Monday, 8 April 2019

RE: Submission regarding the review of the Barwon-Darling water sharing plan

Thank you for the opportunity to make a submission to the review of the Barwon-Darling Water Sharing Plan (BDWSP).

We are pastoralists who own and run three properties totalling 500,000 acres on the Lower Darling, approximately 50 km south of the Menindee Lakes. Tolarno Station sits on the Darling River, and all three properties depend on the Darling for livestock and domestic purposes. The properties have a rich history spanning 160 years, and today run merino sheep and rangeland goats.

The Lower Darling catchment has minimal runoff and is entirely dependent on inflows from the Barwon-Darling, of which 99% of flows are generated in upstream tributaries. The Lower Darling is the only connection between the Barwon-Darling and the Murray Rivers.

This document provides background, addresses the questions as outlined in the consultation, and provides suggested changes to the BDWSP. It is noted that in the consultation, the question is asked whether the BDWSP can better contribute to environmental, social and economic outcomes. We do not believe these three aspects should be considered separately. Ensuring a healthy flow down the Barwon-Darling for all Barwon-Darling communities, the Lower Darling and other downstream catchments has significant environmental, cultural, social and economic beneficial outcomes, which are interdependent. These healthy flows are currently not being achieved.

In reviewing the BDWSP, which will become the Barwon-Darling Water Resource Plan (WRP) under the Murray Darling Basin Plan (MDBP), it is important to reflect on the aim of the Murray-Darling Basin Plan, which is to

“... ensure water is shared between all users, including the environment, in a sustainable way. It does this by managing the basin as one system.” (MDBA)

We recognise the role of WRPs in the implementation of the MDBP at a regional level. However, it is critical that the WRPs/WSPs are interconnected and support the common aim. It must also be recognised that environmental, social and economic risks identified within one WRP area are impacted by the WSPs/WRPs of other areas.

Experience on the Lower Darling
It has only been in the last 20 years that the viability of the Lower Darling has been in question. Tolarno was established in 1851, and has always relied on high-quality river water for stock and
domestic use. As shown in Table 1, dating back to 1940, there were only two occasions when the river had ceased to flow prior to 2002. Between 2002 and 2009, there were a number of short cease to flow events, largely due to the impact of the millennium drought and the absence of significant water stored in Menindee Lakes. The significant cease to flow event in 2015-2016 had a significant detrimental impact on the health of the river and floodplains, and these have not yet recovered in health. The period also had a significant impact on the economic, social, psychological and physical health of the communities. The river again ceased to flow in early 2019, and flow has not yet returned. It is anticipated that this event will be worse than the 2015-2016 event, in that it will last for a longer period and that there will be additional significant damage done to the environment and the communities which depend on a healthy, flowing river. We have already experienced severe blue-green algae, and will run out of access to water in the coming months.

Table 1: Cease to flow events on the Lower Darling at Burtundy
(Burtundy is approx. 180km south of Menindee Lakes)

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Duration (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>September – November</td>
<td>89</td>
</tr>
<tr>
<td>1947</td>
<td>January</td>
<td>19</td>
</tr>
</tbody>
</table>
| 2002     | August – September
September – October
October – November
December | 19
19
26
10 |
| 2004     | January – February | 48 |
| 2005     | November    | 10              |
| 2006     | September
September – November | 10
42 |
| 2007     | July – September | 67 |
| 2007-2008 | October – January | 103 |
| 2009     | July
October – November | 9
14 |
| 2015     | February
March | 3
21 |
| 2015-2016 | April – August | ~500 |
| 2019 -   | January -   | ongoing |
Impact of extraction in the Barwon-Darling on the Lower Darling

It is our position that the health of the Lower Darling has been significantly adversely impacted by alterations in the increase in extraction in the Barwon-Darling. Many of these alterations were included in the 2012 review of the BDWSP. The Murray Darling Basin Authority has reported that there has been a significant flow reduction since 2000 along the Barwon-Darling, which is due to factors such as increased river regulation and irrigation development.\(^1\)

Graph 1 demonstrates the excessive extraction of low flows by A-class licenses which have occurred since the introduction of the 2012 BDWSP. The alterations to the “A” class license has alone had a significant impact on flows, specifically low flows, to the Lower Darling. Corresponding to this is the decreased flow into Menindee Lakes. Graph 2 shows the inflows into Menindee Lakes. It is evident that the low to medium flows that traditionally came down the system no longer reach Menindee Lakes. Since 2001, there was a medium inflow in 2005-2006, and two large inflows (floods) in 2012 and 2016.

Graph 1: Annual “A”-class extractions in the Barwon-Darling 1990-1991 to 2017-2018\(^2\)

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2 James, R. MDBA presentation. Bourke Western Shires meeting 2019 - Data Source: NSW DPI (pre 2012); NSW Water Register (post 2012)
Graph 2: Menindee Lakes Inflows and Total Volumes

Extent to which the BDWSP currently aligns with the Water Management Act 2000

Section 5(3) of the Water Management Act 2000 states that:

“In relation to water sharing:

(a) sharing of water from a water source must protect the water source and its dependent ecosystems, and

(b) sharing of water from a water source must protect basic landholder rights, and

(c) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).”

Section 58(1) of the Water Management Act 2000 states that:

“For the purposes of this Act, the following priorities are to be observed in relation to access licences:

(a) local water utility access licences, major utility access licences and domestic and stock access licences have priority over all other access licences,”

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In recent years, there have been cases where extraction of irrigation licenses in the Barwon-Darling has occurred in accordance with the BDWSP when there has been a failure to i) protect the water source and its eco-systems, and ii) provide water for local water utilities and stock and domestic licenses. Just one such example was extraction in the Barwon-Darling during the 2015-2016 period of cease to flow in the Lower Darling.

Extraction of water under irrigation licenses in the Barwon-Darling when the Lower Darling has ceased to flow and/or there is no provision of water for townships or stock and domestic licenses is in clear opposition of the Water Management Act 2000.

**Environmental, cultural, social and economic outcomes**

The BDWSP can contribute to significantly improved environmental, cultural, social and economic outcomes for lower Barwon-Darling, Lower Darling and other NSW, Victorian and South Australian downstream communities. Such a Plan must be based on reliable science and have an objective of connectivity with downstream WSPs.

We make the following suggested changes:

1. Ensure that the BDWSP is based on current science and best-practice to provide environmental, cultural, social and economic benefits to Barwon-Darling and downstream communities. The 2012 BDWSP was not developed on current science, and has therefore had a significant detrimental impact.

2. Introduce Total and Individual Daily Extraction Limits (TDELs & IDELs) which enable the provision of adequate planned environmental water, in particular low flow events.

3. Reverse all changes made to “A” class licenses made in to the 2012 BDWSP following the close of community consultation. This should include returning to a maximum pump size of 150mm; and lifting the pumping height to protect low flows.

4. Introduce flow targets and storage targets. Flow targets should be introduced for the end of the Barwon-Darling, and the end of the Lower-Darling. A storage target for Menindee Lakes should be introduced. This will protect the river, and provide for town and stock and domestic supplies. It is proposed that a storage target of 160,000 ML be introduced as a minimum. When such targets are not being met, all irrigation extraction in the Barwon-Darling should cease.

5. Remove the rule which enables 300% of access entitlement to be extracted annually.

6. Reverse the unlimited carry over rules. Such a rule places the river ‘in debt’ to irrigators, and results in detrimental environmental impacts.

7. Ensure the protection of environmental flows, so that i) environmental flows cannot be extracted; and ii) environmental flows do no contribute to the river height that initiates pumping. This will protect water that is owned by taxpayers from private use, and will enable it to be used only for public social and environmental purposes.
8. Set an objective for environmental flows, including their height, number, frequency and duration. The objective should have attainable, transparent and measurable environmental performance targets.

9. Ensure that floodplain ‘harvesting’ is accounted for within the BDWSP in a way which ensures the environment is protected.

In addition to these proposed changes to the BDWSP, it is important that all upstream tributary WSPs ensure adequate connectivity to the Barwon-Darling and downstream.

We hope that through the development of an effective BDWSP which truly prioritises the river environment, the environmental, social and economic disaster which has occurred in the last 7 years will be avoided in the future. The community seeks appropriate, sustainable long-term management of the Lower Darling. We recognise that the MDBP and WRPs are critical in achieving this.

We would be happy to expand further any of our above comments.

Kind regards,

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