



Website: www.ncssa.asn.au

Bret Walker SC
Commissioner
Murray-Darling Basin Royal Commission
GPO Box 1445
Adelaide, SA 5001
mbroyalcommission@mdbrc.sa.gov.au

Thursday 31 May 2018

Re: Submission in response to Issues Paper #2 issued by the Commission

Dear Mr Walker,

The Nature Conservation Society of South Australia (NCSSA) appreciates the opportunity to provide a submission to the Murray-Darling Basin Royal Commission. Since 1962, the NCSSA has been a strong advocate for the protection of native vegetation and biodiversity in South Australia with particular attention being paid to nationally and state listed threatened plants, animals and ecological communities and management of protected areas. Specifically, we have a long-standing interest in the ecology of the Coorong and Lower Lakes wetlands at the end of the Murray River, having previously undertaken a number of surveys of the plants and animals of that region, dating back to the 1970's (for example see Gilbertson and Foale 1977).

We share many of the concerns you have raised in both Issues Papers regarding the management of the Murray-Darling Basin. Particularly, we are concerned that even if the issues of compliance with the current Murray-Darling Basin Plan that have been raised recently are adequately addressed, there is still insufficient water being made available to restore the rivers and floodplains of the Murray-Darling Basin to any sustainable level of health or function.

In summary, our submission:

1. Supports your interpretation as outlined in Issues Paper #2 that the proper construction of the *Water Act 2007* (Cth) (Water Act) is that the 'environmentally sustainable level of take' of water from the Murray-Darling Basin should be determined on entirely environmental grounds, and that social and economic concerns should be addressed subsequently;
2. Concurs that it is neither legally sound nor good policy to increase the already inadequate 'sustainable diversion limit' based on 'adjustment measures' that are not yet in place;
3. Outlines our concerns about a particular proposed 'adjustment measure', the South East Flows Restoration Project, as the available evidence is that this 'adjustment measure' will further impair the ecological function of the Coorong;
4. Supports the interpretation that the Australian Constitution's 'external affairs' is the dominant legislative power for the Water Act, so that it can give effect to the two most relevant international environmental

agreements (the Ramsar Convention and the Convention on Biological Diversity), yet Australia's obligations under both these conventions are not being met nor will not be met in future under current management arrangements as enacted by the Murray-Darling Basin Plan (Carmody 2013);

5. In support of the above, our submission briefly highlights that the ecological character of the Coorong, as protected under the Ramsar Convention, has declined significantly and is projected to decline further under current arrangements; and
6. Lays out some suggested future steps, including urging against amending the Water Act to change the definition of 'environmentally sustainable level of take' to include social and economic concerns but instead amending the Basin Plan to reflect a truly environmentally sustainable level of take, seeking greater powers for the Commonwealth to monitor water use and enforce compliance with the Plan and considering more recent legal reform directions in relation to rivers such as the *Yarra River Protection (Wilip-gin Birrarung Murron) Act 2017* (Vic) as options for improving protection for the river system.

We note that, the vote in the Senate mentioned at point 7 of Issues Paper #2 on the disallowance motion for a package of 36 'sustainable diversion limit adjustment measures' was taken on 8 May 2018 and was unsuccessful. Therefore, the already inadequate 2,750GL sustainable diversion limit will be further increased by 605GL.

Please refer to the following pages for our specific comments on the Terms of Reference and issues raised in Issues Paper #2. If you would like to clarify or discuss any of the points raised please contact me on or via email at

Yours sincerely,

Julia Peacock
Nature Advocate

NCSSA comments on Issues Paper 2 of the Murray Darling Basin Royal Commission

We acknowledge that submissions on Issues Paper #2 are being invited specifically in relation to issues (a) to (d), so firstly provide our comments against them, as follows:

- a) the manner in which the *Water Act 2007* (Cth) (Water Act) has been construed in order to determine a long-term average sustainable diversion limit (SDL) which reflects an environmentally sustainable level of take (ESLT);**

We concur with that, on current construction of the Water Act, the Basin-wide SDL ('sustainable diversion limit') must always reflect an ESLT, and that the ESLT is defined in the Water Act on entirely environmental criteria. We concur that this view is not only supported by the text of the Water Act but also accords with common sense, i.e. that the Basin Plan should set an environmentally sustainable level of take in the first instance, and then should optimise economic and social outcomes within the context of that level of take (point 41 of Issues Paper #2).

The Murray-Darling Basin Authority (MDBA) therefore appears to have fallen into legal error by setting an SDL of 2,750GL by taking into account social and economic considerations, notwithstanding its own legal advice referred to in point 14. As you have summarised, the Guide to the proposed Basin Plan (2010) stipulated that between 3,000GL and 7,600GL of surface water was required to achieve an ESLT, and later in volume 2 it stated that even 3,856GL of returned surface water was described as having "high uncertainty" of achieving environmental watering requirements. As you have also pointed out, a number of reports from reputable bodies, including the CSIRO (point 55), the SA DENR (point 56), the Wentworth Group of Concerned Scientists (point 57) and the Goyder Institute (point 58) concur that an SDL of 2,750GL will not restore the rivers and floodplains of the Murray-Darling Basin to any level of health or sustainable function.

Therefore 2,750GL cannot be construed as a *sustainable* diversion limit.

- b) what the consequences of that construction might be for the proposed sustainable diversion limit (SDL) Adjustment Amendment;**

We concur that, even if 2,750GL *was* a sustainable diversion limit, increasing this limit on the basis of 'adjustment measures', many of which are not yet in place and not required to be until June 2024, is neither legally nor environmentally sound, and definitely not good policy. We also concur that it is inconsistent with the precautionary principle that the Water Minister must take into account when exercising powers under the Water Act, and runs the risk of serious, irreversible environmental degradation (points 76-78).

We note that Issues Paper #2 is only dealing with the lawfulness of the SDL adjustment measures, rather than their merit or appropriateness, however, we raise briefly our particular concern with the South East Flows Restoration project because the available evidence is that it will further impair the ecological function of the Coorong, and also it highlights how the decision-making process under the Water Act has lacked transparency and has not adhered to the precautionary principle.

Drainage in the South East

By way of brief background, a network of drains has been established throughout the south-east of the state to remove saline groundwater from the surrounding agricultural region, which has risen to the

surface after deep-rooted native plants have been cleared to make way for crops and pastures. This water is currently drained into the southern lagoon of the Coorong in substantial quantities, and has already caused environmental damage by reducing the naturally high salinity levels and carrying additional nutrients, both of which have encouraged the growth of filamentous green algae. This algae forms mats and smothers the shoreline, damaging the breeding and feeding habitat for the shorebirds. These shorebirds are one of the reasons that the area is listed under the Ramsar Convention, and additionally, the area is also habitat for migratory species listed under various agreements (JAMBA, CAMBA and ROKAMBA) and also threatened species under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

The proposed 'adjustment measure' seeks to *increase* the drain network and therefore the amount of relatively fresh and nutrient rich water being drained into the unique, hyper-marine (naturally saltier than sea water) southern lagoon of the Coorong. It is "a \$60m investment made by the South Australian Government and the Australian Government to assist salinity management in the Coorong South Lagoon, enhance flows to wetlands in the Upper South East and reduce drainage outflow at Kingston beach" (Natural Resources South East 2018), and the MDBA concluded it is not likely to have a significant impact on the hydrological regime and therefore the ecological character of the Ramsar wetland (Murray-Darling Basin Authority 2017).

However, as we understand Associate Professor David Paton, a leading ecologist with over 30 years of field experience in the region, has advised in his submission to you, increased drainage is likely to further impair the ecological function of the Coorong by increasing the nutrients and decreasing the salinity in the wetland to an even greater extent, which will favour more algal growth. This will lead to the further smothering of habitat for shorebirds at this internationally recognised wetland, in contravention to Australia's obligations under the Ramsar Convention. It therefore *cannot* be construed as a project that benefits the environment (except in rare cases of managing extreme salinity which results from lack of flow down the over-extracted river system and only if the excess nutrients could be removed from the water before release), yet it is being counted and funded as an 'environmental flow restoration' project.

As a further comment on the lack of transparency regarding these proposed measures, we understand that Associate Professor Paton was advised that the business case for this measure was 'commercial-in-confidence' between the state and federal governments, and therefore couldn't be released. We also understand that Senator Rex Patrick, who was being asked to decide on the disallowance motion relevant to this and other measures on 8 May, had to seek a Senate Order for Production in order to see the Murray-Darling Basin Authority's technical assessments of these projects. Even after this was produced, he was advised that they didn't, in isolation, provide a good representation of how the final agreed package of projects was put together, and there is a 'final modelled notified package' that will be made available to Senators in August. This lack of timely and accurate information for on which the Water Minister (and the public) can judge the efficacy of these measures is an example of decisions being made inconsistent with the precautionary principle which must be taken into account when exercising powers under the Water Act.

c) what the consequences of that Water Act construction might be for what is defined below as the proposed Northern Basin Review (NBR) Amendment, and

We share the concerns you have raised with regards to the NBR Amendment which was disallowed on 14 February 2018. i.e. that if a recovery of 2,750GL of water for the environment is required to achieve an

ESLT under the Water Act, the recovery of the reduced quantity of 2,680GL of water for the environment cannot achieve an ESLT on the basis of unimplemented and uncertain “toolkit” measures (point 86).

d) whether the Basin Plan itself complies with the Water Act if the Basin-wide long-term average SDL does not reflect an ESLT.

We do not believe that the Basin Plan complies with the Water Act if the long-term average SDL does not reflect an ESLT.

Relevant international environmental agreements

NCSSA is particularly concerned that the Plan will fail to implement certain of the key objectives of both the Ramsar Convention and the Biodiversity Convention, and therefore we further provide comment on the issue (F.) Constitutional validity of the Basin Plan, described in Issues Paper #2 (page 26) as follows:

‘87. As mentioned in paragraph [16] above, the Water Act and Basin Plan primarily rely on the Commonwealth Parliament’s external affairs power for their constitutional validity. It is a key object of both the Water Act and the Basin Plan to give effect to, and to implement, a number of international agreements that Australia has ratified, including the Ramsar Convention and the Biodiversity Convention. The relevant objectives of the conventions – which must be implemented through the Basin Plan – are set out in [17] to [24] above.

88. If the Basin-wide SDL does not reflect an ESLT, it is arguable that the Plan will fail to implement certain of the key objectives of both the Ramsar Convention and the Convention on Biological Diversity. If so, it would throw into doubt the validity of the Basin Plan. For a general discussion of this topic see: Emma Carmody, ‘The Silence of the Plan: Will the Convention on Biological Diversity and the Ramsar Convention be implemented in the Murray-Darling Basin?’ (2013) 30 EPLJ 56.

89. The Commissioner raises this issue briefly as a means of inviting submissions, but it is secondary to the construction issues raised above’.

For NCSSA, this issue is of key concern. Particularly, we are concerned about the ongoing decline in the ecological character and integrity of the Coorong and Lower Lakes wetlands, being at the very end of the river and therefore representing the sum of management throughout the Basin. The wetland was listed under the Ramsar Convention in 1985 for its outstanding biodiversity values, although experts acknowledge that it was in decline prior to this listing and also that the ‘ecological character’ of the site was not well-defined in original listing documents. However, a comprehensive description of the ecological character area was made in 2006, which concluded:

‘... this ecosystem has as its primary determinants of ecological character; salinity, turbidity and sedimentation, water levels, keystone aquatic plants, habitat availability and flows. For these six primary determinants of ecological character, all are presently outside their recommended limits of acceptable change, and in many cases not by a small margin’ (Phillips and Muller 2006),

and for the Coorong specifically,

‘The Coorong lagoons, once a predominantly estuarine environment with some hyper-saline portions, particularly favoured by wading birds and with a great diversity of fish species, are rapidly transforming into more and more turbid and saline systems. This is seeing the rapid loss of the keystone *Ruppia* plant species and with these, declines in much of the biota of the Coorong that justified Ramsar listing’ (Phillips and Muller 2006).

Since that time, the ecological character of the site has declined so much that Australia notified the Ramsar secretariat in 2006, 2008 and twice in 2009 regarding this decline (Department of Environment and Energy 2018), and we understand that though rains in 2010 improved conditions, there has been no sustained recovery of keystone aquatic plants nor the birds that depend on them.

Suggested future steps

Fundamentally, our interest is to see the river used sustainably, so as to support its own health and therefore support the species and ecosystems that rely on it, including those Australia has committed to protecting under international environmental agreements. Within those constraints, the river can then be shared equitably and used to support social and economic outcomes. Therefore, in the immediate term, we strongly urge against amending the Water Act to change the construction of the sustainable level of take to include social and economic considerations. Like you, we are not suggesting these are not important, however, if we are to depend on the river system into the future and particularly through the next drought and in a manner which is able to withstand the predicted future impacts of climate change, we must limit our use so that it can maintain both its own health and therefore ours as well. We therefore urge that the Plan should be amended to truly reflect an environmentally sustainable level of take. You ask at point 65 of Issue Paper #2 what this would be. We defer to others with particular expertise in this area to provide an answer, such as the CSIRO and the Wentworth Group, though it is likely to be in the same range as previously identified, i.e. 7000 GL to have a high certainty of returning the system to health.

As recent reports of water theft and corruption have highlighted, a major weakness of the current arrangements is the lack of monitoring and enforcement powers available to the Commonwealth, which is making a major investment of public money to improve the system. A realistic model for short-term improvement could be the Basin States retaining responsibility for independent monitoring and enforcement, but ceding to the Commonwealth additional powers to act under particular circumstances, for example when they have evidence of unlawful water extraction and diversion structures, or where a complaint about unlawful extraction is made, and when that extraction is affecting environmental water delivery or use. The Commonwealth could then either invest in its own compliance team, or it could compel the states to investigate.

Another model you may wish to consider in your deliberations for improvement is the recently enacted *Yarra River Protection (Wilip-gin Birrarung Murrong) Act 2017* (Vic), which recognises the Yarra River as a living entity, creates a new organisation to advocate for the river (the Birrarung council) and places at the centre Indigenous values of the river (including Victoria's first bilingual legislation, see O'Bryan 2017 for background). There is also a movement toward creating legal rights for rivers themselves, however, these rights are only valuable if they can be enforced by a strong set of governing institutions and organisations (see O'Donnell and Talbot-Jones 2018). Also, legal rights can exacerbate competition between the river and its users, leading to legal reform that weakens those rights, so it may not lead to optimal environmental outcomes unless well planned (O'Donnell 2017).

References

Carmody, E, 2013, The silence of the plan: Will the Convention on Biological Diversity and the Ramsar Convention be implemented in the Murray-Darling Basin?, *EPLJ*, 30:56-73.

Department of Environment and Energy, 2018, Australian Wetlands Database, <http://www.environment.gov.au/cgi-bin/wetlands/ramsardetails.pl?refcode=25#>, accessed 31 May 2018

Gilberston, D & Foale, M, 1977, The Southern Coorong and lower Youngusband Peninsula of South Australia, NCSSA Inc., Adelaide.

Guide to the proposed Basin Plan, 2010, available from <https://www.mdba.gov.au/publications/archived-information/basin-plan-archives/guide-proposed-basin-plan>, accessed 31 May 2018

Murray-Darling Basin Authority, 2017, Sustainable Diversion Limit Adjustment Mechanism: Draft Determination Report, Canberra.

Natural Resources South East, 2018, South East Flows Restoration Project, <http://www.naturalresources.sa.gov.au/southeast/projects/se-flows>, accessed 31 May 2018

O'Bryan, K, 2017, 'Giving a Voice to the River and the Role of Indigenous People: The Whanganui River Settlement and River Management in Victoria' (2016/17) 20, *Australian Indigenous Law Review* (advance).

O'Donnell, E, 2017, Competition or collaboration? Using legal persons to manage water for the environment in Australia and the United States, *EPLJ*, 34:503-521.

O'Donnell, E & Talbot-Jones, J, 2018, Creating legal rights for rivers: lessons from Australia, New Zealand, and India, *Ecology and Society*, 23(1):7.

Phillips, W and Muller, K, (2006), Ecological Character of the Coorong, Lakes Alexandrina and Albert Wetland of International Importance, South Australian Department for Environment and Heritage.