



Murray–Darling Basin Authority

Supplementary submission to the Select Committee on the Murray–Darling Basin Plan

3 February 2016

Summary

The Murray–Darling Basin Authority (MDBA) is providing this supplementary submission to the Select Committee on the Murray–Darling Basin Plan (Basin Plan) in response to some of the comments made during the conduct of the inquiry. More detailed and technical information can be found in the MDBA’s first submission to this inquiry. The MDBA remains available to provide any further information that might be required by the select committee to assist in their deliberations.

The MDBA supports the continued rollout of the Basin Plan, and associated water reforms. These reforms represent the largest structural adjustment program by an Australian government. The water resources of the Murray–Darling Basin (the Basin) are vitally important to all Australians and should be managed accordingly.

This means there must be sustainable limits on water use. It also means there needs to be an active water market that encourages productive use of the resource. In addition, it means managing the water resources in the Basin to meet the interests of all Australians including dryland farmers, who need reliable stock and domestic supplies, Aboriginal people, tourism operators, rural and regional communities and cities which need reliable, clean, drinking supplies. This includes meeting the requirements of a sustainable irrigation sector whose products are important to our national economy.

This is what the Basin Plan, and associated reforms, intend to achieve and are currently on track to deliver.

Basin Plan — purpose and rollout

The aim of the Basin Plan is to stop the river system declining further so that communities can continue to enjoy the social and economic benefits it provides into the future.

- It is incorrect to say that the goals and objectives of the Basin Plan are not clear or do not represent a triple bottom line outcome.
- There is a need to adapt to a new way of managing the Basin’s water resources. The purpose of the Basin Plan is to bring back some balance to how the river system is used and managed, so that future generations can continue to benefit.
- For most of the past 100 years, management of the Basin’s water resources has focused on developing the rivers for economic benefit. While not intended, this has resulted in the loss of around 70 per cent of floodplain vegetation. There have also been increasing problems with algal blooms, acid sulphate soils, and salinity, as well as a significant reduction in the numbers of native fish and waterbirds. These impacts have all been exacerbated by droughts.
- The Basin Plan is not about returning the system to a pristine pre-development state. It will reduce the volume of water extracted annually from the rivers — from about 41 per cent of inflows (based on 2009 figures) to about 33 per cent by 2019 (this does not factor in the

opportunity provided by sustainable diversion limit adjustment). The Basin Plan is about leaving enough water in the rivers so the system can continue to provide for all river uses – human consumption, irrigation, farming, tourism, recreation and the environment.

- The Basin Plan also puts an end to years of debate and uncertainty over whether the right balance has been struck. Not having the Basin Plan would result in further loss of confidence by water users and investors.
- The water resources of the Basin are finite. Beyond a certain level of development, the benefits derived from these water resources are at risk of being greatly diminished. There is potential for the Basin to become a ‘tragedy of the commons’, in which overuse of the resource leads to diminished benefits for all.

The Basin Plan is being rolled out over more than a decade, in order to complete the work and to give communities and industries time to adjust.

- Claims that the Basin Plan should be paused because it is being implemented too fast and causing business instability do not take into account the long implementation process over many years and the support of substantial government investment in innovative and efficient irrigation practices.
- The MDBA does not support pausing the Basin Plan. This would remove some of the opportunities that are helping communities and industry adapt to the changes. For example:
 - this is Australia’s largest structural adjustment funding program. Funding is being used to invest in new water efficient irrigation infrastructure and to buy water entitlements in some areas. To date, \$5.3 billion has been invested in water recovery, underpinning future economic development of Basin regions
 - the sustainable diversion limit adjustment process is on track to deliver around 500 GL of offsetting savings. It could also achieve a greater volume of savings, depending on the projects now being developed by state governments. This would significantly reduce the remaining amount of water needing to be recovered
 - the work by Basin governments on constraints management has the potential to contribute to the sustainable diversion limit adjustment process which may further reduce the amount of water needing to be recovered
 - the northern Basin review, due to be completed this year, is looking at opportunities to reduce adverse social and economic outcomes and improve confidence in the environmental outcomes being sought by the Basin Plan
 - reviews have been completed on the extraction limits for three groundwater areas, as required under the Basin Plan. As a result of this work, the MDBA will be proposing amendments to the Basin Plan that allows for moderate increases in groundwater use in these areas, provided states impose stronger management regimes.

- The Australian Government has also provided \$100 million to Basin state governments to invest in communities to assist with the adjustment process. There are new water trading rules and carryover arrangements that mean individual farmers (or other water licence holders) have greater control over the management of their water portfolios. Legislation has been passed to limit water purchasing by the Australian Government to 1,500 GL, ensuring that the balance of water recovery for the Plan must occur through efficiency savings. This provides a significant boost to regional economies.
- Significant private investment in the irrigation and allied processing sector has occurred since the Basin Plan commenced, reflecting investor confidence. An example is the southern expansion of cotton growing and ginning operations in the New South Wales Riverina.

The MDBA is monitoring the social and economic effects of Basin water reforms as they are rolled out, and our effort is focused on the communities likely to be most vulnerable to change.

- The MDBA is aware that some irrigation communities in the Basin are facing hardship for a number of reasons, however it is wrong to assume that the Basin Plan and associated water reforms are the sole reason for this.
- The Basin Plan is a large-scale reform, and it is has always been recognised that this level of change will have some effect. However, there are many different drivers behind these changes, and the MDBA’s monitoring program is building a picture of what has been influencing change in Basin communities. It is apparent that many communities have undergone significant changes over the last few decades due to a number of economic, climatic and government policy changes.
- Areas such as Dirranbandi, Warren, Collarenebri, Deniliquin-Wakool, Berri-Barmera-Loxton-Waikerie and Kerang-Cohuna have been showing signs of adverse change and are being looked at in detail to separate out the effects of the Basin Plan from other drivers. Other larger towns with more diverse economies such as Griffith, Dubbo and Moree are better able to adapt to some of the changes occurring. The MDBA is using many sources to identify what is changing in Basin communities and why. This includes information on irrigated agriculture production, water use, patterns of water trading, measures of productivity and new developments and investment. Other information being considered includes shifts in demographics (such as population, age profiles and migration into or out of rural communities), employment, and estimates of social and economic conditions and community wellbeing.
- The MDBA’s work has found that where water is recovered in large volumes over short periods, local businesses in some areas have found it much harder to adjust. This reinforces the importance of the Basin Plan being rolled out over a long period and the Australian Government’s recent action in capping the level of buybacks.
- There have been positives from the Basin Plan for industry. Many hundreds of farmers across the Basin are benefitting from government infrastructure investment and will also be better positioned to cope with dry periods in the future. The economic benefits also have flow-on effects to local businesses.

- The MDBA is required to report on the social and economic effects of the Basin Plan every five years, and the first report is due in 2017. Work for this report is well underway.

The sustainable diversion limit adjustment process will lead to improved outcomes.

- State governments have an opportunity to reduce the water recovery volume by initiating projects that lead to smarter and more efficient use of water.
- The sustainable diversion limit adjustment process is an opportunity to change the diversion limits set by the Basin Plan on the basis of:
 - projects developed by state governments that achieve equivalent environmental outcomes with less water (called supply measures), examples include works and measures, changes to river operating rules and projects that reduce water losses (such as that being considered for Menindee Lakes)
 - projects funded by the Australian Government that deliver improved environmental outcomes but with no additional social or economic impact (called efficiency measures), examples include on and off-farm efficiency measures.
- An independent stocktake in mid-2015 has found that if the state governments develop quality projects based on the proposals they originally submitted, they could achieve an offset of 500 GL, and potentially more. This would substantially reduce the water recovery task.
- The sustainable diversion limit adjustment process is scheduled to operate in mid-2016 and will be followed by a formal amendment to the Basin Plan in 2017.

The research into river constraints is about making the best use of environmental water which could help reduce the water recovery task.

- Further work to address constraints is not needed to allow full implementation of the Basin Plan. In fact, the constraints work is targeted at achieving additional outcomes.
- Basin Plan outcomes can be achieved without addressing existing constraints to delivering water in the Basin. The constraints investigations are aimed at identifying opportunities to improve the efficiency of water delivery for the environment and production, while avoiding or mitigating effects on people who live along the river and use the floodplains and waterways.
- Over the past decades, Basin governments and communities have done considerable work has been done to maintain and restore the health of the rivers and floodplains, particularly in highly modified areas downstream of dams and weirs. The Basin Plan and the Constraints Management Strategy aim to build on these achievements to restore a small part of the natural flow pattern. Returning the rivers to their pre-development condition is not feasible, but it is possible to restore some of the smaller flows that are critical for improving the health and resilience of the river systems, and surrounding floodplains.

- Change to managed flows are only likely on the lowest parts of the floodplain, in areas often designated by state planning as floodways or ‘flood country’. Generally these areas do not have buildings or crops, but it is in these locations that native plants and animals will benefit.
- State governments requested a Constraints Management Strategy be developed under the Basin Plan – this was completed in November 2013.
- In 2014 the MDBA carried out the early work required under this strategy on behalf of the state governments. This included investigating the flow targets set by state governments and consulting with communities in the relevant areas. The state governments are now leading this work and are being assisted by MDBA staff.
- A range of possible flows is being investigated in order to identify constraints and limits. It is not correct to assume that the highest flow being examined will be the “most likely” future regime, nor can it be assumed that any additional flows will occur at more frequent intervals.

The northern Basin review is on track and will identify whether changes can be made to some northern Basin Plan settings.

- Some people are frustrated by the lack of progress on the northern Basin review, however the review is due to be completed by the middle of this year, as scheduled.
- The review is an opportunity to see if changes can be made to the extraction limits for two catchments in the north — the Condamine–Balonne and the Barwon–Darling — by improving our social, economic and scientific knowledge of the area.
- The extraction limits for the Barwon–Darling have potential flow-on impacts for a number of the upstream valleys in both northern New South Wales and southern Queensland. This is because the water requirements for the Barwon–Darling are in part sourced from these upstream valleys.
- The review involves scientific, social and economic work in consultation with the New South Wales and Queensland governments and the Northern Basin Advisory Committee (a community-based group set up by the MDBA to provide advice on the review).
- Following a decision in the middle of this year, there will be a formal amendment process for the Basin Plan. This will involve more opportunities for public consultation over the following 12 months.

There are a number of checks and balances already built into the Basin Plan.

- Calls for the Basin Plan to be reviewed regularly are unnecessary as the *Water Act 2007* (Cwlth) includes review points and external checks on the Basin Plan:
 - The Productivity Commission is responsible for auditing the effectiveness of the rollout of the Basin Plan every five years. The first audit is due in 2017. The commission will also review state governments’ water resource plans that implement the Basin Plan on the ground.

- The Basin Plan, as a whole, must be reviewed by the MDBA after 10 years — this includes reviewing Basin Plan work being delivered by Australian Government and state agencies.
 - The MDBA is required to evaluate the social and economic effects of the Basin Plan, the environmental watering plan, and water quality and salinity targets every five years. These evaluations are scheduled to be published for Basin governments to consider in 2017.
 - The MDBA is also required to report annually on the progress of Basin Plan implementation, including the work of other Australian Government and state agencies with responsibilities under the Basin Plan.
- The 2014 review of the Water Act recommended improving these review opportunities by ensuring the Basin Plan is reviewed at a time when outcomes can be assessed and the necessary evidence can be collected. In line with these recommendations, the Australian Government has agreed to re-phase the reviews conducted by the MDBA, so that the first review of the Basin Plan is completed in 2026. The MDBA’s five-yearly reporting starts in 2020.

Delivering outcomes and achieving results

Water management is now better coordinated across the Basin.

- Claims that environmental watering is not focussed, nor strategically managed in the Basin are unfounded.
- For the first time, the Basin is now being managed as one connected river system, and the MDBA’s job is to ensure that this is being done in a coordinated way. The MDBA sets Basin-wide environmental watering priorities each year as a guide to state and Australian Government environmental water holders. These priorities take account of a range of factors including: long term objectives, storage levels, climate outlook, how wet or dry the catchment is, and the watering history of key sites.
- State and Australian Government environmental water holders determine how to use their own portfolios of environmental water. These decisions are guided by the Basin priorities, expert advice from river operators, and other more local considerations (for example, advice from catchment management authorities and local land services).
- In 2014–15, 97 per cent of all environmental water used by state and Australian Government agencies was delivered to meet annual watering priorities identified across the Basin for that year. This includes return flows that drain back into rivers after a watering event and provide multiple benefits further downstream.

Environmental watering is making a positive difference.

- Claims that there have been no benefits from environmental watering to date are unfounded.

- State and Australian Government agencies are seeing immediate results from their watering activities across many regions in the Basin. Environmental monitoring has shown local level improvements for native fish, waterbirds, vegetation and water flows, and these outcomes are regularly reported by Australian Government and state environmental water managers.
- This reporting shows the range of environmental responses achieved from each watering event, as well as how Australian Government and state environmental water managers coordinate to get the most outcomes from their water holdings.
- It has taken decades for some of the negative impacts of development on the Basin’s water resources to become evident. Similarly, it will take time — probably a decade or more — to show long-term improvements across the Basin in response to more water being left in the rivers, or being actively delivered to important sites.

The Basin Plan aims to meet environmental needs over the length of the river system.

- There is a common misconception that the Basin Plan is just about delivering water to South Australia, and particularly for the Lower Lakes and Murray Mouth.
- In developing the Basin Plan, the environmental water needs of 122 sites across the whole Basin were assessed. These sites are located from the top of the river system to the bottom. The assessment showed that if the water needs at the 122 sites were met, sufficient water would be available to meet the environmental water needs at the end of the system.
- There is also a misconception that removing the barrages will resolve the health problems in the river system, or reduce pressure on upstream states. Removing the barrages would mean that more fresh flows would be needed through the river system to stop salt water moving further and further up the river. Furthermore, proposals for an additional lock or weir below Lock 1 would not remove the need for fresh flows to be travelling down the system through the Murray mouth.

Engaging with communities

The MDBA works with all stakeholders in the Basin and is responsive to feedback.

- Claims that the MDBA does not respond to community feedback and does not engage with people in regional areas are incorrect. Further, such comments do not take into account the variety of stakeholders in the Basin with often opposing views, and the extent of what can be changed during the implementation phase of the Basin Plan.
- Stakeholders in the Basin have wide-ranging expectations about how the system should be managed. These views vary markedly: between upstream to downstream areas, between different sectors or groups of water users, and depending on individual views about ‘what is sustainable’. The Basin Plan reflects a balance between these divergent views and interests.

- From 2011, MDBA staff have consulted extensively across the Basin. In 2014–15 more than a third of MDBA staff were involved in over 250 meetings across the Basin discussing aspects of implementation.
- The MDBA is often accused of not responding to feedback. However, there is considerable evidence and examples of where we have modified our work based on community feedback. Examples include: the early constraints investigations, the constraints river reach reports, the Basin-wide environmental watering strategy, the Basin Plan Evaluation Framework and drafts of the Basin Plan. This evidence can be found in supporting consultation documents, or logs, which are all available to the public on the MDBA website.

Other issues

Water allocation decisions are made by state governments

- It is wrong to claim that low water allocations are the result of the Basin Plan.
- State governments use allocations to manage risk in water availability throughout the course of a water year. These decisions take into account: storage levels (where relevant), the volume of unused water carried over from previous years, the level of natural inflows expected in the coming season, and how much water has already been used in the water year.
- Allocations are currently low because of successive dry seasons. Prices in the temporary water market closely follow allocations. This means prices have risen as a result (but nowhere near the highs of around \$1,000 per megalitre experienced during the millennium drought and before the Basin Plan).
- Environmental water entitlements remain subject to the same conditions of use as entitlements for consumptive purposes, and are subject to the same allocation decisions. For example, if there is only a 10 per cent allocation for a general security entitlement in a particular area, then both irrigators and environmental water users receive 10 per cent of their entitlement volume.

Temporary water prices are driven by availability

- The Basin Plan is not a key driver of temporary water prices in the Basin. The key driver is water availability. For example, during the millennium drought the temporary water price was around \$800 to \$1,000 per megalitre. That was before the Basin Plan existed.
- Temporary water prices have a strong correlation with annual state government water allocations. For example, the recent prices for temporary water in the southern Basin are broadly consistent with prices in other years with similar water availability outlooks, and are not as high as those experienced during the worst of the millennium drought.
- That is not to say that water recovery under the Basin Plan has no impact at all on the market – clearly there is an effect on the supply side.

- Many factors can cause water prices to rise early in the season, including: starting allocations, increased demand from farmers who have sold some or all of their water, new growers in the market, and farmers seeking to minimise the risk of rising prices between November and February. Although not the only factor, water recovery has reduced the potential supply of water to the temporary market, which may have some effect on prices, although the current prices largely reflect the low water allocations.

The water market helps to drive productive use of water

- The water market in the southern Basin continues to be the most active and largest water market in the world.
- Participation in the market continues to grow, which suggests more irrigators are adapting each year to the changing volumes of water in the market, re-thinking planting decisions and taking a more informed approach to their business decisions and risk management.
- The temporary water market has been changing because of demand and supply, the widespread introduction of carryover, and the changing risk management approaches of irrigators. Since 2012–13, the allocation price has followed a pattern of rising sharply early in the season, remaining high during November to January, and then falling towards the end of summer as irrigation demand drops off.
- The MDBA supports steps to improve the transparency of the water market in the Basin. One area in which this could be improved would be online reporting of timely information on water prices. Another option would be to further streamline the processing of water trades within and between Basin states — requiring a commitment from states to make their existing registries interoperable.

Menindee Lakes is owned and managed by the NSW government

- The Basin Plan has not caused Broken Hill’s current issue of low water supply.
- The drought in the northern Basin means that flows into the lakes have been very low, in fact, the last 28 month period has been the lowest on record.
- The lakes are not a very efficient water storage, and without inflows, the lakes run out of water in three years. They also have a high level of evaporation, losing on average 400 GL of water a year, or about 20 per cent of the capacity of the lakes.
- There is a great deal of confusion about who manages the lakes and how they are managed. The New South Wales government owns and manages the Menindee Lakes. New South Wales has a longstanding agreement with other Basin governments to share some of the water from the lakes to help support the River Murray. The Basin governments have contracted the MDBA to manage the River Murray according to their rules and principles. This includes placing orders for water from the Menindee water storage when the lakes are at a certain level.
- Any changes to the management of Menindee Lakes would need to be made by New South Wales with the agreement of the other Basin governments.

- There is a significant opportunity for the NSW government to propose different management arrangements for the lakes that reduce these evaporative losses, and yield an offset in the SDL adjustment process. This could significantly reduce the economic impacts of the Basin Plan.

CONCLUSION

The MDBA is pleased to have had an opportunity to address a number of issues and misconceptions raised about the Basin Plan. This is a highly complex, nationally significant reform. The reform has bipartisan endorsement of the Commonwealth Parliament, and supported by state governments via a number of intergovernmental agreements. Through the MDB Ministerial Council, implementation is proceeding on schedule.

Murray–Darling Basin Authority

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