#### The integrity of the water market in the Murray-Darling Basin Submission 19

The Senate Rural and Regional Affairs and Transport Committee, Parliament House, Canberra, ACT 2600 By email to <u>rrat.sen@aph.gov.au</u>

28th September 2017

Dear RRATCommittee

Thank you for this opportunity to make a submission to the Senate Rural and Regional Affairs and Transport References Committee's inquiry into the integrity of the water market in the Murray Darling Basin.

I write as a former member of the Murray Darling Basin Authority''s (MDBA) Northern Basin Advisory Committee (NBAC). Many of the Terms of Reference for this current inquiry were addressed in my submission to the MDBA's Northern Basin Review. That submission is appended herewith.

My submission is largely focused on the water market as it applies to the purchase of environmental water.

The "Matthews' review" has found that there was indeed substance to the allegations raised the ABC Four Conrners program "Pumped" which aired in late July 2017. Water purchased from willing sellers and paid for with taxpayers' money is being accessed by irrigators for two key reasons: NSW changes to the Barwon Darling Water Sharing Plan which has allowed a huge increase in take; and NSW refusal to shepherd Commonwealth Environment Holder's water through the Barwon-Darling system.

NBAC made a strong recommendation to the MDBA that sleeper licences on the Barwon Darling totalling 12GL should be targeted for recovery to ensure they were not purchased and activated, increasing pressure on an already stressed river and the communities and businesses reliant on it. Whether that advice was passed on to the relevant agency is not known to me but these licences were indeed traded and are now active.

A segment on the ABC's Lateline program in early September 2017 examined allegations of unapproved works on the floodplains downstream of Goondiwindi that are causing flooding on some farms while depriving other land of life-giving floodwaters. In this instance it appears that water has been sold to the Commonwealth and then 'replaced' by the use of unapproved works manipulating water in a number of nearby streams. Water is pushed out of the channels and onto the floodplains, where, under Queensland water planning rules, it can be taken as overland flow water.

One wonders what it is that taxpayers have actually purchased and of what environmental benefit the "purchased" water can deliver when the system is being gamed in this way. The bottom line appears to be that landholders, communities and the river itself, especially downstream of Walgett the site of the Four Corners theft - are being deprived of their rightful share of the resource. We risk the MDB being severed into 2 separate and rarely connected basins. Taxpayers are being rorted. An

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examination of the links between beneficiaries and key decision-makers is required.

In my opinion, there is a fundamental problem in the Commonwealth Environmental Water Holder (CEWH) only being the manager of environmental water and not being empowered to purchase water from willing sellers directly. There is therefore no opportunity for the CEWH to make strategic purchases with specific environmental needs or desired outcomes in mind.

Instead we have a situation where the Department of Agriculture and Water Resources decides which parcels of water will be purchased, from which location or vendor, and at what price. There has been little – if anything – strategic about many of these purchases. Some purchases have been made at an extremely high price per megalitre and with very little environmental benefit likely or even possible. The purchase of water from Tandou on the Lower Darling is a case in point.

It is worth noting that a company owned by Websters Ltd was a beneficiary of changes to the Barwon – Darling Water Sharing Plan. According to the NSW Water Register, they have one A Class Water Allocation Licence for 4031.5ML which is attached to 13 pumps. Since there is no Individual Daily Extraction Limit (IDEL) in place, large volumes of water can be extracted during an A Class event . Under the current rules they can – and do - temporarily trade large volumes of water which increases their extraction capabilities.

The sale of Tandou's water combined with yet-to-be-announced plans for the Menindee Lakes System may go some way to explaining the proposed pipeline from the River Murray to Broken Hill. The NSW taxpayer funded pipeline would allow Broken Hill's town water supply to met – albeit very expensively – without any need to ensure water continues to reach the Menindee system. [Landholders on the Barwon-Darling and the largely indigenous community of Wilcannia (which bears the cumulative impacts of ALL upstream extractions) are apparently completely expendable]. This ridiculous proposal would allow 2 very large irrigators to continue to take water that rightfully belongs to taxpayers. There is surely a case for a forensic examination such as a Royal Commission which can compel public servants to appear and give evidence to shed light on Barwon-Darling water issues.

There is a disturbing lack of transparency in information available on water purchased by the Commonwealth for the environment. While it is possible to find the date and cost of recent environmental water purchases online, the volume and type of entitlement / water licence characteristics do not seem to be readily available to interested members of the public. It is difficult to understand the value we are getting for taxpayers' money andhow reliable or beneficial it may be to the environment.

In my opinion, a Royal Commission is long overdue but urgently required into many aspects of water governance. There is also a strong case for the reinstatement of the National Water Commission to provide independent oversight of the water market as well as to scrutinise water plans for consistency with the intent and objectives of MDB Plan.

Thank you for the opportunity to comment.

Yours faithfully,

The integrity of the water market in the Murray-Darling Basin Submission 19 Mr Phillip Glyde, Chief Executive, MDBA, GPO Box 1801, Canberra, ACT 2601 By email to submissions@mdba.gov.au

1st February 2017

Dear Phillip,

Please accept my submission on the proposed amendments to the MDB Plan.

I make this submission as a member of the Northern Basin Advisory Committee (NBAC) and as a member of the conservation movement with a long-standing interest in and commitment to the sustainable use and management of the MDB's water resources. Although closely involved in the process I have found it difficult to understand how the MDBA made its decision based on the documents available on the website. There is nothing to indicate how new data was integrated nor synthesised.

On top of the consultation period falling over the Christmas - New Year and summer holiday break, the absence of the full hydrological modelling report from the MDBA's website until just 10 days before the close of submissions will make it extremely difficult for many to prepare detailed submissions. If requested, extensions should be granted to ensure detailed submissions are received.

# I do not support the proposed 70GL reduction in the Northern Basin's water recovery target.

The proposal to limit water recovery to 320GL plus the complementary "toolkit" measures is based on two fundamentally flawed assumptions. The first is that NSW can (and has the political will) to protect environmental water and shepherd it through the Barwon-Darling system. The second is that NSW and Qld can (and have the political will) to cooperate to coordinate releases of environmental water from headwater storages in the northern tributaries.

Neither of these strategies have been tested in the real world and NSW is on the public record stating that they are "unrealistic and unachievable". (*Northern Basin Review - NSW Synopsis.* NSW DPI, November 2016) Given NSW's attitude to the Basin Plan generally and to the NBAC process and NBAC's advice it seems clear that NSW cannot (or will not) implement either strategy.

In my opinion, this means that the '320GL + toolkit' scenario is doomed from the start. The same document flags concerns concerns about the reliance on long-term average flows in the Barwon-Darling as a measure of environmental outcomes. NSW argues that it '...is not an SFI and not clearly linked with specific environmental gains, and should not be considered a proxy for environmental outcomes or SFI.'

Furthermore, the document questions the concept of SFIs in the context of assessing environmental outcomes in the largely unregulated north and suggests that SFIs are not fit for purpose in the northern MDB at all. To that I would add that it is not clear how the hydrological modelling is linked to SFIs.

I personally find the continued use of long term averages frustrating and inappropriate. We have known for a long time that there is nothing average about flows in the MDB and particularly in the north. An "average" flow is a statistical anomaly!

# The Triple Bottom Line Approach

Much has been said about the need to "balance" social, economic and environmental outcomes. The objects of the Water Act, in particular s3(b) and s3(c) refer to "optimising" these outcomes.

In my opinion, the pendulum has swung back way too far and doesn't achieve "balance" as several social and environmental outcomes will be compromised. The NBR and amendment decision placed enormous emphasis on the short term economic pain at the expense of the real needs of river health; and the Plan's benefits to the floodplain grazing industry, indigenous communities and non-irrigation dependent communities such as WIIcannia. Research into the latter 3 has not been given the weight they deserve in the decision-making process.

In other words, I do not believe that the cultural, social and economic *benefits* of a healthy river system including improved floodplain grazing productivity, freshwater fishing and tourism have been adequately assessed.

Wilcannia has had to bear the cumulative impacts of extractions upstream, including in all the northern tributaries. The massive reductions in flows at Wilcannia are unacceptable, particularly to the indigenous communities and floodplain graziers on the Barwon Darling. If we are serious about restoring "the balance", then much more water needs to be provided to reverse the parlous state of the river, to restore some of the productivity lost from the grazing industry due to over-allocation and to make it possible for indigenous cultural practices to thrive again.

# **First Peoples' Concerns**

The Northern Basin Aboriginal Nations – and indeed MLDRIN – are overwhelmingly in favour of a northern basin recovery target of at least 415GL. A 25GL increase on the current legislated target would ensure better protection and condition of cultural sites and values and allow indigenous people greater opportunities to practice and pass on their cultural practices.

I applauded the MDBA's investment in and commitment to the Cultural Flows Research Project. However, I am deeply disappointed that the NBR review did not include its findings. Non- indigenous people have much to learn from strong spiritual and cultural connections to our rivers and wetlands. The social benefits to the wider community (taxpayers) of having more water in the rivers and on the floodplains needs to be documented and ways found to appropriately value this.

# Ramsar and other international obligations in the Water Act 2007

The northern basin includes 3 Ramsar sites to be targeted for increased flows and specific environmental outcomes. A reduction of 70GL threatens the resilience of entire ecosystems and particularly the viability of some water-bird populations which, under the proposed scenario, will have only one opportunity to breed in their lifetime, as opposed to two opportunities under the existing and currently legislated 390GL scenario. Water-bird numbers have been in an alarming declining for decades and all reasonable attempts must be made to arrest and reverse this trend.

Closely linked to Ramsar obligations are those pertaining to the International Convention of Biological Diversity and international Migratory Bird Agreements with China, Japan and the Republic of Korea. Australia is a signatory to all of these and faces ridicule on the international stage if we fail to demonstrate our commitment.

I believe that to achieve the environmental outcomes of the Basin Plan and to meet commitments under the Convention on Biological Diversity, the Ramsar Convention and Migratory Bird Agreements, environmental water recovery in the Northern Basin should be at least 415 GL.

### Contested Cap factors and over-recovered valleys.

The proposal to return currently held environmental water in the Macquarie and Gwydir valleys by at least 12GL and 6GL respectively (and potentially much more given the contested Cap factors) is vigorously opposed. The lack of a clear explanation of the Cap factors in these valleys is problematic. I understand that there is no prescribed way to calculate the volume "over-recovered" so it is far from clear how much water could actually be returned to consumptive use. In addition to wiping out some of the gains made to date by restoring flows to these Ramsar sites, this will also reduce the reliability and quality of stock and domestic and town water supplies downstream, including those on the Barwon-Darling river.

With regard to the Macquarie valley, the Environmental Water Requirements document includes only the Marshes. No consideration is given to the in-stream habitat of the Macquarie River, its distributary creeks system that links the Macquarie to the Bogan and Barwon-Darling Rivers, and Aboriginal cultural and environmental values. These values are well understood by the Macquarie community through the work of traditional owner and Macquarie EWAG member, Danielle Flakelar.

### **Menindee Lakes**

The reduction of shared environmental water flowing into the Menindee Lakes Scheme by over 100GL will take the issues of reduced reliability of access to entitlements to the southern-connected basin. Reduced inflows from the Lower Darling to the River Murray will affect all water users along the Murray in 3 states. How can the MDBA justify – and the states accept - these particular third party impacts when certain other third party impacts are so vehemently rejected?!

### **Climate change**

The proposed reduction of water recovered for the environment will reduce the resilience of water dependent ecosystems in the face of climate change. Failure to allow water dependent ecosystems to maintain and build resilience to climate change contravenes

section 8.07 of the Basin Plan.

### Water quality

Water quality is covered under Chapter 9 of the Water Act 2007. I have seen signs warning of the potential presence of blue-green algae in every tributary of the Northern Basin except the Paroo. Note that this does not mean such signs do not exist, only that I personally have not seen any such signs in the Paroo catchment.

The Darling is particularly susceptible to blue-green algae and outbreaks affect stock and domestic and town water supplies, recreational fishing (and therefore tourism) and the environment. In my opinion, the risks of a blue-green algae water quality event have not been adequately assessed. Sufficient water must be available in the unregulated system to ensure water quality is maintained for all users and uses. It is not possible to release a flushing flow to deal with a water quality event quickly, easily nor effectively. They must be prevented and adequate low and medium level flows must be provided to achieve this.

The 320GL + toolkit proposed scenario poses a risk of increased blackwater events. In my opinion, it is reasonable to assume that low and medium level benches will be inundated less frequently under this scenario than under the 390GL scenario. This means a greater accumulation of woody and other debris on benches between inundation events and therefore higher levels of organic carbon being returned to the rivers when such bench inundation events actually occur. An increase in the number and/or frequency of blackwater events would undermine the achievement of ecological outcomes, particularly with regard to native fish.

# Groundwater

I do not support the proposals to increase groundwater take in the MDB by some 134GL/ann across the eastern and western porous rock groundwater areas. Australians are becoming increasingly concerned by the huge volumes of water made available to the resources sector and the significant impacts this has on existing users and the environment.

Throughout the NBR, the emphasis has been on surface water. If it is difficult to understand how the dots between hydrological modelling and SFIs were joined, it is impossible to see the methodology used to make the proposed groundwater amendments. With regard to the eastern and western porous rock groundwater areas it appears that these increases are sought solely to provide for the needs of the resources sector – Santos' Narrabri CSG project and the Hawson's iron ore project respectively. I can see no evidence or science-based justification for them at all.

With regard to the Eastern Porous Rock in northern NSW, much of this region is a major recharge area for the Great Artesian Basin. The GAB was once thought to be in some kind of equilibrium but is now understood to be a declining resource. Connections between the GAB and other ground and surface water systems have also been found to be far more complex than previously thought (Smerdon et al). Not only are the volumes of water used by the resources sector highly significant, the risks of contamination have now been demonstrated on a number of occasions. Furthermore, extraction by the resources sector mobilises vast amounts of salt currently stored safely underground. The MDB does not need any more salt on the landscape nor in its rivers where it becomes another expensive problem and

environmental liability.

# I support the current SDLs for groundwater sources as set out and agreed to in the Basin Plan.

Finally, as an NBAC member I am acutely aware of the level of engagement the irrigation sector has had with the MDBA during the Northern Basin Review process. There should have been an equitable and balanced approach to engagement with key sectors. However, I understand from documents obtained under RTI/FoI requests that engagement with the irrigation sector included hundreds of emails, dozens of meetings and privileged access to models and other detailed information denied to NBAC in spite of numerous requests, particularly access to hydrological models. From conversations with my colleagues I know that engagement with the conservation sector, the floodplain grazing community and the indigenous stakeholders hasn't come close, either in terms of the number of meetings or access to detailed information.

In principle, I don't believe there is anything wrong with agencies and stakeholders working closely together and I personally have been involved in such a process – specifically the development of the Condamine-Balonne WRP. The difference is that in that case, ALL stakeholders were at the table and had equal access to detailed information and staff. In my opinion, a great deal was learnt by all during that process and an unprecedented level of trust developed.

It is now obvious that - among other things – the Northern Irrigation Alliance had access to the hydological models denied to NBAC; that the 320Gl + toolkit scenario was discussed and undertakings given that it would be acceptable provided certain WSP rule changes were agreed in return; and that the 320+ toolkit option was known to irrigators weeks before NBAC was advised of the proposed amendment.

Extraordinarily, it appears that Namoi Water conducted at least some of these negotiations when one would expect this to be the role of the NSW government though DPI Water. I find it extremely disappointing that the outcome of the NBR and NBAC process was ultimately decided by horse trading rather than the new science specifically commissioned to underpin the NBR.

I would like to think that the MDBA will regard all submissions opposing the 320GL + toolkit scenario as having community values and the long term health of the Basin at their core, and standing in stark contrast to those focused on protecting vested interests and commerical priorities.

Thank you for considering my submission.

Yours sincerely,