

Independent panel assessing the management of the
2020 Northern Basin First Flush event
independentpanel.firstflush@dpie.nsw.gov.au



Sunday, 7 June 2020

TOLARNO STATION 1851 Pty Ltd

via Wentworth, NSW, 2648
[REDACTED]

RE: Submission regarding the independent assessment into the management of the 2020 Northern Basin First Flush event

Thank you for the opportunity to make a submission to the independent panel assessing the management of the 2020 Northern Basin First Flush event.

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 upstream tributaries. The Lower Darling is the only connection between the Barwon-Darling and the Murray Rivers, and therefore a critical link for the whole Basin.

As 'first flush' rules are being introduced under Water Resource Plans (WRPs) under the Murray-Darling Basin Plan (MDBP), it is important for any review to shape future decision making to reflect on the aim of the 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)

Any management of flows should adopt the above aim which is to enable flow events to be shared between all users along the length of the river. This requires interconnectedness and a consistent prioritisation of water needs, and is consistent with section 60(3) of the NSW Water Management Act 2000.

It has been well documented, particularly in the Vertessy (2019) and Keniry (2019) reports, that the health of the Lower Darling has been significantly adversely impacted by alterations in the increase in extraction in the Barwon-Darling and tributaries. To address the fundamental issues which are resulting in extended cease to flow events on the Lower Darling, there is a need to address fundamental flows in the rules and policies which allow the capture and extraction of water upstream. A critical part of this is to ensure that, especially in an extended period of dry, there is protection of flow events to the end of the system, in this case the Darling River. A healthy river system must be prioritised before allowing capturing and extraction of water for irrigation.

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 events in 2015-2016 and 2019-2020 have had a significant detrimental impact on the health of the river and floodplains, and there has not been an opportunity for the ecosystem to recover between 2016 and 2019. The two extended cease to flow periods also had a significant impact on the economic, social, psychological and physical health of the communities.

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

Year	Month	Duration (days)
1946	September – November	89
1947	January	19
2002	August – September	19
	September – October	19
	October – November	26
	December	10
2004	January – February	48
2005	November	10
2006	September	10
	September – November	42
2007	July – September	67
2007-2008	October – January	103
2009	July	9
2009	October – November	14
2015	February	3
	March	21
2015-2016	April – August	~500
2019 -2020	January 2019 – March 2020	430

In January 2020, the situation on the Lower Darling was dire. The few remaining stagnant pools of water were running dry, with regular native fish kills. Many of the remaining pools had blue-green algae, and were not safe for domestic or stock use. The river ecology was dying before our eyes,

river red gums hundreds of years old were dying, floodplain vegetation drying and dying with no underground moisture available from the river. Large numbers birds, reptiles and mammals were dying from thirst, refusing to drink the putrid water, or dying of toxicity after drinking.

One of our properties was dependent on a new bore (sunk with significant cost due to the inability to pump from the river); one property had only days of water remaining and; one property had been destocked entirely due to the absence of water. Our staff and families had depended entirely on donated bottled water for drinking and carted treated water for other domestic purposes for over a year. There was significant psychological strain on ourselves and our staff, having to deal daily with the reality of exceedingly poor water quality. Our business suffered significantly due to the absence of water, and where water was available, the foul water quality.

Experience of the flow event

This flow event occurred at a time when the Lower Darling was in ecological collapse, critical human needs and stock needs were not being met and the community was experiencing significant physical and psychological health, social and economic impacts from the state of the river. This scenario was not unique to the Lower Darling with many communities upstream in a similar dire position.

When the first rain fall event occurred, we had a great sense of hope that the event would provide relief to the Lower Darling and our communities. This hope was tempered by fears that no water would reach Menindee or that insufficient water would reach Menindee for a release down the Lower Darling, leaving the health of the river and our communities still in a dire situation.

The timely introduction of the 324 orders in NSW (referred to heron in as the embargoes) and Minister Pavey's criticism of the Queensland Government's failure to protect first flush gave us hope that the NSW Government was prioritising river connectivity to Wentworth, critical human needs and stock needs, as required under the NSW Water Management Act 2000.

The Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020 was implemented on 7 February 2020. There had been no prior notice, consultation or explanation of the Regulation's purpose. Just days later, an embargo on floodplain harvesting was lifted in tributaries of the Darling River, allowing irrigators to capture water off the floodplain under this Regulation (ie undertake floodplain harvesting legally). At this stage, the predicted inflows to Menindee Lakes was less than 80GL, and a high likelihood that the Lower Darling would not receive any flow from this event. When the expected inflow to Menindee Lakes reached 80GL shortly after, embargoes on extraction for licenses started occurring in a number of valleys. When these embargoes were lifted, many towns along the Barwon-Darling and Lower Darling did not have any flow, and there was potential that they would not receive flow resulting from this flow event.

What is likely not understood by those making decisions is the significant uncertainty that was felt amongst the Lower Darling community. Each decision to allow capturing or extraction of water was a significant blow to individuals and the community. This was at a time when we, like many others, were experiencing extreme physical and psychological health and economic stress due to the dire state of the Lower Darling.

Members of the Lower Darling community, ourselves included, were able to access information through regular WaterNSW Lower Darling River Operations Stakeholder Consultative Committee (ROSCCo). Whilst this regular form of communication was seen as a benefit in providing regular updates to the community, the regular absence of senior Department staff meant that many questions and concerns were not able to be raised. Members of the ROSCCo sought information on what targets were being set for the protection of flows. We were unable to get an answer for a number of weeks. We were subsequently told that a target of 80GL at Menindee Lakes had been set.

80GL of inflow at Menindee would have provided a 2-4 month flow event in the Lower Darling. A 80GL target falls far short of the 2 year drought supply for critical human needs and stock and domestic needs which is the target for drought management of the Lower Darling. Under the NSW Water Management Act 2000, the highest priority water user needs were unmet beyond the immediate period. In short, a 80GL target at Menindee falls far short of what is an environmentally or socially acceptable target.

Whilst over 500GL has now reached the Menindee Lakes, there was extreme uncertainty throughout the flow event, and this flow has only been achieved due to subsequent rain events. Releases out of Menindee Lakes occurred in mid March, using 50-60GL.

What was done well

- Embargoes of the first flow: We strongly support the introduction of embargoes in numerous valleys for the protection of the flow event. It has been noted that the speed at which the headwaters travelled was greater than similar flow events in recent years. It is likely that the protection of the first flush has enabled sufficient head pressure to enable this to occur.
- Compliance: There were visible compliance efforts during this flow event, which have not been seen in previous flow events. This was reassuring that compliance was being taken seriously, given the serious allegations of lack of compliance that have surfaced in recent years.
- Regular communication: The Lower Darling River Operations Stakeholder Consultative Committee (ROSCCo) provided regular updates and up-to-date information on the flow event.

What could be done better or differently in future events

- Provide a 2-year drought reserve to the Lower Darling as a priority: A 2 year planning period, ie a minimum of 300-480GL of water in the top two Menindee Lakes (Lakes Wetherill and Pamamaroo), has been used as a benchmark for supply of critical water to communities on the Barwon-Darling and Lower Darling. In February 2020 when the embargoes lifted, critical human needs on the Barwon-Darling and Lower Darling were not being met. The Lower Darling community were later informed that the Department's target was 80GL. The targets

set in this event did not align with the NSW Government's own targets for providing short- to medium-term water security for the Lower Darling. A target in first flush events must ensure a 2 year drought reserve is achieved for the Lower Darling.

- Ensure highest priority water users needs are met prior to providing access to other users: Extraction of water for irrigation and floodplain harvesting was legally occurring whilst Lower Darling communities did not have any water security for critical human or stock needs, and was potentially unlikely to receive any water from the flow event. This is in direct conflict with the NSW Water Management Act 2000.
- Adaptive management of multiple events: The event was a result of multiple rain events, which had an cumulative effect on the flow event. The Department has had a long-standing position to consider each event in its own right and not as a single event in a series. This results in a management approach which is not adaptive, and meaningfully reduces the effectiveness of flow events.
- Quantity of water required for re-connectivity: The Lower Darling community were told that 15-30GL would be required to return connectivity to the length of the Lower Darling. In reality, the return to connectivity used 50-60GL. There was a failure to model a realistic event, which would have had a significant impact on longevity of flows if only 80GL had reached Menindee Lakes.
- Consistent actions: The Minister's actions were contradictory, first criticising the Queensland Government for failing to protect flows, and then removing the protection of flows on floodplains in NSW only days later.
- Evidence of need to lift embargoes: There is a lack of evidence on the need to have lifted the embargo on floodplain harvesting.
- Evidence to justify 80GL inflow target at Menindee: There is a lack of evidence on how a target of 80GL inflow to Menindee was identified. It is in contradiction to NSW Government's management of Menindee Lakes and the Lower Darling. The 80GL target falls far short of the identified requirements of long-term critical human needs and stock supply on the Lower Darling. There is an alarming alignment with the NSW Government's SDLAM proposal, which has received community outrage and has been demonstrated to have negative environmental impacts.
- Transparency of targets: The target of 80GL was announced retrospectively. There was a lack of transparency on how this target was identified. There was also a lack of transparency on the management of embargoes in relation to this target. If this was the target, it should have been transparent at the commencement of the flow event.
- Transparency of lifting embargoes: The lifting of embargoes created significant concern and stress at a time when we had no access to quality water, and potentially no prospect of

access to water from this flow event. There was a lack of transparency in this process, as discussed above.

- Decision makers need to listen to community and respond in a timely manner: NSW Government staff were often absent during ROSCCo engagement by WaterNSW. As river operators, WaterNSW were not able to provide an adequate response to this established community consultation process. Department staff often did not respond to questions posed by the ROSCCo, or there was a significant delay in response.
- Monitoring of floodplain harvesting: The inability to monitor floodplain harvesting, in particular to undertake realtime monitoring, means there is no capacity to understand the impact on flows and apply adaptive management approaches.
- Formal legal protection of flows: The use of 324 orders is compromised. There is a clear need to embed protection of first flush and connectivity in formal legal structures. This should occur within the Water Resource Plans.
- Address delays in decision making: The uncertainty of the inflows to Menindee led to delays in the removal of the four block banks on the Lower Darling and delayed the delivery of water. This had further health and economic impacts on community.

What should be considered by the Panel in their assessment

- What evidence base was used in decision making processes: In particular, what evidence was considered when the embargoes were lifted, and in what manner was this evidence collected.
- Evidence-based decision making: There is a need to review the evidence-base on setting targets.
- Need for an end-of-system target: The Panel should consider the clear need for a target at end-of-system, which in this case is flow into the Murray. Targeting flow to Menindee is not a sufficient end-of-system target which takes into consideration the critical role of connectivity of the Lower Darling and critical human needs on this section of the river.
- Need for transparency in targets: There is a need for transparency in targets. Targets must consider quantity of water required for re-connection, safe water quality, having sufficient storage of water to meet critical human needs and stock needs for a minimum of 2 years on the Lower Darling, and the needs of higher priority water licenses (ie high-security licences) before allowing take by lower class licenses, as required under the NSW Water Management Act 2000.
- Targets must comply to the NSW Water Management Act 2000 section 60(3): There is a need to ensure that connectivity of the Darling and its tributaries and meeting critical human need are prioritised in the WRPs. This is in line with the NSW Water Management Act 2000.

We hope that through revision of management decisions of flow events in the Northern Basin, we have an approach that truly prioritises the river environment; and the environmental, social and economic disaster which has occurred in the last 7 years will be averted in the future. The community seeks appropriate management of first flow events to provide long-term base flow for the Lower Darling and critical human needs, and high-security water access.

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

Kind regards,



Robert McBride



Katharine McBride

Tolarno, Peppora and Wyoming Stations

[Redacted]
[Redacted]
[Redacted]