

PARLIAMENT OF AUSTRALIA – HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON REGIONAL AUSTRALIA

**SUBMISSION – Inquiry into certain matters relating to the proposed Murray
Darling Basin Plan**

Submissions: Bullatale Creek Landholders

The Water Act 2007 and the development of the Murray Darling Basin Plan will deliver substantial economic and social changes to communities in the Murray Darling Basin.

In addressing social and economic impacts, a requirement of the Water Act 2007, the Murray Darling Basin Authority has failed to address two important factors.

1. The full extent and severity of the social and economic impacts of total basin plan and
2. third party impacts arising, from how environmental flows, will be managed and delivered.

In developing the Murray Darling Basin Plan, the Murray Darling Basin Authority (MDBA) has also not identified tangible outcomes to the environment in addition to new environmental provisions to be implemented under the Living Murray, the National Water Initiative (2004 NSW Water Sharing Plans) and other environmental programs.

Transparent and measureable environmental outcomes should be a critical component to help mitigate adverse social and economic impacts imposed by the Basin Plan. The Basin Plan also sets additional flow volumes, as the single measure of environmental health. In doing so, no other options are considered.

The focus of the Basin Plan on flow volumes, will result in significant third party impacts that have not been considered in the MDBA social and economic impact studies.

Southern Connected System – Murray River (NSW)

The management and delivery of environmental flows in the Murray River will ensure broader social and economic impacts beyond those relating to the loss of productive water from a region.

How environmental water is managed, stored and delivered places significant risks to regions. The MDBA has focused on water recovery and not provided transparent plans on how the water will be managed or delivered. This is particularly relevant for the NSW Murray system in the southern part of the basin.

Future policies changes on rules, dam capacity and how water is physically delivered, can all increase economic impacts.

To date, the MDBA have not conducted a system analysis on how environmental flows are to be delivered in conjunction with historical river capacity arrangements. Common statements such as *'it will be worked out in the future'* or *'we will learn as we go - there might be a few mistakes'* appear to be acceptable at both political and bureaucratic levels.

This key aspect of the basin plan, should have been included in the initial planning phase.

Information relating to what is physically deliverable within system capacity of the Murray River should have occurred at the start of the planning period, not at some future point in time, yet to be determined.

To date, there has been no basic third party risk assessment conducted in relation to delivery of environmental flows.

This is despite clearly and readily identifiable third party impacts to private property. Despite community concern, no acknowledgement of third party impacts, has been included in social and economic studies commissioned or conducted by the MDBA.

This is a critical data gap for communities within the NSW Murray – particularly those landholders living in the vicinity of the Barmah Choke.

After considerable community reaction to the Guide to the Proposed Basin Plan, the Draft Basin Plan and the third attempt – the proposed draft (2012), the MDBA have only just recently made known in private conversations, that system modeling on the Murray River is being conducted to determine how environmental flows will be implemented.

It is unclear what information the actual modeling will produce as comprehensive system constraints information has not been collated. It is also concerning that the major system constraints of the Barmah Choke, appears to be 'relaxed' in recent MDBA documentation.

This should not be seen as the natural Barmah choke physically disappearing, more that a rule change will allow the forest to be more regularly watered, overturning previous management that allowed a drying phase in the Barmah Millewa forest system.

In the Murray system, documentation in relation to the Basin Plan have recognised existing system constraints but only in the section of the Murray River between the Hume Dam and Yarrawonga, where legal easements for regulated flows are in place with private landholders.

No other areas of risks or private property impacts have been identified.

The MDBA is signaling but as yet has not been transparent exactly how such large environmental flow targets will pass through the Hume to Yarrowonga section of the Murray. If the MDBA intends to amend the current easements constraints of 25,000 ml/d through legal changes and associated compensation, this will still leave large sections of private property below Yarrowonga still with third party impacts.

In particular properties on adjoining creeks and rivers upstream and downstream, of the Barmah choke.

The total volume of new water therefore to be returned to the environment in addition to existing environmental flows, is critical to the NSW Murray section.

The MDBA have identified that 2750 GL remains their recovery target for water for the environment. Of this 2289 will be sourced from the Southern connected systems.

This will give a total figure of 3600 GL for water recovered for environmental flows by 2019.

The effect of the MDBA's basin plan and the current market activities of the Commonwealth Environmental Water Holder will mean that a large percentage of the additional 2289 GL for the Southern connected systems will flow down the Murray River.

There have been no plans for addressing private property impacts that will result.

NSW Murray - Delivery of Environmental Flows:

Major project funding is required to identify the total impacts to private property resulting from the Basin Plan. Studies will require the identification of financial impacts on agricultural businesses that will be adversely affected by environmental flows.

In particular, identified sections of riverine environments along the NSW Murray associated with flow restrictions of the Barmah choke.

In response to rising community concern, the Murray Group of Concerned Communities in conjunction with the Murray Catchment Management Authority has facilitated the preparation of a regionally specific report to provide an overview of system constraints in parts of the Murray Catchment. (Appendix A & B)

The attached report is limited to providing an initial overview of flow levels where third party impacts commence. The report should not be seen as providing a comprehensive overview of the full range of impacts, nor how individual business are impacted.

Substantial studies are required to identify the full range of risks (including moderate to major flooding) on private property. Assessments must include issues of ongoing

property access, property management, property values, flood risks, infrastructure damage and the ability for landholders to continue current business activities.

Studies in relation to the delivery of environmental flows in strategic areas of risk, must be prioritized to inform planning of the MDBA and water acquisitions by the Department of Sustainability, Environment, Water People and Communities (SEWPaC) and the Commonwealth Environmental Water Holder (CEWH).

Assessment of private property infrastructure and environmental infrastructure works should be prioritized to ensure that the range of social and economic impacts can be minimized.

Terms of Reference:

1. Progress to date in water recovery towards bridging the Gap by 2019 through both infrastructure investments and water recovery.

Bridging the Gap by 2019 sets targets for water recovery but fails to address how the basin plan will be implemented.

Regional communities have identified that the basin plan in its current form cannot be delivered without third party impacts. Despite this, Governments and the MDBA have NOT prioritized environmental infrastructure investment, to maximize the efficient use, of environmental flows.

High volume targets set by the MDBA should have been accompanied by strong investments in works and measures for the efficient use of environmental water. Instead the focus has been on direct water purchases, on farm efficiency projects and system improvements for infrastructure operators. While the efficient use of water off river is supported, equal weighting should have been given to infrastructure works associated with the use of environmental water.

This submission strongly recommends that Government focus is shifted towards works and measures for environmental sites to develop environmental outcomes that can reduce the adverse social and economic impacts of the basin plan.

This focus is critical when known third party impacts exists and yet these have not been included in any social and economic analysis, nor been used to guide MDBA planning, that should have underpinned basin decisions.

This despite the MDBA having been notified of the need to address these risks, for nearly two years.

2) The potential role that new environmental works and measures projects could play in partially offsetting SDL reductions under the Basin Plan, focusing particularly on prospective project proposals identified by State Governments and community interests.

Investments in environmental works and measures to offset the Basin Plan SDLs should be regarded as a critical component of the basin plan.

The current restrictions however preclude such investments offsetting the SDLs and this need to be amended.

Of particular concern is that any water savings achieved through environmental works and measures, cannot go to reducing the SDL figures. This is a major factor for the NSW Murray region where end of system flow contributions make are a substantial component of water recovery for the environment.

Works and measures in a shared system provide mutual interstate benefits and help overcome third party property impacts that will result from the proposed flow volumes for the environment.

A further impediment to practical outcomes, is that all environmental targeted water must be held as an entitlement. This requirement needs a major review.

Environmental outcomes should not be measured purely in terms of 'held entitlements' as this precludes any sensible approach to deliver outcomes for the environment and severely narrows the opportunity for success.

For the Southern connected system – end of system flow targets remain a major social and economic risks. Under current planning processes, NSW Murray is unable to offset 'end of valley' flow requirements (component of the 971 GL).

This submission strongly urges a whole of basin approach to addressing works and measures to deliver environmental outcomes. We urge full implementation of the Living Murray infrastructure works program, including any additional broader Murray environmental infrastructure investments, to maximize water efficiency and reduce third party impacts.

The Living Murray program stated that 1500 GL together with infrastructure works would deliver a healthy working Murray River. Despite this, Living Murray infrastructure works remain uncompleted and now new targets for the Murray River are being implemented via the Basin Plan.

Living Murray works for Perricoota Koondrook, Hatta, Chowilla and Riverland and the Lower Lakes and Coorong should be prioritized and implemented. Assessments of water savings maximized through infrastructure works should be built into the baseline information for basin plan environmental flow targets.

If such actions had been implemented, this would offset the need for new higher targets in addition to the Living Murray and those delivered through the National Water Initiative Water Sharing Plans. This would substantially offset and reduce third party property risks.

Under the present Basin Plan proposals, it is not possible to deliver environmental flow targets specified by the MDBA without third party impacts upstream particularly for private property upstream of the Barmah Choke.

These impacts extended to the ability to maintain basic property access and to issues of elevated moderate and major flood risks.

A key driver for private property third party impacts in the Southern Murray system is end of system flow requirements for the Coorong, Lower Lakes and Murray Mouth.

The release of the original Guide to the Proposed Basin Plan (2010) proposed that of the minimum 3000 GL to be recovered for the environment, 2000 GL was to flow out the Murray Mouth.

Little has changed in the next two versions of the basin plan, however the language is now more subtle with a preference to suggesting flows to indicator sites upstream will result in benefits to the Coorong, Lower Lakes and Murray Mouth (CLLMM), but that the CLLMM is not the driver.

Whatever the promotional words are used, it remains clear in supporting documentation that the CLLMM sites remains a key driver in end of system flow targets.

The third draft plan, also more clearly specifies a salinity target of 1000 EC in the modified estuary (Lower Lakes) which will have major flow implications for upstream states.

Salinity targets of 1000 EC are unachievable in a modified estuary with the existing aged infrastructure and current operations of the barrages. Without substantial investments to the barrages, sea water inflows will continue in the Lake Alexandrina and these cannot be overcome by Murray River flows.

It is not uncommon for Lake Alexandrina salinity levels to rise to 30,000 or 40,000 EC near the Goolwa wharf when Goolwa barrages blocks are removed to enable large river flows from the lakes to flow into the unmodified remaining 11% estuary. Southern lows result in sea water intrusions into the lake. The sea has moved back into the lakes against the outgoing high flows of the lakes.

A salinity target of 1000 EC without major upgrades to the barrages therefore is an inappropriate target. Particularly given that the sea remains the stronger force regardless of Murray river flows.

There is now more widespread understanding of the long term environmental problems of the Coorong and Lower Lakes, a key driver for SDL targets in Murray River.

The Basin Plan is implementing the longer term strategy of South Australia, a focus on fresh water solutions to address long term environmental issues. While this may be the preferred option for South Australia, it can be delivered without third party impacts.

It is critical therefore that a substantial review occurs into the SA plan Securing the Future, a long term SA plan of management for the CLLMM site. This plan which relies predominantly on a 'freshwater solution' ignores other infrastructure options. Major investments in infrastructure works should be prioritized to deliver long term sustainable environmental outcomes.

This equally applies to addressing environmental problems of the Coorong. Recognition of historic flows to the Coorong from South East Australia must be now included into a revised approach to measuring and achieving environmental benefits to the Coorong.

This submission supports recent moves by the South Australian Government, to implement a feasibility study to return historic flows to the Coorong from South East of South Australia, is a long term target. However, **support does not** exist if benefits derived from this feasibility study are not extended to revising downward the 'end of system' water requirements that are being sought from the NSW Murray.

It is inappropriate for Water for the Future funds to be redirected to South Australia, if water savings claimed only are reduced off the SA SDLs.

It also is widely acknowledged now that Murray River extractions in NSW are not the primary reason for hyper saline conditions in the Southern lagoon of the Coorong.

Therefore, the 971 GL end of system flow targets claimed to benefit the Coorong needs major revision. Environmental targets for the Coorong, should be underpinned by infrastructure works within the geographic area of the Coorong and South East of South Australia.

Flow objectives for the Murray Mouth will also require major investment upgrades and operational reviews to the barrages.

End of system flow targets will not resolve long term problems of sedimentation at the Murray Mouth. Sedimentation of the Murray Mouth was first predicted in 1903 when construction of barrages across the tidal inlet system was first proposed.

1903 – Report by Government experts (NSW & SA)“*construction of a weir or dam in the tidal compartment of a river has been invariably found to result in shoaling.....
When supply is sufficient to overcome tidal action and when supply of fresh water falls off the sea water takes it place...*

In the recent drought (1903).. if barrages had been erected 5 yrs ago, it would have required nearly the whole available flow of the river to keep the lakes sweet"

Source: *Adelaide Advertiser* 20.3.1903

In conclusion, it is critical that all infrastructure works across the Basin are prioritized, including the original Living Murray recommendations.

In conjunction with this, major investments in private property infrastructure works such as bridges, crossing upgrades, strengthening of flood levees, should be an integral component of development of the Basin Plan.

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