

Submission to Productivity Commission Inquiry “Murray-Darling Basin Plan: Five-year assessment

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I wish to raise several concerns regarding the implementation of the Basin Plan.

SDL Adjustment Mechanism

It is recognised that the mechanism to adjust the Sustainable Diversion Limits is written into the Plan and agreed by all jurisdictions and that responsibility for developing potential projects under this mechanism rests with the States. However, despite the time extension agreed by Ministerial Council, the amount of detail that is publicly available on each project appears to be very limited (at least in the South Australian context) and community consultation has been very limited. This lack of information and consultation has eroded community confidence in the potential outcomes of these projects.

This lack of confidence is exacerbated by the “trust us” attitude in relation to assessment of the projects and the lack of information (eg model assumptions and outputs) especially relating to the cumulative impacts of the package of projects on environmental outcomes in areas downstream of the project sites.

A further issue relating to the SDL Adjustment Mechanism relates to the timing and the level of scrutiny applied to the acquittal of these projects once they have been implemented or constructed. Given the previous significant delay in developing these projects and the fact that the community understands that business cases for many projects have yet to be submitted, it appears likely that the 2024 deadline will not be met. This, combined with the apparent limited scrutiny of some water savings projects that have already been implemented is generating concerns within the community.

Monitoring

Of necessity, implementation of the Basin Plan has been focused on process and outputs rather than outcomes as a means of measuring progress in the short-term. The Plan has a strong emphasis on adaptive management and it is hoped that, as implementation of the Plan progresses, a more outcome based approach will be adopted. However from a community perspective there appears to be ongoing difficulties in ensuring that there is appropriate and adequate monitoring to support this outcome based adaptive management regime. Adaptive management requires integrated continuous and event-based monitoring linked to management decisions to facilitate changes to deliver better environmental and social outcomes.

Infrastructure

Outdated infrastructure (particularly the barrages) is a significant constraint on being able to make the best possible use of available environmental flows. Proposals were put to the MDBA to include the barrages in the Constraints Management Project but this infrastructure was specifically excluded from the project. The lack of remotely operated quick acting gates on Goolwa Barrage is a significant barrier to trialing different water release regimes to better mimic natural estuarine flows and conditions.

In addition engineering constraints and the current condition of the weirs and locks limit the extent to which weir pools may be raised or lowered again to better mimic natural conditions.

Failure of the Basin Plan to address the issue of climate change and in particular the potential rise in sea level is of considerable concern both in terms of more frequent over-topping of the structures at times of high tides and the increased difficulty in releasing water to achieve the desired environmental outcomes in both the Coorong and Lakes Alexandrina and Albert.

Clearly there is a wide range of options that could be implemented to ensure that the natural resources of this region can be appropriately managed and protected into the future. The lead time for making and implementing such a politically sensitive decision as enhancing or replacing the barrages is likely to be substantial and it is essential that consideration of this issue be commenced well before the 10-year review of the Plan.

Channel Capacity Sharing

An issue not adequately addressed in the Basin Plan is that of channel capacity sharing between potentially competing demands during periods of high water use. This issue is of particular relevance downstream of the Barmah Choke. The competing demands include delivery of environmental flows, water for irrigation and South Australia's Entitlement Flow. The increase in irrigation development and the shift towards a business model relying more heavily on temporary water allocations are likely to place much greater political pressure to prioritise irrigation demands over environmental flows, reducing the potential positive environmental outcomes that can be achieved. It may also put pressure on South Australia to change the pattern of delivery of Entitlement Flow to accommodate the increased upstream irrigation demands at least for short periods.

This is a complex and sensitive issue which has the potential to assist in delivering optimum environmental, social and economic outcomes but requires considerable community engagement and much greater transparency to reach a broadly acceptable resolution.

Compliance

It is recognised that the issue of compliance is primarily the responsibility of the individual states. However failure to adequately ensure compliance threatens adoption of the Basin Plan. Communities need confidence that the SDLs agreed under the Plan are being honored across the whole Basin and that additional resources are not being diverted (eg through floodplain harvesting). It is suggested that an annual independent assessment be undertaken across all jurisdictions (similar to the IAG under the Cap) and that this assessment be widely publicised across Basin communities in a timely manner to provide an increased level of confidence that the fundamentals of the Basin Plan are being adhered to.

River Operations

River operations to deliver the required flows throughout the system is a complex process guided by detailed rules under the Murray-Darling Basin Agreement. Some of the proposed water savings projects may affect the outcomes of these water sharing and delivery rules by changing the volumes held in various storages. This particularly applies to the management of the Menindee Lakes Storage and Lake Victoria where changes to the volumes held in storage in Menindee Lakes may affect Additional Dilution Flow or the salinity benefits derived from the rules governing transfer of water from Menindee Lakes and Lake Victoria. Any consideration of issues such as these to date has not been readily apparent to the community.

Water Resource Plans

Completion and accreditation of all Water Resource Plans within the required timeframe is clearly going to be difficult particularly for those jurisdictions requiring several Plans. However it is essential that the quality of these Plans and the depth of the assessment and review of them to confirm that they meet the requirements of the Basin Plan not be sacrificed in order to meet the deadline. This includes ensuring that there is adequate community consultation throughout the process.

Murray Mouth

The Basin Plan includes a mouth openness target that the river mouth should be open through natural river flows for 95% of the time. While this target is somewhat ambiguous because it is not time bounded, it is extremely unlikely that it will ever be met even when the Plan has been fully implemented. Local community groups recognise that it is probable that to keep the mouth open, dredges will be required on-site most, if not all, the time unless a significant undertaking is implemented to remove some 5 to 10 million m³ of sand from inside the river mouth to effectively “re-set” conditions similar to those that prevailed prior to closure of the mouth in 1981.

Even with this major project to re-set conditions it may not be possible to meet the current target. The futility of this target undermines the credibility of the Basin Plan in the eyes of local Lower Lakes and Coorong communities.