Murray Darling Basin Plan: Five-year Assessment

Submission

The attached submission identifies some specific instances where implementation of the Basin Plan is insufficient and has fallen short of what is required.

Two instances are covered in my submission:

- The changes to the Sustainable Diversion Limit (SDL) which were proposed by the Murray Darling Basin Authority (MDBA) in the Northern Basin; this proposal was contrary to the requirements of the Water Act.
- Inadequacy of actions to achieve the water quality objectives in the Basin Plan.

Proposed change to the SDL in the Northern Basin.

There have been a number of criticisms about the MDBA proposal to increase the SDL in the Northern Basin (since disallowed by the Senate). For example, the assumptions made in a number of the scientific analysis by the MDBA have been questioned by some. However, even taking the assumptions at face value, it seems apparent that the MDBA ignored the requirements of the Water Act in framing their recommendation.

The definition of 'Sustainable Diversion Limit' under the Water Act (Sn. 23(1)) is that it '…**must** reflect an environmentally sustainable level of take', where an environmentally sustainable level of take is the level beyond which, *inter alia*, key environmental assets would be 'compromised', or put at risk (Sn.4). **MDBA have no discretion to modify this number on the basis of other considerations.**

Thus, for a diversion limit to be considered a sustainable diversion limit, the level must be such that it does not compromise, or put at risk, key environmental assets. Any proposed diversion limits which do not meet this criterion, i.e. puts at risk key environmental assets, cannot be considered as sustainable diversion limits and would be inconsistent with the requirements of the Water Act.

The results of the MDBAs scientific studies are unequivocal; at the level of take that was proposed, many key environmental assets would be compromised - only 32 of the 49 environmental indicators would have been met, (where the environmental indicators were chosen to identify circumstances under which environmental assets would be compromised). In some sub-basins, **none** of the indicators were met.

Further, conclusions from MDBAs scientific studies included:

> *All recovery scenarios…were a **long way** from meeting all the local environmental needs*
>
> (**Summary report, p13**)

in the lower Balonne, the proposed recovery was:

> *likely to result in **a high risk** to native fish species*
>
> **Environmental Outcomes of the Northern Basin Review, p49)**

The scientific studies also identified likely negative ecological impacts on the Ramsar listed Narran Lakes Wetland, viz.:

*For the internationally recognised Narran Lakes Ramsar site, the flow indicator that provides large-scale habitat opportunism for waterbirds **is not met ….** **Waterbirds will remain at risk** of having less than two opportunities in their life cycle to breed, which is the minimum requirement to maintain stable populations*.

Environmental Outcomes of the Northern Basin Review, p29.

This latter conclusion is particularly worrying as one of the primary heads of power for the Commonwealth under the Water Act is their obligations under the Ramsar Convention.

These are by no means isolated examples, and it obviously should have been necessary in a number of sub-basins for MDBA to have considered markedly **increased** recovery volumes to achieve an 'environmentally sustainable level of take' and meet their obligations under the Water Act (2007). They failed to do this.

The MDBA attempted to 'soften' the blow by proposing a number of tool-kit measures to replace the need for environmental water. This approach is flawed on a number of grounds:

- Their own scientific studies clearly indicated that these measures were 'complementary'; i.e., required in addition to provision of appropriate flows:

*largely considered to be **complementary** (in addition) … rather than being a substitute for water recovery*.

Environmental Outcomes of the Northern Basin Review, p31.

- Some of the measures suggested are already within the power of MDBA to implement under the Basin Plan and do not need to rely on third parties. This is primarily through accreditation of State based water resource plans, viz.,
  - Cold water pollution should be covered by the 'water quality management plan' requirements in water resource plans. Cold water pollution is identified in the Basin Plan as a key cause of water quality degradation (Item 5, Schedule 10) and the temperature targets in the Basin Plan (Schedule 11) were primarily designed to manage the impacts of cold water pollution. It would thus be expected that an accredited water resource plan would include measures to deal with cold water pollution;
  - Within the constraints of an SDL, an accredited water resource plan **must** include, where necessary, rules to prescribe:

    (a) the times, places and rates at which water is permitted to be taken from a surface water SDL resource unit; and

    (b) how water resources in the water resource plan area must be managed and used.

(Sn. 10.17, Basin Plan)

These requirements, if properly implemented, would help ensure that environmental flows from one catchment are adequately protected as the water moves into an adjacent catchment, as well as providing protection for ecologically important low flows.

Full reliance on MDBAs Basin Plan powers should be used before any uncertain reliance on third-parties. Failure to use its full powers could be seen as a dereliction of duty by MDBA.

Moreover, it is ironic that other proposed complementary measures such as better provision of fish passage were the subject of a former MDBA program, the 'Native Fish Strategy for the Murray Darling Basin' that had been largely disbanded.

Does this mean the MDBA ignores socio-economic considerations.

No. There is only a requirement under the Water Act to provide protection for **key** environmental assets. Environmental assets that are not considered 'key' are not necessarily protected. Decision as to what environmental assets are key is a policy decision by MDBA. If a proposed diversion limit puts at risk ('compromises') a particular environmental asset, MDBA has two policy options:

- Increase the diversion limit to ensure the environmental asset is not compromised; or,
- Do not include the environmental asset as a 'key' environmental asset.

MDBA have done neither.

From the above example, one is forced to conclude that the MDBA give little regard to the requirements of the Water Act in implementation of the Basin Plan.

Inadequacy of actions to achieve the Water Quality Objectives in the Basin Plan.

Actions relating to achievement of water quality objectives are addressed in two parts of the Basin Plan.

Sn 9.14 deals with consideration of the water quality objectives and associated targets in making a number of operational flow-management decisions.

More importantly, the water quality objectives are meant to be primarily addressed by the development of a Water Quality Management Plan (WQMP) as part of the Water Resource Plan (WRP) accreditation. It is this aspect of the Basin Plan that is the focus of my submission.

There has been a failure to fully and properly implement the requirements for a WQMP. As well as a comprehensive analysis of key causes and scientifically based-targets, the WQMP requires the inclusion of measures to address any water quality issues. It is clear that MDBA have adopted the view that only flow measures need be addressed in the WQMP. Thus:

The cause of the remaining medium, high and very high risks identified in the WQM Plan was outside the scope of management by the Water Act 2007 (Cth) and Water Act 2000 (Qld). The WQM Plan recognises the land management responses under the HWMP to address these risks however they are not formally listed for accreditation under the Basin Plan 2012.– (from the Warrego-Parro-Nebine Water Resource Plan, the only accredited plan at the time of writing) https://www.mdba.gov.au/publications/policies-guidelines/water-resource-plan-warrego-paroo-nebine

The original intent of the WQMP requirements was not so restrictive. There is no limitation on the types of measures to be considered and included for accreditation purposes. I can say this with some authority, as I was the primary author of the water quality section of the Basin Plan.

Basis of confusion and myths

1. As the plan is about protection of the water resource, it is confined to flow matters.

This view fails to recognise the comprehensive nature of the definition of water resources (Sn.4) under the Water Act, that:

> *…includes **all** aspects of the water resource (**including** water, organisms and **other components** and ecosystems **that contribute to the** physical state and **environmental value of the water resource**).*

Clearly, water quality is covered under the definition.

However, more fundamentally,

2. A misinterpretation of Sn. 22(10) of the Water Act.

This section prevents the Basin Plan **directly** regulating land use, natural resources or pollution matters. I.e., the Plan cannot **explicitly** require particular measures of this nature to deal with water quality issues. However, it does not limit the measures adopted by a State in its WQMP who may, and would be likely to include, such measures in their accredited WQMP. The legal opinions supporting this approach, at the time of the development of the Basin Plan, was unequivocal.

Moreover, it mirrors the general approach to implementation of water resource plan requirements; viz:

- The Basin Plan identifies the outcomes and targets (SDL, water quality targets)
- The State jurisdictions, **using their own legislative powers and instruments**, identify how they will address the targets.

In a similar fashion, the Basin Plan does not directly regulate specific allocation approaches or water quality management measures, nor does it exclude any from possible inclusion.

That this broader approach to consideration of measures was the original intent is indicated explicitly in the Plan under S.10.33(3): *'The measures may include land management measures'* . I.e., inclusion of measures is not confined to flow management measures.

Moreover, the absurdity of the limited approach taken in consideration of the water quality management measures becomes clear when the requirements of the WQMP are looked at holistically.

There are essentially three elements:

1. Establishment of key causes of water quality degradation;
2. Development or adoption of water quality targets
3. Consideration of water quality management measures.

For the first two elements, the analysis is comprehensive and holistic. I.e., there **must** be an analysis of **all likely key causes** of water quality degradation, whether or not they are related to flow. For examples

the key causes which must be considered include 'poor soil conservation practices'; 'cold water pollution' (Schedule 10).

The water quality targets are similarly wide-ranging.

Thus, in order to provide balance, a wide view of possible measures is appropriate. If a narrow view is taken, the need to undertake a comprehensive analysis of key causes and have a broad range of water quality targets would be unnecessary and irrelevant. The narrow approach to consideration of possible water quality measures ensures the Plan's objectives for water quality (Sn. 9.03 – 9.08) will be a long way from being achieved.

The farcical nature of this narrow approach is illustrated by the water quality measures incorporated into the accredited Warrego, Paroo and Nebine Water Resource Plan. The **only** real measure is trivial and not really relevant, being just a re-statement of the process for developing alternative targets, viz.:

> *Establishment of Environmental Values (EVs) and Water Quality Objectives (WQOs) for the waters of the Warrego, Paroo and Nebine plan area under Schedule 1 of the Queensland Environmental Protection (Water) Policy 2009, to inform statutory and non-statutory planning and decision making.*

To achieve the water quality objectives in the Basin Plan, it would be necessary for a broad range of measures to be incorporated, addressing **all** of the key causes. The original intent was for an accredited Water Resource Plan to incorporate other State instruments such as those already used by the State for water quality planning. Thus, in the case of the Warrego, Paroo, Nebine Plan the measures identified in Sn. 9.1.2 – 9.1.4 of the 'Healthy Waterways Management Plan' should also form part of the instrument for accreditation. (https://www.ehp.qld.gov.au/water/policy/pdf/hwmp-warrego-paroo-bullo-nebine.pdf)

The comprehensive scope expected for water quality management plans can be found in current national guidelines for water quality management. In particular:

- 'Implementation Guidelines' (1998) Document 3 of the National Water Quality Management Strategy, http://www.agriculture.gov.au/water/quality/nwqms/nwqms-implementation-guidelines
- 'The Framework for Marine and Estuarine Water Quality Protection: A Reference Document', (2002) http://webarchive.nla.gov.au/gov/20130904194802/http://www.environment.gov.au/water/publications/quality/water-quality-framework.html

Both of these national guideline documents give detailed analysis of what a water quality management plan should entail. The narrow approach adopted by the MDBA is inconsistent with this national guideline material.

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