

WITNESS STATEMENT

Name: William Johnson
Occupation: Consultant
State: New South Wales

1. My name is William Johnson and I am providing this statement to the staff of the Murray-Darling Basin Royal Commission. (**Commission**)
2. I have provided a detailed submission to the Commission dated 29 April 2018.
3. I provide this statement in addition to that submission.

Background

1. I am currently a member of the NSW Barwon-Darling Water Resource Plan Stakeholder Advisory Panel. I have held this position since March 2017.
2. I have a significant background and involvement with environmental and water resource management, particularly across the Northern Basin where I have lived and worked for much of my life.
3. In the 1980s and 1990s I was a Ranger with the New South Wales (**NSW**) National Parks and Wildlife Service. In this role I was responsible for managing the Ramsar-listed Macquarie Marshes Nature Reserve in northern NSW, including responsibility for the delivery of a 50,000 ML environmental water allocation. This was the beginning of my experience as an environmental water manager.
4. I was then, and later, involved with water planning and policy, including the development of Water Sharing Plans in the Macquarie, Gwydir and Namoi valleys.
5. I subsequently prepared Adaptive Environmental Management Plans for the Macquarie Marshes and the Gwydir Wetlands. These plans have regard to the effects of climate change in the formulation of their recommendations, referencing the CSIRO sustainable yields report to the Australian government. The CSIRO best estimate for these areas was a reduction in water availability. Management options that consider this are included in those plans.
6. My involvement with water planning exposed me to the difficulties applying hydrological modelling to environmental management in the Northern Basin, especially linking flows to ecosystem responses. From my experience with hydrological models, I am aware that they are not well-suited to representing the way environmental water is managed. Assumptions should be included in hydrological models that represent how environmental water is used and delivered and protected in practice.

Signature

W. Johnson

Date

24/7/2018

Witness

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Role at the MDBA

7. In 2009 I joined the Murray-Darling Basin Authority (**MDBA**) on secondment from the NSW Government. In 2011 I applied for a permanent position with the MDBA. At that time I believed, not only that water reform would benefit from Commonwealth intervention, but that it was essential for progress.
8. I was employed at the MDBA from 2009 until July 2016. During my time at the MDBA I was engaged in various roles.
9. One of my early responsibilities was managing the section responsible for identifying environmental assets and functions.
10. I later had some involvement in water planning involving consideration of different water recovery targets. This included work on the Guide to the Basin Plan published in 2010.
11. I worked on Chapter 8 in the lead up to the release of the Basin Plan in 2012, and until 2015 on the preparation of the Murray-Darling Basin annual environmental watering priorities, environmental watering outlook, and environmental watering strategy.
12. In my final role at the MDBA I worked as the Director of Engagement for the Northern Basin Review. My responsibilities in this role included arranging community consultation in the Northern Basin. I arranged about 30 meetings in approximately 20 towns for community members to meet with Phillip Glyde, Chief Executive, MBDA, other members of the Authority, and members of the Northern Basin Advisory Committee.
13. During my time at the MDBA I maintained a practice of making and maintaining contemporaneous notes of meetings, discussions and decisions that I was involved in. My recollection of events detailed in this statement has been assisted by reference to my notes.

Water Recovery

14. The modelling used by the MDBA was not dissimilar to the modelling I dealt with in my prior experience as an environmental water manager. It is difficult to model actual flows in the Northern Basin.
15. I recall that after the release of the Guide there was a change in the water recovery targets being discussed.
16. My view was that the change appeared to be the result of the reaction to the way the Guide was received and not based on how well the modelling represented the rivers of the Northern Basin.
17. I considered that efforts to provide a scientific basis for the amount of water recovered was abandoned. I recall that there were people working at the MDBA who were disappointed by the change to the water recovery target.

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Northern Basin Review

18. At pages 3-4 of my submission, I have discussed the Northern Basin Review. At the top of page 4 I said that the recommendation of the Northern Basin Review was inconsistent with the *Water Act 2007* (Cth), having regard to matters including the scientific findings for the Ramsar-listed Narran Lakes.
19. Further to my submission, my full-time involvement in the consultation process for the Northern Basin Review started in November 2015. Having reviewed my notes of the consultation process, I recall that some common concerns expressed during the community meetings were:
 - a. The Barwon-Darling Water Share Plan, particularly the removal of pump size limits for A Class licences and failure to introduce Individual and Total Daily Extraction Limits;
 - b. The purchase of water for the environment from the tributaries of the Barwon-Darling and subsequent extraction of that water by irrigators when it reached the Barwon-Darling;
 - c. Suspicions of water theft in the Barwon-Darling.
20. I brought these issues to the attention to the MDBA.
21. I also brought it to the attention of the MBDA that the MDBA's position on the Cap and protection of environmental water was not consistent, as it undermined the justification for the shared reduction amount and possibly the recovery itself. I also raised concerns that there was no research on ecology or Aboriginal cultural values outside the Barwon-Darling and the Condamine-Balonne.
22. I was informed by Frank Walker, Director Northern Basin Review, MDBA, that environmental flows in the Barwon-Darling are not assumed to be shepherded on an event by event basis but that the protection of environmental flows is done in the model by ensuring the long-term average diversions do not change.
23. It was also communicated to me by Mr Walker that growth in diversions in the Barwon-Darling is prevented from being shown in the model as the model was adjusted. Mr Walker confirmed that the MDBA adjusted the NSW model for the Barwon-Darling Water Sharing Plan. I am not aware of the nature of these adjustments.
24. I recall that in November 2017, a senior officer of the MDBA said that the hydrological model did not represent flows in the Barwon-Darling at Bourke well.
25. Examination of flow records shows that since 2000 the Barwon-Darling has flowed below 2,000 ML a day below Bourke about 75% of the time. What that said to me was that the modelling used to inform flows in the Barwon-Darling as part of the Northern Basin Review does not represent the river the majority of the time.
26. During May and June 2016, when I was Director of engagement for the Northern Basin Review, I had several meetings with Brent Williams, then the General Manager of the Northern

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Basin Review Taskforce, MDBA. We disagreed with the consultation approach adopted for the Northern Basin Review.

27. On 6 June 2016 I had a meeting with Russell James, Executive Director, Compliance, MDBA, who told me that Brent Williams no longer wanted me to continue working on the Northern Basin Review. Mr James told me that my options were another job within the MDBA or a redundancy. I chose to accept the redundancy.
28. In my view, the MDBA is a traditional water agency in many ways. It has strong skills in hydrology and engineering. During the Northern Basin Review (and from my observations since) the MDBA placed too much reliance on hydrological modelling to guide and support policy decisions, and encountered difficulties when trying to link this modelling to social, economic and ecological responses. It became a very technocratic world that was not accurately reflecting reality.

Climate Change

29. From my past experience, I believe that the effects of climate change could have been better considered in developing the Basin Plan.
30. In my view, based on the CSIRO Sustainable Yields Project (2008), as climate change takes effect, and the Basin becomes drier, the volume of water available for all users will diminish. However, irrigation will have access to a greater proportion of the available water and the environment a smaller proportion, due to reduced unregulated flows and fewer dam spills.
31. I am also concerned that smaller irrigators will not have the same capacity to respond to climate change as larger irrigators.

Water Resource Plans

32. I have discussed water resource plans at pages 1 and 2 of my submission.
33. Further to my submission, I recall conversations involving Tony McLeod at the MDBA, who described the future Water Resource Plan accreditation as a 'tick and flick' process.
34. From this I was concerned that Water Resource Plans would be the bare minimum required, resulting in little gain from the Basin Plan process.

Floodplain Harvesting

35. On 16 March 2018, I attended a stakeholder meeting in Dubbo held by NSW Department of Industry, Water. This meeting was organised as part of NSW Water Reform Action Plan.
36. Four policies were presented at that meeting, namely metering, management of environmental water, transparency measures, and floodplain harvesting. The consultation was largely about approaches to developing the policies.
37. However, the consultation about floodplain harvesting was about how the pre-existing policy was going to be implemented.

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38. I recall Dan Connor from the NSW Office for Water saying that the amount of water in floodplain harvesting in NSW has been grossly underestimated, and that there is no measurement of Floodplain Harvesting in NSW.
39. The approach to licencing Floodplain Harvesting communicated at that meeting was that NSW plans to grant floodplain harvesting licenses first and work out how much water is involved later.
40. It was said at the meeting that no consideration has been given to the impact that floodplain harvesting will have on the environment.
41. A representative of the MDBA present at that meeting suggested, when asked, that when the policy was implemented the SDL will raise by the amount of floodplain harvesting because it is already being taken and included in the modelling as a loss.

Signature *W. Khan*
Date *24/7/2018*

Witness *ADK*
Date *24-7-18*