

7 May 2018

Mr Bret Walker SC,
Commissioner
Murray-Darling Basin Royal Commission
GPO Box 1445
Adelaide, SA 5001

Dear Commissioner,

Re: Submission to the Murray-Darling Basin Royal Commission, May 2018

Thank you for the opportunity to make a submission to the Murray-Darling Basin Royal Commission.

This document provides our experience and concerns going forward from the perspective of landholders who have been significantly affected by, what is in our opinion, poor implementation of the Murray-Darling Basin Plan. This document is set out with some general comments regarding the Lower-Darling region and our experience of the Murray-Darling Plan, and then specifically addresses specific elements of the Terms of Reference.

Importantly, we strongly support in principle the vision of the Murray-Darling Basin Plan, which is a healthy, working Basin through management of water resources. The aim of Plan 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) However, unfortunately experience demonstrates that this has not been achieved since the introduction of the Plan.

We 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, cattle and rangeland goats.

Background on the region:

The Lower Darling, a 500km stretch of river which includes the Menindee Lakes, is integral to the social, cultural and economic livelihood of the communities of Menindee, Pooncarie, Ellerslie and Wentworth, as well as providing critical water to the township of Broken Hill. It is the traditional lands of the Barkindji Nation, who have continued connection to the river and country.

The Lower Darling is a profitable agricultural community with predominantly pastoral production, including sheep, cattle and rangeland goats. There is also a strong citrus production industry. The area has a long and rich history in this industry, dating back to the 1850s. The industry requires a healthy, sustainable river system for economic viability, with properties dependent on pumping small quantities of water for stock and domestic purposes or permanent plantings, either directly from the river or from groundwater replenished by the river.

It has only been in the last 15 years that the viability of the Lower Darling and Menindee Lakes has been in question. As shown in Table 1, dating back to 1940, there were only two occasions when the river had ceased to flow prior to 2002. Since 2002, there have been 15 cease to flow events, which have 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

(~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

The Lower Darling is some of the most valuable habitat in the Southern Murray-Darling Basin. The Menindee Lakes are a vital spawning and recruitment site for Golden Perch, with 60-80% of all of this species in the Basin originating from this stretch of the River and Lakes. The Lower Darling is also home to one of the strongest populations of Murray Cod in the Basin, due to the traditionally reliable and naturally occurring flows. The ecological importance of this stretch of river for the whole Murray-Darling Basin is only now just being understood by scientists. The Menindee Lakes are also an important site for wildlife, particularly waterbirds, being the home of a number of threatened and endangered species local and migratory birds.

The Lower Darling catchment has minimal runoff and is entirely dependent on the Northern Basin. The Lower Darling catchment is fed directly by the Barwon-Darling catchment, of which 99% of flows are generated in upstream catchments (MDBA). The Lower Darling is the only connection between the Northern Basin and the Southern Basin.

Recent experiences on the Lower Darling

In November 2012, the Menindee Lake system was at full capacity (98.8%).

In 2013/2014 the decision was made to use water stored in Menindee Lakes at the first source of water to fulfil requirements for flows to SA. At the time, there were concerns made by both landowners and bureaucrats alike across the Murray-Darling Basin about the pressure this decision would place on the Menindee Lakes. These calls were ignored.

As a direct result of minimal inflows into the Menindee Lakes and Lower Darling and excessive released from the Menindee Lakes, in 2015-2016 the Lower Darling saw an unprecedented environmental disaster.

In 2015-2016, the Lower Darling at Tolarno Station was completely dry for a period of 8 months. The dry river period in 2015-2016 was longer and had greater economic, social and health impacts than any dry river period during the 2000s drought.

During this period, there were significant and long-lasting social and economic impacts to the community. On our properties alone, we experienced significant loss of land, stock and production. Over 200,000 acres of land was lost to production due to loss of property borders (the river is a natural boundary between properties) and no potable water for stock or domestic use. The water quality in the remaining water hole was so poor, the water became toxic and was unsafe for use. In time, the bore supply also reduced in quality and supply.

The impact on the community was significant. Agricultural businesses across the region experienced similar issues with toxic water supplies, loss of property boundaries, and death of stock. The cost of new bores and additional infrastructure was substantial, and no government support was received. The township of Pooncarie (population approximately 100) relied on trucked water for at least 3 months. At least 3 children developed staphylococcal infection which is highly resistant to antibiotics caused by exposure to the toxic river water.

In the lead-up to the dry river event of 2015-2016, the catchment had received average rainfalls over the preceding 12 months, and in our opinion the event was a direct result of over-diversion upstream in the Northern Basin, specifically:

- mismanagement of water resources in the Murray-Darling Basin by NSW Government and the Murray-Darling Basin Authority, specifically Menindee Lakes.
- significant changes made to the Barwon-Darling Water Sharing Plan by NSW Government in 2011.
- the use of Commonwealth-owned environmental water for irrigation purposes.

In March/April 2016, DPI Water senior bureaucrats visited the affected community of Pooncarie. At this meeting NSW DPI Water were asked that:

- all water below Bourke currently available should be immediately prioritised for the purpose of returning water to the Lower Darling River below Menindee Lakes.
- An embargo be placed on irrigation extractions, to return water to the Menindee Lakes and the Lower Darling for the environment and communities.
- there be full environmental impact study undertaken prior to any pumping of shallow bores at Menindee Lakes for the purpose of water supply to Broken Hill, to understand the long-term consequences.

There was no action taken by NSW DPI Water on any of these points. We were told by a senior bureaucrat that, categorically, there would be no embargoes placed to support return of flows to the Lower Darling.

Senior DPI Water bureaucrats acknowledged in Pooncarie in March/April 2016 that small flows had not been embargoed, and that if they had been it was likely that there would be water in the Lower Darling.

Flows returned to the Lower Darling in August 2016, a result of unseasonal floods in Queensland and northern NSW. If this unseasonal event had not occurred, it is uncertain when water would have returned to the Lower Darling, if at all.

The Menindee Lakes were at 90% capacity in December 2016. The community again called for the NSW Government and MDBA to improve management of the Menindee Lakes storage to prevent the lakes and Lower Darling going dry. We argued that draining the Menindee Lakes as first preference of supply is not sustainable, and that the justification on the basis of high evaporation rates was not valid over having a connected river system and water in the Lower Darling. Despite repeated calls, use of the Menindee Lakes storage commenced in December 2016, including release of environmental water. In December 2017, the 480 GL drought trigger for handover of management from MDBA to NSW occurred. In early 2018, large stretches of the Lower Darling and Menindee Lakes experienced blue-green algae events, putting people and livestock again at high risk. WaterNSW model that the Lower Darling will cease to flow in December 2018.

Given the lack of protection of low and medium flows in the Barwon-Darling, the Menindee Lakes and Lower Darling will be dependent on the next flood to return water to the river. This may not occur for many years. This will have direct impacts on the supply of water to South Australia in the coming years.

The Menindee Lakes Sustainable Diversion Limit (SDL) Adjustment Mechanism Project

We have many concerns regarding the SDL adjustment mechanism (SDLAM) projects, which have not yet been approved by the Federal Parliament. Given the limited information available, there are significant flaws in the overall SDLAM process put forward by the MDBA in their consultation paper in 2017, these include:

1. The lack of any mechanism to guarantee that SDL adjustments proposed beyond the 5% limit of change are fully offset by additional environmental flows secured through the efficiency measures.
2. Issues such as climate change, and the changing geographical pattern of irrigation demand has not been taken into account in the current proposal.
3. Accounting for projects in the proposed SDL adjustment in 2019, before they are completed and their outcomes assessed in 2024.
4. A failure to provide any detail of the supply measure projects. The brief description provided is not adequate for stakeholders to provide informed feedback on any of the individual measures. This significantly inhibits appropriate scrutiny.
5. The timing of consultation less than two months from the date of final determination indicates that this consultation is only lip service and that the MDBA have no intention of addressing or integrating consultation feedback. The length of time for consultation provided limited opportunity to review the complex and far-reaching set of measures.
6. There is a failure to ensure that environmental water is shepherded when crossing state borders.

7. It is proposed that SDLAM projects must be implemented by 2024. Projects implemented in 2023 and 2024 will be impossible to evaluate in terms of yield if 2024 is the measurement year.
8. Recent allegations of compliance raise concerns of Basin-wide processes and systems to prevent inappropriate or illegal activities by individuals or governments.

In addition to these concerns, there are real questions regarding the quality and integrity of some of the SDLAM projects proposed. The "Structural and operational changes at Menindee Lakes" project (the Menindee Lakes project) is one such project. In the case of this project:

- The MDBA's own analysis of this project highlights significant concerns with the project, including:
 - the absence of an environmental impact statement,
 - failure to address potential risks and impacts to downstream users, including reliability of supply, water quality and interactions with planned environmental water,
 - the potential for adverse ecological impacts given the filling regime of the Lakes will be much dryer than natural occurrences,
 - failure to address mitigation measures,
 - potential loss of habitat of the Golden Perch nursery (this nursery's significance across the Basin discussed above),
 - questions about the environmental outcomes previously achieved through other projects undertaken by the NSW Government, in particular the Great Darling Anabranch Pipeline project,
 - the project is outside the MDBA's framework for testing environmental equivalence,
- No information has been made publicly available by NSW Government on the project;
- There has been no consultation process with communities regarding the structural and operational changes, or the impact on lake levels and permanent flows down the Lower Darling;
- The NSW and Commonwealth Governments are undertaking a number of associated projects/actions which will impact this project. There has been no information released on the alignment or combined impact of these projects.
- Changes to the Barwon-Darling Water Sharing Plan made in 2011, which undermine the Murray-Darling Basin Plan, have not been reversed, and the impacts of this on the Menindee Lakes project fully investigated.
- It is alleged that documents specifically related to this project were confidentially released to a select group of irrigators by NSW Government employees. All investigations relating to this matter, and other allegations related to flows into the Menindee Lakes and Lower Darling should be completed, and issues resolved, prior to progression of this project.
- The community has significant doubt on the integrity of this project, particularly given the finding of systemic issues (Matthews Report, 2017) which have led to a failure of the NSW Government to implement the Plan.

The community is strongly opposed to this project, and are committed to ensuring that the project is either implemented in a transparent and honest manner, or is stopped. Given this is a significant project in terms of the SDLAM, and a major project for NSW Government, this brings into great uncertainty the full implementation of the SDLAM projects.

Responses to specific elements of the Terms of Reference

Whether the Water Resource Plans defined by the Act and Basin Plan (which are to include the long-term average sustainable diversion limits for each Basin water resource) will be delivered in full and in a form compliant and consistent with the Basin Plan by 30 June 2019.

It is our opinion that there has been a lack of corporate capacity within NSW to achieve the Water Resource Plans (WRPs) by mid-2019, and it is our understanding that there is little scope for NSW to have all plans accredited by mid-2019.

There has been limited communication with relevant stakeholders in downstream WRP regions regarding the impacts of upstream WRPs in NSW. There has also been limited communication with pastoral communities along the Lower Darling regarding the region's own WRP.

It is critical the needs of downstream users are prioritised in WRPs going forward. To date, this has not been the case with Water Sharing Plans (WSP), which is evidenced by the situation experienced on the Lower Darling in recent years.

It is also important that the WRPs re-focus on the importance of connectivity. This failure to prioritise connectivity (particularly in the Lower Darling) over needs within the WRP area will result in a failure to have enhanced environmental outcomes in the Basin.

It is critical that there be an increased connectivity between WRPs. There is a need for community and environmental water requirements to be based on long term watering plans, and not current flawed models. It should also be noted that models using long term averages in the Northern Basin should not be used, given variability and change in irrigation practices in recent years.

Whether the Basin Plan in its current form, its implementation, and any proposed amendments to the Plan, are likely to achieve the objects and purposes of the Act and Plan as variously outlined in ss.3, 20, 23 and 28 of the Act, and the 'enhanced environmental outcomes' and additional 450 GL provided for in s. 86AA(2) and (3) of the Act, respectively.

As discussed previously, we have significant concerns regarding the implementation of the Murray-Darling Basin Plan in its ability to achieve the objectives and purposes of the Act and Plan, and deliver 'enhanced environmental outcomes'. We make the following points:

- There has been a failure in the implementation and evaluation of the Plan to report against measurable environmental outcomes of the Basin Plan. There is a need to increase focus on measuring and evaluating actual 'enhanced environmental outcomes', and this should include basin-wide connectivity. Basin-wide connectivity, in other words having one connected eco-system, has been lost from the original intent of the Plan of "managing the basin as one system" (MBDA), and has resulted in many issues we observe today on the Lower Darling.
- Since the allegations raised by Four Corners in July 2017, and subsequent allegations made through the media, we as members of a community in NSW directly affected by their actions, have not witnessed a substantial change in the NSW Government's attitude to the Plan or water management. The community has significant concerns in the integrity of NSW Government, particularly given the finding of systemic issues (Matthews Report, 2017) which have led to a

failure of the NSW Government to implement the Plan. Having reviewed the consultation paper for the NSW Government's proposed water reform package in April 2018, we are concerned that these reforms will not reach recommendations of the Matthews Report. There have also been allegations made in the media that as recently as December 2017, senior Water NSW bureaucrats have sought to protect the interests of select irrigators at the cost of downstream communities.

- Downstream community and environmental impacts of low or no flows is not properly addressed. Focus is on the impact of flooding, when the greatest issues experienced on the Lower Darling are little or no water, and water of poor quality. These issues are closely associated with the trading and water management rules of the Barwon-Darling WSP.
- We have significant concerns regarding the accounting practices for the Sustainable Diversion Limit Adjustment Mechanism (SDLAM) projects. The water 'savings' will be accounted for in 2019, however, some projects will not be completed until 2024. This issue is discussed above.
- We have significant concerns regarding the integrity of some of the Sustainable Diversion Limit Adjustment Mechanism Projects put forward, in particular the Menindee Lakes Project. Concerns are detailed above.
- The allegations raised since the Four Corners "Pumped" has resulted in widespread community distrust, which in turns erodes the implementation of the Plan. This distrust will not be reduced until there is a transparent decision making system put in place. An example of the distrust is with the Menindee Lakes SDLAM project. Despite clear evidence that the outcomes of the project could in fact have negative environmental outcomes in the MDBA's own analysis, the project has continued to be included in the suite of projects put forward in the Adjustment Mechanism. There is an obvious lack of transparency in the process, including the failure of the MDBA and the NSW Government to release key documentation on the projects.
- There are issues regarding the ability of environmental flows purchased under the Plan are able to travel un-extracted through the system. There has been much spoken about this issue in the last 18 months. The embargo placed on environmental flows in April 2018 in NSW demonstrates this ongoing issue. There is a critical need to have automatic protection of environmental flows which does not depend on a government to introduce embargoes specific to that occurrence. It is noted that the Australian Bankers Association has made a submission to the NSW Government's consultation on the Water Reform Action Plan in April 2018. It is our understanding that the primary concern made in this submission is that the measures being considered under the NSW Water Reform Action Plan regarding the shepherding of environmental water may decrease the value of irrigator water rights, thereby reducing the collateral value of entitlements as security for loans.

If the Basin Plan is unlikely to achieve any of the objects and purposes of the Act and Basin Plan and/or the 'enhanced environmental outcomes' and the additional 450 GL referred to above, what amendments should be made to the Basin Plan or Act to achieve those objects and purposes, the 'enhanced environmental outcomes' and the additional 450 GL?

We acknowledge that this is not our area of expertise. However, there are some practical considerations to achieve the objectives and purposes of the 'enhanced environmental outcomes' and the additional 450GL:

- Re-orientation of monitoring and evaluation of the plan to focus on environmental outcomes. This is identified as a gap in the Productivity Commission Issues Paper (Productivity Commission, 2018).
- Re-orientation of implementation targets and outcomes which ensure that the MDBP focuses on connectivity of the whole system, and secondary targets such as efficiency in water utilisation recognised as that – a secondary or tertiary target and outcome measures.
- It is unlikely that this Royal Commission will have full coercive powers in other jurisdictions. A Federal Royal Commission which has full coercive powers of investigation across all Basin States and relevant governments, should build on the findings and recommendations, and address any gaps, identified through this Royal Commission.
- Policies in place to ensure the systematic protection of environmental flows to prevent extraction.
- Increased transparency in decision making by the MDBA, with clear criteria and decisions made against these criteria.
- Increased transparency in the conduct, decision making and actions to fully implement the Plan required of Basin State governments, in particular NSW. This should ensure that all decision, policies, and actions are in line with implementation of the Plan, and do not compromise its integrity.
- The current complexity of the institutional and governance arrangements of the Plan compromise transparency, proper oversight and community engagement. It is too complicated to comprehend, and there is constant blame shifting between bodies. It is difficult as a landholder and community member to engage with. This is complicated by a lack of transparency and unbiased consultation processes by the NSW Government and the MDBA. We propose a more streamlined governance arrangement which addresses these issues. It is critical that the arrangements be simplified and that there be clear responsibilities for each body. These should be clearly delineated and communicated to the community.
- A final review and approval process for the Sustainable Diversion Limit Adjustment Mechanism projects before commencement. This should ensure that environmental outcomes are to be achieved, and that there will not be detrimental environmental outcomes as a result of any project.
- Ensure that adequate funding is available in 2024 to purchase water through buy-backs in the event that the Sustainable Diversion Limit Adjustment Mechanism projects do not achieve the stated 605GL savings in water. If funding is not able to be put aside in 2018 for this eventuality in 2024, the projects should not receive final approval or funding.

The likely impact of alleged illegal take or other forms of non-compliance on achieving any of the objects and purposes of the Act and Basin Plan, and the 'enhanced environmental outcomes' and the additional 450 GL, referred to above.

It is our position that alleged illegal take and other forms of non-compliance have had a significant impact on the health of the Lower Darling. It is alleged that one case of water theft occurred during an embargo and in a period when the Lower Darling was dry. Such an

alleged illegal take had a huge impact given that this water was not able to come down the system to wet the river bed and return water to severely impacted stretches of the river. However, we would note that in our opinion, it has been the changes made to the Barwon-Darling Water Sharing Plan in 2012, allowing significantly increased levels of extraction and at lower river levels, all legal, which has had a far greater impact on the Lower Darling and providing 'enhanced environmental outcomes' across the Basin.

In relation to any found instances of illegal take or work, whether appropriate enforcement proceedings have been taken in respect of such matters and if not, why.

It is our opinion that there has not been appropriate enforcement proceedings taken in respect to instances of illegal take or work. It is clear through the allegations made by Four Corners and proceeding stories that there was a clear lack of enforcement in the Northern Basin prior to July 2017. In our opinion, the delay in legal action taken by NSW Government against those alleged of water theft in Four Corners in July 2017 indicates a lack of appropriate enforcement proceedings and suggests a lack of will to act by NSW Government. It is our understanding that many illegal works have not been removed, and that the relevant NSW Minister retrospectively approved works. The rigour in which these illegal works were reviewed is unclear, and there is a lack of transparency regarding this matter.

There remains a failure by both the MDBA and the NSW Government to ensure that there are appropriate compliance and related enforcement measures in place.

Whether monitoring, metering and access to relevant information (such as usage data) is adequate to achieve the objects and purposes of the Act and Basin Plan and the 'enhanced environmental outcomes' and additional 450 GL referred to above.

A key aspect associated with compliance is a consistent set of rules across all states in terms of measurement and metering, which is clearly not the case. The 2017 Matthews Report found NSW Government had very weak measuring and metering, and had clear recommendations. In the recent consultation paper on the NSW Water Reform Action Plan, it is uncertain whether the recommendations of the Matthews Report will be followed, in particular the introduction of no meter, no take rules. If the recommendations of the Matthews Report are not implemented by NSW, there will be ongoing concerns regarding compliance and consistency across states.

Having reviewed the NSW Water Reform Action Plan consultation papers, we have significant concerns that NSW Government will fail to achieve a level of monitoring, metering and provision of access to relevant information which will achieve the objects and purposes of the Act and MDBP and meet consumer expectations.

Whether water that is purchased by the Commonwealth for the purposes of achieving the objects and purposes of the Act and Basin Plan and/or the 'enhanced environmental outcomes' and the additional 450 GL referred to above will be adequately protected from take for irrigation under water resource plans, and any recommendations for legislative or other change if needed.

As mentioned previously, we are concerned that the WRPs will not provide adequate protection of 'environmental water'. A key issue is the lack of recognition of the need for connectivity of the system. Our suggestions are provided elsewhere in this paper.

Whether the Basin Plan in its current form, its implementation, and any proposed amendments to the Plan, are adequate to achieve the objects and purposes of the Act and Basin Plan, the 'enhanced environmental outcomes' and the additional 450 GL referred to above, taking into account likely, future climate change.

We have significant concerns that the current implementation of the MDBP will fail to achieve the objects and purposes of the Act and Basin Plan. As discussed previously, we have significant concerns about the lack of focus on connectivity of the rivers, and an over-emphasis on efficiency which has resulted in poorer environmental outcomes on the Lower Darling. We are concerned about the intent of the NSW Government regarding the Plan given the systemic issues identified within the bureaucracy. We are yet to see a response by NSW Government which effectively addresses the significant issues raised by the Matthews Report. We also have significant concerns with the processes which have taken place within the Northern Basin Review and the SDLAM. There is a clear lack of transparency, which has resulted in significant community distrust of the MDBA and of the NSW Government in our region.

We again thank you for the opportunity to make a submission to the Murray-Darling Basin Royal Commission, and are happy to be contacted regarding this submission.

Robert McBride **Katharine McBride**
Tolarno, Peppora and Wyoming Stations