

Barwon-Darling Water Sharing Plan

Submission on draft review report

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INTRODUCTION/SUMMARY

We thank the Natural Resource Commissioner for the thorough and forthright *Draft Review of the Barwon-Darling Water Sharing Plan*. We support all of the Commission's recommendations.

We raise two additional matters for the Commission's consideration:

- Legality of the 2012 Barwon-Darling Water Sharing Plan.
- Cap compliance.

LEGALITY OF THE 2012 BARWON-DARLING WATER SHARING PLAN

When making a Water Sharing Plan, the NSW Water Minister is required to obtain the concurrence of the Minister for the Environment to the making of the Plan.¹ The 2012 Barwon-Darling Water Sharing Plan was required to be signed by the then Water Minister, Katrina Hodgkinson and Environment Minister, Robyn Parker.

A Ministerial request was sent from Minister Hodgkinson to Minister Parker on 5 September 2012, seeking her formal concurrence on the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*.² That plan was signed by Minister Parker on 18 September 2012.³

The plan signed by Minister Parker includes the Note to s33 (2) of the Plan:

At the commencement of this Plan, an assessment of the long-term average annual extraction that would occur under the conditions specified under (2) (b) has been made using the Barwon-Darling IQQM computer model with system file bd007e.sqg. This computer model indicates a long-term average annual extraction volume of 210 gigalitres per year. The within channel irrigation component of this long-term average annual extraction volume is 197 gigalitres per year.⁴

The Plan was gazetted on 4 October 2012. The final Plan has the Note to s33 (2) as:

At the commencement of this Plan, an assessment of the long-term average annual extraction that would occur under the conditions specified in subclause (2) is 223 gigalitres per year. The component of this long-term average annual extraction that

¹ Water Management Act 2000 No 92,

² Hodgkinson (2012) *Ministerial Request*, Obtained under GIPA 933

³ Lloyd-Jones (2012) *Ministerial Request*, Obtained under GIPA 933

⁴ NSW (2012) *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012: Parker signatory*, Obtained under GIPA 933

would be taken by irrigation and industry under the conditions specified in subclause (2) has been assessed using the Barwon-Darling IQQM computer model with system file LT92_30.sqq. This computer model indicates a long-term average annual extraction volume of 214 gigalitres per year (189 gigalitres from ‘within channel’ extractions).⁵

The differences between the Plan signed by Minister Parker and the gazetted plan are summarized in Table 1 below.

Table 1: Differences between Plan signed by Parker and gazetted Plan

	Plan signed by Parker	Gazetted Plan
Long-term average annual extraction volume	210 GL	214 GL
Long-term average annual extraction volume (within channel)	197 GL	189 GL
IQQM computer model	bd007e.sqq	LT92_30.sqq

That is, the Environment Minister did not give concurrence to the gazetted plan. This raises the question of whether the Plan is lawful under the NSW Water Management Act. If not, the accreditation of the new Barwon-Darling Water Resource Plan should be undertaken using the rules in place prior to the commencement of the 2012 Plan, rather than the 2012 Plan. This will presumably also have implications for any compensation payable.

CAP COMPLIANCE

We request that the Cap Management Strategy be immediately put in place, which will reduce the annual average extraction to 143GL, more than a 30% reduction on the current average extractions of 206.01 GL (189 GL at 109% allocation).

We also request that the cumulative Cap credits that were created when the Barwon-Darling Cap model was changed are reversed.

We have detailed the issues around the Barwon-Darling Cap management in our report *Owing down the river*.⁶ The relevant section of that report is replicated below for the Commission’s convenience.

⁵ *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*, <https://www.legislation.nsw.gov.au/#/view/regulation/2012/488/historical2012-10-04/part6/div1/sec33>

⁶ Slattery, Johnson and Campbell (2019) *Owing down the river: Mortgaging the future flows of the Barwon-Darling/Barka River*, <https://www.tai.org.au/content/owing-down-river-0>

Extract from ‘Owing down the river’

BARWON-DARLING CAP LIMIT CAP

A foundation of the Murray-Darling Basin water reform is a limit on water extracted for irrigation. In 1995, Basin governments agreed at the Council of Australian Governments meeting to limit (cap) the extraction of water to the level of development in 1993/94.⁷ This policy is known as the Murray-Darling Basin Cap (the Cap) and will continue under the Murray-Darling Basin Plan as Sustainable Diversion Limits (SDL).

The Cap limit refers to annual and long-term average limits. The annual limit is adjusted up or down to correspond with water availability. After every year, an annual Cap is determined by running actual, observed flows in an accredited Cap model to determine a Cap target. Actual extractions are compared to the target. In cases where actual extractions are less than the target, a ‘Cap credit’ is granted. In cases where actual extractions are more than the target a ‘Cap debit’ is generated. Cap credits and debits accumulate over time to form a ‘cumulative credit’ or a ‘cumulative debit.’ This policy recognises the variability of Basin water availability. If a valley exceeds Cap in one year, it can be rectified in a later year. Similarly, if a valley is under Cap in one year, it can take more in a subsequent year.

While all other valleys in the Basin managed to reach the Cap in the years following its implementation, the Barwon-Darling/Barka is a notable exception. This valley was in breach of the Cap from when it was implemented in 1997 until 2011, except for one year. An internal minute to the CEO of the MDBA explains:

Barwon-Darling has been problematic for Cap compliance since the beginning of cap accounting in 1997/98. To support its performance it was merged with the Lower-darling in August 2000. This created the Barwon-Darling Lower-Darling Cap valley.

For 6 out of 10 years between 1999/00-2008/09, the Barwon-Darling caused the Cap breaches in the combined valley. Had it not been merged with Lower Darling, the Barwon-Darling would have been in breach for continuous 14 years up to 2010-11.⁸

The issue of the Barwon-Darling/Barka consistently being in breach of the Cap was brought before the Murray-Darling Basin Ministerial Council. In 2010, The Council accepted a recommendation by the NSW Water Minister to implement a strategy to bring the valley

⁷ Guest (2016) *Sharing the water: One hundred years of River Murray politics*

⁸ MDBA (2014) *Minute to Chief Executive – Response to NSW: Accreditation of the Barwon-Darling Cap model*, obtained by FOI

under Cap.⁹ The Barwon-Darling/Barka again breached the Cap in the 2009/10 year, but the strategy was not implemented. Advice to the NSW water minister explains:

That a Cap exceedance management strategy response is being implemented by NSW in the Barwon-Darling sub-valley.

NSW proposed that for the 2010/11 water year, users in the Barwon-Darling are restricted to use 173GL...

Should auditing of the 2009-10 water year by the Independent Audit Group find Barwon-Darling water users above cap, the 10-year, 143GL annual average strategy proposed will be implemented immediately.¹⁰

Notwithstanding this, the 2009/10 audit has revealed a Cap debit for the Barwon-Darling sub-valley of 13.5GL and so the response by the NSW Officer of Water, in accordance with the agreement made on 18 June 2010, would be toreduce the annual allocation for the Barwon-Darling licenced users from 173GL to 143GL....commencing in 2011/12.....

Given the apparent changes in the Cap modelling and the recent appointment of the Coalition Government in NSW, no action has been taken to date.¹¹

Instead of reducing extractions in the Barwon-Darling/Barka to comply with Cap, the NSW government increased the Cap limit retrospectively and increased the water shares in the 2012 Barwon-Darling Water Sharing Plan, as explained to the NSW Water Minister:

The revised Barwon-Darling Cap [model] estimates the long-term Barwon-Darling Cap to be 198GL for irrigation.¹²

Compliance with Cap is assessed through a hydrological Cap model accredited by the MDBA. Rather than complying with Cap as calculated by the initial model, NSW simply developed a new model. Developed in 2012, the new model miraculously showed that the Barwon-Darling/Barka was not in breach of Cap. A minute to the CEO of the MDBA explains:

⁹ NSW Office Water – Water Management Division (2011) *WS11/162 ministerial Approval: Public Exhibition of the draft water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources*, Obtained by GIPA

¹⁰ NSW Office Water – Water Management Division (2011) *WS11/162 ministerial Approval: Public Exhibition of the draft water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources*, Obtained by GIPA

¹¹ NSW Office Water – Water Management Division (2011) *WS11/162 ministerial Approval: Public Exhibition of the draft water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources*, Obtained by GIPA

¹² NSW Office Water – Water Management Division (2011) *WS11/162 ministerial Approval: Public Exhibition of the draft water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources*, Obtained by GIPA

The Barwon-Darling valley has not yet had an audited Cap model. Changes to the model have been occurring as improvements have been incorporated. However, these changes have generally created a more favourable Cap compliance outcome, especially in the last 5 years. The latest version of the Barwon-Darling model shows that the combined valley would never have breached the Cap up to 2011-12.¹³

Not only did the new Cap model relieve NSW of reducing annual allocation in the Barwon-Darling from 173 GL to 143 GL, it also allowed an increase in the annual allocation to 198GL.¹⁴

This change and its implications for the Barwon Darling/Barka was of concern to at least one MDBA Board member, George Warne, who wrote an email to the MDBA Board about issues in the Barwon-Darling/Barka River, which said in part:

The cap credit issue in the Barwon Darling needs to be sorted by NSW in any future complying WRP (and NSW needs to know this). It is currently out of hand (my view), and effectively gives users a free kick in terms of access-to and using any water available, above quite a low flow threshold, for the foreseeable future.¹⁵

The changes that concerned Warne are a massive accumulation of Cap credit in the Barwon Darling/Barka. Before the Cap model was changed, the Barwon Darling/Barka had an accumulated breach of Cap, that is, a Cap debit. The changes to the Cap model changed this breach to a credit of 200GL in 2009/10.¹⁶ By 2016/17 the Cap credit for the Barwon-Darling/Barka was calculated by MDBA to have increased to 635 GL.¹⁷ Figure 7 shows the valley's performance against Cap until 2008/09 using the new model and the previous model.

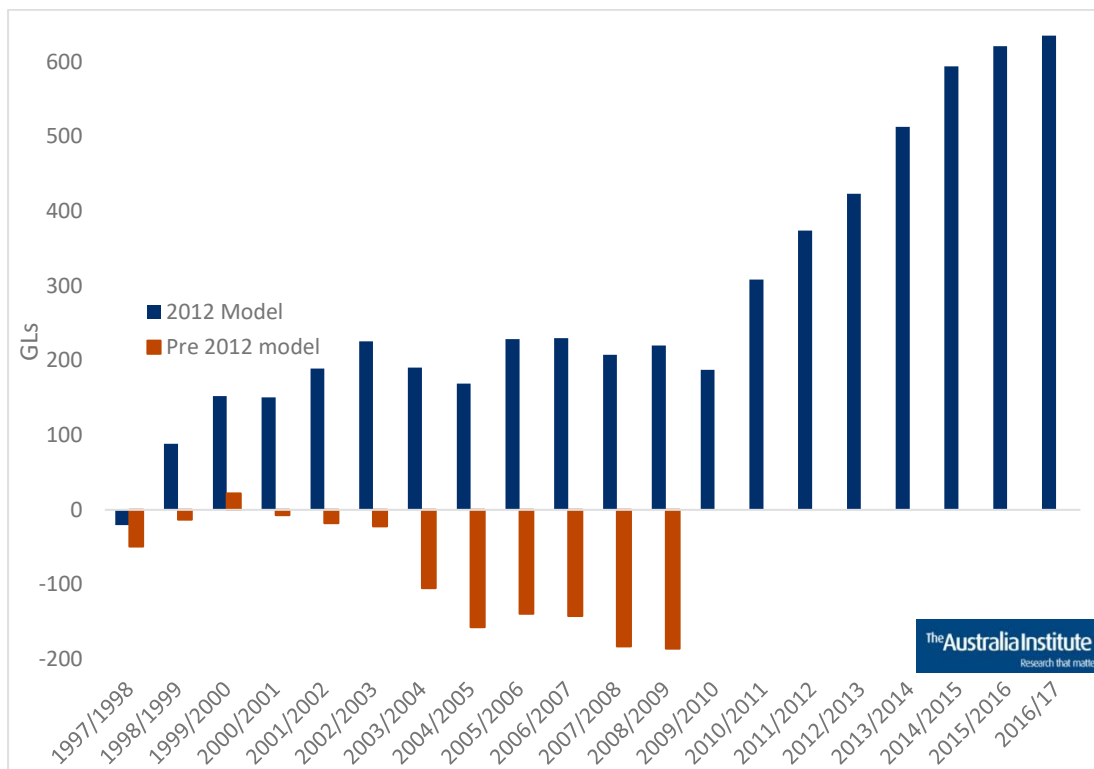
¹³ MDBA (2014) *Minute to Chief Executive – Response to NSW: Accreditation of the Barwon-Darling Cap model*, obtained by FOI

¹⁵ George Warne (2016) *Confidential memo to the Authority members*, Obtained from Four Corners

¹⁶ NSW Office Water – Water Management Division (2011) *WS11/162 ministerial Approval: Public response to NSW: Accreditation of the Barwon-Darling Cap model*, obtained by FOI

¹⁷ MDBA (2018), *Transition period water take report 2016/17: Report on Cap compliance and transitional SDL accounting*, <https://www.mdba.gov.au/sites/default/files/pubs/transition-period-water-take-report-2016-17.pdf>

Figure 1: Accumulated Cap Credits for the Barwon-Darling/Barka and Lower Darling



Source: MDBA (2018) Transition Period Water Take Report 2016–17 Report on Cap compliance and transitional SDL accounting June 2018, <https://www.mdba.gov.au/sites/default/files/pubs/transition-period-water-take-report-2016-17.pdf>

The orange columns in Figure 7 shows the cumulative Cap debits under the previous Cap model. The blue bars are the cumulative Cap credits according to the new 2012 model. In addition to the retrospective changes in Cap performance, there is a sudden increase of Cap credits since 2010/2011 as a result of the changes in the Cap modelling.

This means that the Barwon-Darling/Barka is in debt to irrigation. The annual take limit of 198GL can be exceeded by more than four-fold of the annual valley take without breaching Cap. The four-fold is the current 635GL Cap credit, plus the annual limit of 198GL, equalling 833GL, or 4.2 times 198GL.