

Northern Basin Review submission by Mal Peters, former Chair of the Northern Basin Advisory Committee

My motivation to Chair the Northern Basin Advisory Committee (NBAC) was to ensure that the diverse range of interests in the Northern Basin community: rural and aboriginal communities; floodplain graziers; irrigation; and the environment; were recognised by the MDBA. Water reforms inflict a great deal of uncertainty and anxiety upon communities and the Basin Plan is the third major attempt at water reform by the Commonwealth government. I wanted to contribute to its success to avoid a fourth attempt at water reform. After working closely with MDBA between 2012 and 2016, I am convinced that this reform has failed and a fourth attempt at water reform will be inevitable. The MDBA has failed to recommend a SDL that is justified by either the science or the socio-economic information. The recommended SDL targets will trade rural communities against each other, yet both the economic and hydrological science is highly questionable.

NBAC was a statutory committee established under s203 of the Water Act (Cth 2007) to advise the Murray-Darling Basin Authority (MDBA) on the development and implementation of an MDBA Northern Basin work program. Throughout the process, NBAC was seldom confident that MDBA were giving them the information necessary to fulfill their charter and we believed MDBA at times withheld or provided misleading information. It has now become clear that this was in part because MDBA has compromised its independence and technical role in favor of irrigation industry, with blatant disregard for all other stakeholder groups - rural communities, floodplain graziers, aboriginal communities and the environment.

Giving some communities a temporary reprieve that has to be revisited on a change of Government when water reform 4 occurs is irresponsible, because of this I do not support MDBA's recommendation to revise the SDL in the Northern Basin based on a process with major flaws behind the recommendation. I have provided a limited list of my criticisms in this submission.

Hydrological modeling

MDBA does not have a model run that represents the final SDL reduction, which is clearly not acting on the best available scientific knowledge.

MDBA's hydrological modeling for the Barwon-Darling does not reflect the Barwon-Darling water sharing plan established in 2012. Rule changes in that water sharing plan have resulted in the introduction of large scale irrigation at low flows which has made major changes to the hydrology, particularly low flows, in the Barwon-Darling. Any rationale to change the SDL which is not based on a model that reflects the current rules and hydrology is unjustifiable.

MDBA would not provide the water sharing plan modeling results to NBAC, despite many requests from NBAC and a commitment from MDBA to do so, nor are they shown in the hydrological modeling report. MDBA states that the comparison between the model used and the water sharing plan model show that the long term average diversions are the same. This is to be expected, given that maintaining the same long term average diversions is a key assumption in both models. It is not proof that the hydrology is unchanged due to the changes in the water sharing plan, nor is it justification for MDBA not to have used the water sharing plan model.

MDBA justification that using a model that does not represent the current hydrology was necessary because the Barwon-Darling WSP model has not been accredited is inadequate:

- The entire justification of the NBR was to determine a SDL based on better science, which clearly requires using the most current models available.
- The Barwon-Darling WSP is an interim plan under the Basin Plan with a model run referenced in the water sharing plan. It is inconsistent to accept the interim plan, but not the model run that represents it.
- The Barwon-Darling model used for the NBR is also not an accredited model. It had provisional accreditation from 2010 until 2015, subject to New South Wales Department of Primary Industries (DPI) addressing shortcomings in the model. DPI did not address those shortcomings and the provisional accreditation has expired, yet was continued to be used for the NBR.
- There is no legal basis to assume a model is accredited if it was used to inform the NBR.
- MDBA developed the Basin Plan in 2012 using the Barwon-Darling model that was only provisionally accredited at the time. MDBA did not raise concerns then, that doing so might prejudice the future accreditation process. It is at best inconsistent to use that argument for the NBR.

MDBA also stated that the WSP model could not be used because it was received late in the process. This is an inadequate justification because:

- The model run existed when the Barwon-Darling WSP was made in October 2012, and it is referenced in the WSP.
- I understand that MDBA was interrogating the WSP model for at least a year prior to the release of the NBR. This would seem to give MDBA more than enough time to use the WSP model.

Modeling is viewed by most community members as questionable but accept it is the only tool available however MDBA cannot credibly make any recommendations about water recovery from communities based on hydrological modeling when the cumulative standard error in the northern basin is 380GL. This is nearly as high as the original reduction in the SDL and more than 5 times the proposed adjustment. The standard errors in the models are 95GL (28%) for the Gwydir; 52GL (19%) for the Namoi; 132GL (30%) for the Macquarie/Castlereigh/ Bogan; 58GL (43%) for the Lower Darling and 43GL (23%) for the Barwon-Darling. If I ran my farm with such wide discrepancy I would be out the gate in no time.

Socio-economic data

MDBA has made much of the impact of the Basin Plan on Dirranbandi and Warren, and has reported that jobs in those towns have declined because of the Basin Plan, thereby justifying the increase in the SDL.

Documents obtained by the NSW Environmental Defenders Office (EDO) under freedom of information have been made available to some NBAC members and they reveal that MDBAs analysis shows jobs in Warren have increased in the irrigation agricultural sector and decreased in the non-irrigation sector. MDBA has grossly misrepresented both the figures and conclusions by attributing a net decrease in jobs in Warren to the Basin Plan.

MDBA's bias to irrigation at the expense of rural communities, floodplain graziers, aboriginal communities and the environment is demonstrated in its method to assess socio-economic impacts of the Basin Plan. That analysis only looked at the sole socio-economic impact relating to irrigation and not the other uses of water or from the perspective of other stakeholders. It is totally unacceptable that the poorer towns that will have the major impact from the NBR had no socio-economic analysis the non-irrigation communities downstream of Bourke: Louth, Wilcannia, Menindee and Pooncarie will all be highly impacted by the Basin Plan.

Toolkit

NBAC believed that the toolkit was a critical component to achieve the outcomes sought under the Basin Plan, if it was properly implemented. The toolkit includes two important policies of the protection of environmental water by event and the coordination of environmental water.

The States are responsible for implementing the policies of protecting environmental water by event and since the NBR was released, DPI is on the public record that they will not implement policies to protect environmental water by event.

The coordination of flows is completely unrealistic because it is operationally infeasible. MDBA have been advised of this by WaterNSW river operators, but have ignored this advice.

MDBA is aware that NSW has no intention to implement either the protection of environmental water by event or the co-ordination of environmental flows and they are completely disingenuous to promote these policies as a justification to adjust the SDL.

Both the protection of environmental water by event and the coordination of environmental flows was assumed in the hydrological models. If they are not implemented, more environmental water will be required to achieve the modeled outcomes. Implementing them will not create additional water savings.

NBAC has consistently rejected MDBA's proposition that environmental water does not need to be protected by event, because it is protected on average over the long term. If environmental water is not protected on an event basis, the water recovered from upstream communities for the Commonwealth Environmental Water Holder is simply extracted by downstream irrigators.

Flawed process

NBAC was repeatedly frustrated by MDBA's refusal to explain the data inputs and method which underpinned the socio-economic models. Subsequent correspondence made available by the EDO freedom of information request reveals that MDBA appears to have provided the socio-economic models to peak industry groups for irrigation for those groups to input data into. That is especially inappropriate given that MDBA has subsequently relied on a socio-economic argument to justify the reduction in the water recovery target. The MDBA has no credibility or moral authority in making decisions based on socio-economic data that was changed by peak industry groups representing irrigation.

I am not aware of any other stakeholders having access to the socio-economic models.

Papers obtained under the same EDO's freedom of information request also revealed that MDBA appears to have made the hydrological model available to the Northern Irrigators Alliance (NIA) in July 2016. At the same time, NBAC was increasingly frustrated and vocal at the absence of information from the MDBA regarding the hydrological models. I am not aware of the environmental

water holders, floodplain graziers, community or aboriginal groups having access to the hydrological models.

MDBA also appear to have provided the NIA with either the draft Hydrological Modeling report, or an Executive Summary of that report at the same time. NBAC did not receive copies of these reports at any time. The final report was not published until 30 January 2017 – 69 days after the NBR was released, 10 days before the submissions were due and some **7 months** after the irrigation industry had access to that report.

The mental anguish inflicted on rural communities by water reform cannot be understated and it is particularly disappointing that the the third iteration (NBR) will not be the last because MDBA have cut corners. Rural communities are holistic consisting of many parts and it is disappointing MDBA have given one group priority over others. As the NBAC Chair, I attempted to balance the opinion of all interest groups while MDBA have sacrificed their independence and credibility as a scientific organisation leaving me lacking confidence in the process that developed the Northern Basin Review and much of the information prepared by MDBA.