Australian Productivity Commission Murray Darling Basin Plan: Five Year Assessment

Murray River Council NSW - Submission

The Murray River Council welcomes the opportunity to make a submission to the Australian Productivity Commission on the Five Year Assessment of the Murray Darling Basin Plan.

The Murray River Council covers an area of 11,865 km² with a population of just under 12,000 people. The area is bounded by the Murray River to the south and the Edward River to the north and includes numerous significant environmental assets such as the Yanga, Perricoota and Barmah Forest areas. It also includes several major irrigation districts with water being provided through Murray Irrigation Limited and several smaller irrigation consortiums along the Murray, Edward, Wakool Rivers and numerous other Creeks.

INFORMATION REQUEST 1

The Commission welcomes feedback on its approach to assessing the Basin Plan.

The Murray River Council believes the approach being taken to assess the Basin Plan is relatively robust, however, there are several matters that should be considered to strengthen the overall assessment.

The first matter is the need to have measurement of the amount of water within the system and especially the amount taken for environmental purposes so there is equity in management requirements between the irrigators and environmental purposes. This will also allow for a more holistic measure of the cost of achieving environmental outcomes within any location along the Basin.

The second matter is that there is no accurate measure of the river flows which also needs to be measured so there is a better control of what happens within the rivers at any time. The adage that if you cannot measure it you cannot manage it is also true for this situation.

The third matter that could be considered is the effectiveness of management of river flows through the constraints in the system. This becomes very important when considering the need to transfer water from storages to provide airspace for inflows at the same time there is high levels of natural flows into streams feeding the rivers resulting in significant overbank flows. While it can be argued that this is a natural flooding event it is also a situation that would not occur if the releases from the storages did not occur. Damage to property, infrastructure and stock are immediate impacts of this situation and October 2016 was a most recent example.

- a. risks that may prevent Basin States from successfully implementing SDL adjustment projects
- b. the extent to which adopting a different definition of 'neutral or improved socioeconomic outcomes' for efficiency measures to what is in the Basin Plan would affect the likelihood of projects being delivered on time and on budget
- c. whether there are other novel approaches to recovering water for the environment, such as purchase of entitlement options, that may contribute to Basin Plan outcomes while achieving neutral socioeconomic outcomes.
 - a. The risk that may prevent successful implementation of SDL adjustment projects is the possibility of continuing alteration of the targets due to political interference rather than having scientific evidence based targets with suitable measures of achievement. The adoption of the disallowance of the Northern Rivers adjustment was the first step in undermining the security of local economies. The proposed disallowance of 605GL from the SDL adjustment projects will completely erode confidence in the irrigator communities.
 - b. Any new definitions for 'neutral or improved socio-economic outcomes' would need to be considered and be a reflection of what has actually happened as a result of current changes rather than a theoretical modelling of what may happen. The definition needs to consider all of the impacts to social and economic outcomes rather than just those that measure the industries directly involved in extraction and use of water. The support industries and service industries are also directly affected by any changes in irrigation water availability and costs. To council it is clearly consideration of whether there has been no change to the social and economic wellbeing of the communities, or if there has been change has it been positive in comparison to previously. If this is not the case then the measure has not been met.
 - It is evident that the studies already undertaken by the MDBA have shown that there is significant adverse impacts on communities within the irrigation areas of the Basin. It is clear that it is not possible to remove approximately 30% of water from the irrigator and expect to get a neutral or positive outcome.
 - c. One consideration for improving the environmental outcomes from the environmental water is to use some irrigation structures to deliver the water through the system instead of breaching current restraints in the natural river. As an example it may be possible to deliver up to 6GL per day through the Murray Irrigation Mulwala Canal and various offtakes to prevent overbank flows at the Barmah Choke. This method could save significant volumes of water in delivery because there is approximately 2% loss through the lined irrigation channels yet between 30 and 50% loss when using the river over the same distance.

The Commission is seeking information on actions governments should now take to achieve SDLs in the Northern Basin.

While this Council has no in depth knowledge of the Northern Basin a general concept is that all flows both into and out of the system are required to assist in the management of the river systems. This also requires metering of all outtakes so accurate information and management is achieved.

INFORMATION REQUEST 4

The Commission is seeking information on:

- a. why progress to remove constraints has been slower than expected
- b. the implications of this slow progress
- c. what can be done to ensure that constraints are removed in a more timely manner while managing impacts on third parties
- d. strategies that are, or could be, put in place to increase the extent to which Basin Plan objectives are met when constraints cannot be removed.
 - a. Progress to remove constraints is slow as the constraints in the system are complex and not easily understood as there is interconnection between many of the system constraining points. The initial issue that one of the major constraints on the river is the Barmah Choke which is a result of a natural event thousands of years ago. This naturally caused flows across floodplains which have now been recovered and used for irrigation and farming purposes making the constraints a critical management point to prevent flows into the floodplains causing damage to infrastructure and property.

Another consideration is that removal of the constraints may also have a negative impact on the environment of the river with altered flows causing bank erosion, loss of water through evaporation and seepage, and more frequent black water events.

It is also interesting to note that constraints were not a significant issue for river management until the volume of water for irrigation was reduced significantly, resulting in larger volumes being held in storage and required for delivery for environmental purposes with the flow events happening at peak flow times.

- b. The implications of not making progress to remove constraints is that the river flows have to be very carefully managed to prevent negative social or economic impacts.
- c. Removal of constraints can be achieved by using alternative infrastructure for delivery of water downstream. As stated previously this may be by utilisation of the irrigation infrastructure such as Mulwala Canal.

d. Strategies to meet Basin Plan objectives without removal of the constraints may be to construct additional in stream storages downstream of the major constraints as initially planned in the 1902 design for the Murray and Murrumbidgee Rivers. This design made provision for more storage facilities between Mildura and Barham which would provide for earlier release of water with holding points much closer to the South Australian border facilitating much quicker release and delivery into the SA storages when required and to the relevant environmental sites.

INFORMATION REQUEST 5

The Commission is seeking information on:

- a. the extent to which the Australian Government's strategy to recover water in areas where gaps remain will be cost effective, align with the Basin Plan's environmental objectives, and be transparent
- b. risks to achieving water recovery targets by 1 July 2019 and, where not already addressed under current arrangements, how any shortfalls may be resolved
- c. examples of water recovery (both infrastructure projects and purchases) that have been either well implemented or had major deficiencies, including risks to securing contracted but not yet delivered water from water-saving infrastructure projects.
 - a. The proposed recovery strategies through productivity projects and infrastructure improvements will see the existing gaps in recovery targets being met at some stage in the future. While this may not meet the 2019 there is a need to consider deferring the timelines to allow for efficient implementation of the projects with suitable and accurate measurement processes included.
 - b. As suggested above the shortfall should be reviewed in line with progress on recovery projects and provision made for deferral of some of the target timelines.
 - c. Excellent examples of water recovery projects that achieved the desired outcomes are the significant amount of work undertaken to line and improve irrigation channels. The reduction in losses and the ability to be able to accurately measure and control all water flows within the system provides significant confidence in the community that targets are being achieved as designed.

There are numerous examples of water buy back that has created significant issues for both land and infrastructure management increasing costs to remaining irrigators to the point that some have been forced to sell to prevent loss of all family assets.

- a. what specific assistance has been provided to help communities adjust to the Basin Plan
- b. the extent to which this assistance has supported particular industries or regions
- c. evidence that this assistance has facilitated adjustment that would not have otherwise occurred and has contributed to meeting the intended outcome of the Basin Plan, including more resilient industries and communities with confidence in their long-term future
- d. whether future structural adjustment assistance is warranted, and if so, what lessons can be learnt from past programs.
 - a. Assistance to communities has been provided into the agricultural industries and through some infrastructure grants which are one of injections of funds which do not adequately compensate for large reduction in productive income into communities.
 - b. The assistance packages generally to not provide support for the agricultural service and support industries. These groups have also lost significant components of their income streams through reduction in numbers of clients, reduced levels of expenditure and reduced frequency of expenditure. Often this may mean that businesses choose to close completely or reduce the levels of service to minimise their losses.
 - c. Council does not believe that industries have been adequately supported to meet the intended outcomes of the Basin Plan other than through water recoveries. The social and economic impacts are still being felt and growing as more people and businesses within the community feel the longer term impacts. Significant change of this nature may often take between eight to ten years to fully demonstrate the impacts.
 - d. There is seen to be a need for future structural adjustment with major lessons learnt that the assistance needs to cover the full spectrum of affected person within the communities affected by the structural adjustment. There should not be projects funded outside of the impacted areas under the assumption that people will be drawn into other industries.

- a. the main risks to remaining WRPs being finalised and accredited by mid-2019
- b. how, and to what extent, recent measures to make the WRP accreditation process more efficient and streamlined have sped up the preparation of WRPs and whether there are opportunities to further streamline the accreditation process for WRPs
- c. other ways WRPs or associated planning processes (e.g. consultation, modelling inputs) could be changed to better meet the objectives of the Basin Plan
- d. how effective Basin States have been in consulting with all relevant stakeholders
- e. the main risks to planning assumption work being finalised on time.
 - a. Main risks to WRPs being finalised is the disallowance motions and potential withdrawal from the Basin Plan as a result because of loss of faith in the process.
 - b. The recent measure to speed up WRPs seem to be having some impacts. It is not known what other measures may be effective.
 - c. Consideration needs to be given to include targets for WRPs for productive use of water as well as the volumes and outcomes for environmental use.
 - d. Each of the States appear to have been engaging well with the communities, however, it is a matter of what the outcomes of this engagement actually achieve that leaves some levels of dissatisfaction.
 - e. Risks to Planning assumption work being finalised is the potential for some of the factors being ignored at early stages of planning and modelling work.

The Commission is seeking information on:

- a. how environmental water planning under the Environmental Management Framework is, or is not, facilitating achievement of the Basin Plan's environmental objectives within legislated timeframes, and what improvements should be made.
- b. how effective and efficient the delivery of environmental water is including through coordination among owners of held environmental water, managers of planned environmental water and other stakeholders and how any barriers could be reduced
- c. whether Australian and State Government objectives for the delivery of environmental water align, any examples of where this has not been the case, and how differences are resolved through the Environmental Management Framework
- d. the extent to which the Prerequisite Policy Measures (PPMs) assumed to exist under the Basin Plan will be in place by the target date of 30 June 2019, so that the Plan's environmental objectives can be achieved under the SDLs agreed by governments, and how any identified concerns should be addressed
- e. any opportunities to better integrate environmental water planning and management with natural resource management programs and complementary works to facilitate achievement of the Basin Plan's environmental objectives.
 - a. No comment.
 - b. The efficiency of delivery of environmental water could be improved through utilisation of irrigation infrastructure. It is also important to note that many landholders and irrigators also make personal contributions to environmental outcomes as an example 50GL of water is used in this region for private wetlands.
 - c. No comment.
 - d. There is a continuing concern that the PPMs are all aimed at achieving environmental objectives often at the expense of maintaining productive communities. Consideration should be given to the inclusion of some community economic outcomes as a result of either environmental benefits or increased production benefits to the economy.
 - e. No comment.

INFORMATION REQUEST 9

The Commission is seeking information on:

 any inconsistencies between the various national water quality guidelines and the water quality management plan requirements in WRPs and whether these inconsistencies are being resolved and managed

- b. the adequacy of the actions of water managers to achieve the water quality objectives of the Basin Plan.
 - a. No comment.
 - b. There is some concern that increased environmental flows across forest floors and floodplains will decreased the water quality through higher levels of sedimentation and more frequent black water events. There is also greater incidents of blue-green algae outbreaks impacting on both stock and domestic use.

INFORMATION REQUEST 10

The Commission is seeking information on:

- a. whether the Basin Plan trading rules advance the water trading objectives and outcomes stated in chapter 5 of the Plan
- b. whether changes to state trading rules made to date as part of implementation of the Basin Plan adequately recognise and protect the environment and third party interests
- c. whether implementation of the Basin Plan has improved access to market information and what further actions Basin States, irrigation infrastructure operators or the MDBA might need to take
- d. whether processes for reviewing Basin State trading rules including the roles of the MDBA and the water trade working group are sufficiently transparent, evidence-based and consultative.

Basin Plan trading rules have been considered to have created an increase in the base price of water and have reduced the total pool of water available for trade generally. In some circumstances this is proved incorrect as more people trade the water on a temporary basis rather than risk not having sufficient water allocation to fully maintain seasonal crops. Many of the farmers with permanent planting continue to risk using smaller volumes of permanent water and rely more on natural events supplemented by temporary trade. This is seen as high risk farming however, the cost of purchasing permanent water eliminates this as a solution as well as the uncertainty of water allocation within any irrigation season.

The information available for most people trading in water is seen as being adequate as information can be sourced by spending time undertaking research. The transparency could be improved but care needs to be taken to ensure that commercially sensitive information is not mandated for disclosure.

INFORMATION REQUEST 11

- a. risks to meeting critical human water needs (CHWN) under the Basin Plan, how the Plan addresses these risks, and what, if any, further measures are required
- b. any concerns about provisions in WRPs relating to CHWN under extreme conditions.

As stated previously there are concern about meeting critical human water needs especially during periods of drought. While there are numerous measures taken in each community to assist with the security of supply of water for domestic consumption the Plan does address some of these risks. Consideration of this area of consumption and supply needs to be specifically measured in the WRPs for all potential extremes. Contingency plans for worst case scenarios also need to be prepared and tested.

INFORMATION REQUEST 12

- a. risks to the MDBA's ability to monitor and enforce compliance with the Basin Plan and WRPs from July 2019, and what, if any changes should be made to address these risks
- b. the extent to which non-compliance with the Basin Plan will be addressed by recent changes to compliance and enforcement announced by governments
- c. any further changes that should be introduced to increase water take compliance across the Basin.
 - a. Main risk to compliance is the disallowance motion and consequent lack of trust in the Plan if this is successful. Continually moving targets always leads to measures being taken to avoid compliance. If the targets are set and metering is mandated and measured consistently then confident that compliance can be achieved. The issue will be the quantity of water compliance required compared to the volumes extracted and risks of non-compliance creating issues. The metering of all significant extractions including environmental location will provide confidence in compliance transparency.
 - b. Recent changes will provide some confidence in compliance and enforcement being transparent and satisfactorily meeting desired outcomes.
 - c. Introduction of metering of all extractions of significance from the system will improve compliance.

The Commission is seeking information on:

- a. how well current arrangements for monitoring, evaluation and reporting support the delivery of the objectives of the Basin Plan; and how they could be improved to increase the likelihood of the objectives being met
- b. whether there is a clear delineation of responsibilities for monitoring, evaluating and reporting on the Basin Plan, and, if not, how it could be improved
- c. the usefulness of the MDBA's Framework for Evaluating Progress and its recent application in evaluating the Basin Plan
- d. how data and information obtained through monitoring, evaluation and reporting could be made more useful for decision making and evaluation of the Basin Plan (including how to make this data and information more outcomes-focused)
- e. the general information required to provide confidence to communities and others that the Plan is being implemented well and is achieving its objectives
- f. whether processes are in place to monitor key risks to the continued availability of Basin water resources.

The issue of monitoring, evaluating and reporting have shown to lack significant levels of trust and comprehension. Many people do not consider the information being reported is accurate as they have not been adequately briefed or consulted on the factors being measured and interpreted. As an example measurement needs to be taken to the micro level to understand the more macro level information which often does not show the significant affect within smaller segments of communities.

As this is a very specialised area of measurement it is considered that this should be undertaken by organisations completely independent of the MDBA. A consideration could be that Australian National University or some similar organisation may be the appropriate organisation to undertake the research of monitoring, evaluating and reporting.

INFORMATION REQUEST 14

The Commission is seeking information on:

- a. whether current institutional and governance arrangements provide for sufficient oversight of the plan and support engagement with the community
- b. whether there are risks to the achievement of the objectives of the Plan that arise from the current institutional and governance arrangements
- c. what improvements can be made to ensure that institutional and governance arrangements are fit for the next phase of implementing the Plan.

The current institutional and governance arrangements do not provide for adequate support and engagement with the community. In many instances it is apparent that the MDBA are undertaking a strategy of divide and conquer to get tacit acceptance of progress.

There are risks that the Plan which is established as a regulation instrument by the MDBA is being evaluated and governed by the same body that has set the conditions of regulation. There should be separation of functions to ensure that the regulation, compliance and governance are being undertaken by separate bodies.