian border was rebadged as the Commonwealth Environmental Water Holder's (CEWH) and deducted from the CEWH accounts. No actual additional environmental water was added to the river.⁹

South Australia frequently retains CEWH water in the Lower Lakes for recreation, at times when CEWH wants its water to be released into the Coorong.¹⁰

⁸ Slattery (2018) *South Australia Murray-Darling Basin Royal Commission: Submission*, <https://www.tai.org.au/sites/default/files/The%20Australia%20Institute%20submission%20to%20the%20Murray-Darling%20Basin%20Royal%20Commission.pdf>

⁹ MDBA (2017) *Water Use Acquittal Report*, Unpublished and obtained by The Australia Institute

¹⁰ Slattery and Campbell (2018) *Coorongs don't make a right*, <https://www.tai.org.au/sites/default/files/P661%20Coorongs%20don't%20make%20a%20right%20-%20Final.pdf>

Constraints

The Basin Plan contained provisions to deliver more environmental water, pending the removal of physical constraints in the Southern connected system and in the Gwydir. The existing and relaxed constraints are shown in Table 1 below.

Table 1: Current and relaxed constraints

River	Location	Current Constraint ML/day	Relaxed constraints ML/day
Murray	Hume to Yarrawonga	25,000	40,000
	Downstream of Yarrawonga	22,000	40,000
Lower Darling	Weir 32	9,300	18,000
Murrumbidgee	Gundagai	30,000	50,000
	Balranald	9,000	13,000
Goulburn	Seymour	12,000	15,000
	McCoy's Bridge	20,000	40,000

Source: MDBA (2012) *Hydrologic modelling of the relaxation of operational constraints in the southern connected system: Methods and results*, <https://www.mdba.gov.au/sites/default/files/pubs/Hydrologic-modelling-relaxed-constraints-October-2012.pdf>

The Southern constraints assumed a combination of those flow rates could increase managed flows at the South Australian border from 60,000 to 80,000 megalitres a day, which would water an additional 30,000 hectares of the floodplain.¹¹ Modelling analysis by MDBA confirmed that the 80,000ML/day at the South Australian border can only be achieved when all four rivers (Murray, Murrumbidgee, Goulburn and the Darling) contribute to the increased flow, and their flow peaks combine at the same time.¹²

The 80,000ML/day target was based on information known to MDBA when they undertook the modelling. Since then, there have been several changes to the hydrology of the Murray that were not modelled and will make meeting a managed flow of 80,000 megalitres a day very unlikely:

¹¹ MDBA (2015) *South Australian River Murray Reach Report, Constraints Management Strategy*, <https://www.mdba.gov.au/sites/default/files/pubs/SA-River-Murray-reach-report-aug-2015.pdf>

¹² MDBA (2012) *Hydrologic modelling of the relaxation of operational constraints in the southern connected system: Methods and results*, <https://www.mdba.gov.au/sites/default/files/pubs/Hydrologic-modelling-relaxed-constraints-October-2012.pdf>

- the supply measures, particularly Menindee Lakes and the Yanco and Billabong Creek. They will have significant impacts on the hydrology of the Lower Darling and the Murray and Murrumbidgee rivers.
- the increase of permanent plantings in the Murrumbidgee and around the South Australian border is changing the timing and delivery of water for irrigation and the environment in the Murray and Goulburn rivers, and is challenging the system's capacity.
- increase of on farm storages in the Murrumbidgee valley and their impact on supplementary flows;
- the Victorian government will not relax constraints above 20,000 megalitres a day at McCoy's Bridge; and
- the declining flows in the Barwon-Darling river due to increased floodplain extractions and the Barwon-Darling Water Sharing Plan.

Before any recommendations on constraints can be considered, the constraints modelling will need to be revised to include the above changes.

Conclusion

The Royal Commission and the Productivity Commission reports highlight many problems with the water reforms of the Murray Darling Basin, including the Basin Plan. It is important to realise that these reforms can never address regional economic resilience and development on their own, but that is often what they have been expected to do. The MDBA's reinterpretation of its role under the Water Act to optimise a triple bottom line approach, rather than putting the needs of the environment first was always destined to fail without broader support for other industries, activities, public services, infrastructure and wider economic development initiatives. Expecting the MDBA and the Basin Plan to achieve all this represents a major failure of Australia's political and policy establishment.

The MDBA's attempt has been cast as a doubling down on an 'environment versus irrigation' narrative that is still damaging the Basin. An alternative would have been to understand the many issues that are impacting regional communities and develop a comprehensive policy response to those impacts.

Policy makers have applied a 'set and forget' to the implementation of the water reforms. The water market alone is the default drought policy. Those with the deepest pockets will survive the drought. The only consideration given to the plight of the Basin's agriculture is whether water recovery is via buy backs or supposed water savings through efficiency projects. Socio-economic valuations are simplistic, ignore down-stream and flow-on effects to the economy and basin.

As a result, the Basin is rapidly being dominated by just two crops – cotton and nuts. The north has long been dominated by cotton, while the water market's stated intent to 'move water to its highest value use' is resulting in the domination of nut plantations in the Southern Basin. These could require 100% of available water in dry years in the Southern Basin.¹³ The narrative of the Murray-Darling Basin as the 'food bowl' for the country is at risk, as are intergenerational farmers and the communities that have relied on them.

If implemented properly, the Basin Plan could protect and restore Basin ecosystems. However, regional communities will never accept the Basin Plan if it is implemented in a way that ignores their wider agricultural, economic and social struggles.

¹³ Aither (2019) *Water Markets Report: 2018-19 and 2019-20 outlook*, https://www.aither.com.au/wp-content/uploads/2019/08/20190821_AWMR-2018-19_FINAL_file.pdf