

**Submission  
No 93**

## **INQUIRY INTO WATER AUGMENTATION**

**Organisation:** Murray Irrigation

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Murray Irrigation

# **Inquiry into the augmentation of water supply for rural and regional New South Wales**

Submission to the General Purpose  
Standing Committee No. 5.

August 2016

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# Executive summary

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## Water management policy has been developed over time and in response to climate and industry influences.

Murray Irrigation welcomes the opportunity to provide the following comments to this inquiry. In preparing this submission, we focus on issues relevant to the NSW Murray Valley, specifically environmental water management and the management and reporting of information relevant to the water market.

Environmental water management in NSW is complex and the multiple agencies that are involved increases the complexity and potentially the effectiveness of delivering on programs.

The Basin Plan was originally proposed as a means to streamline the management of the Murray-Darling Basin, however, the result has been increased bureaucracy leaving water users and irrigation corporations at a disadvantage as they try to manage their water holdings under complex rules while multiple environmental managers have the capacity to influence the rules through regulatory arrangements that require the concurrence of the Environment Minister and the Murray Darling Basin Authority (MDBA).

In rural and regional NSW, historically water management has been developed at a valley level based on climate and water availability, infrastructure – including dams or river regulating structures – and industry base. In regulated valleys – those with access to storage – the range of products and the value of those products is inherently linked to the reliability of supply.

That reliability and information about water availability, forecasts and probabilities is vital to an open and robust water market.

As rules have been developed to open the water market between jurisdictions and separating water from land, new players have entered the market and it is vital that information and reporting is easy to access, easy to understand and timely to ensure a level playing field.

With multiple jurisdictions operating water management activities and water market information, differences in process and access to information has become more obvious and the need for improvement in NSW reporting is apparent.

The Committee will be looking at ways and means for potential augmentation of supply and ways to ensure water supply will continue to meet demand in the future.

In conducting this review, it is important to consider the significant reform in water policy over the last three decades undertaken in the name of environmental management and the impact and cost of that reform on rural and regional communities, including operational costs.

In considering any proposals for current and future augmentation of water resources, the Committee must also consider the cost and cost recovery methodology.

Currently NSW operates under an 'impactor pays' principle with the majority of river infrastructure and planning and management costs being recovered from irrigators.

With more and more water recovered for environmental accounts, and increasing demand on water resources from other interest groups including riparian landholders, recreational users (boating, fishing) and tourism, it is timely for a review of how costs are recovered and the user share paid by irrigators. There is increasing justification for river operations to be subsidised through a community service obligation recognising the contribution a healthy working river system provides to the community more broadly.

# Executive summary

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Murray Irrigation welcomes the opportunity to provide the following comments to the Standing Committee as they review the augmentation of water supply in rural and regional NSW. Murray Irrigation would be available to present to the Committee on request.

## Background

Murray Irrigation Limited is an unlisted public company that provides irrigation water and associated services to almost 2,400 landholdings through around 3,000km of gravity-fed earthen supply channels over an area of 748,000ha in the NSW southern Riverina. Murray Irrigation's source of water is the regulated River Murray above Barmah Choke and the company's water supply is almost exclusively NSW Murray General Security Water.

Murray Irrigation operates a Water Exchange to facilitate the temporary trade of allocation water between water users. This exchange is open to anyone who establishes a Water Exchange account. The operation of the Exchange complies with the Water Market Rules. Daily trade information, including volume and value is freely available on the Murray Irrigation Water Exchange webpage.

Murray Irrigation's shareholders are farmers, with food and livestock being the focus of regional production for both domestic and international markets. With a regional population of around 33,000, irrigated agriculture is the foundation of the social and economic wellbeing of our towns and businesses. Prior to the extreme drought of 2006 and 2007, the Murray Irrigation area of operations produced 50 percent of Australia's rice crop and, in terms of State production, 20 percent of milk, 75 percent of processing tomatoes and 40 percent of potatoes.

Murray Irrigation is a member of New South Wales Irrigators' Council.

# 1 Terms of Reference

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## 1.1 Environmental water management (g)

The multiple agencies responsible for managing environmental water in NSW is confusing and has the potential to lead to competing priorities or bureaucratic duplication.

In the NSW Murray there are at least four agencies involved in the management and delivery of environmental water:

- Commonwealth Environmental Water Office (CEWO) – managing water entitlement recovered through Basin Plan water recovery programs;
- Murray Darling Basin Authority (MDBA) – managing some of the water recovered under the Living Murray and Water for Rivers initiatives;
- NSW Office of Environment and Heritage (OEH) – managing NSW held environmental water recovered through State programs; and
- NSW Forest Corporation – managing the Koondrook-Perricoota Forest project developed under the Living Murray Program.

All agencies prepare environmental watering plans and conduct monitoring and reporting activities. The OEH, CEWO and the MDBA all identify the same key hydrological indicator sites as priority watering sites. All agencies say they work with each other, however, from the public's perspective they see multiple agencies managing multiple portfolios for the same objectives producing multiple reports.

**Recommendation:** NSW take immediate steps to consolidate all environmental water holdings and activities to minimise duplication and maximise outcomes. NSW work with the MDBA and the CEWH to streamline processes and ensure there is no duplication in the management of environmental water or reporting of the outcomes.

A further conflict arises due to the need for the concurrence of the NSW Environment Minister and the Minister for Primary Industries to allow any changes to the Water Sharing Plans for the management of water in individual valleys. Under the Basin Plan, the MDBA must also accredit Water Resource Plans and Water Sharing Plans.

That means that two water holders have capacity to influence the regulation that underpins water management in the State. No other water holder has that privilege and there is a risk that the needs of productive water users becomes secondary to the environmental requirements of these water holders.

**Recommendation:** Remove the need for concurrence of the Environment Minister with regards to water management regulations. NSW should lobby the MDBA to either cede their water holdings or cede their right to accredit Water Resource Plans, recognising the conflict of interest in being a water holder and an administrator of the rules.

Environmental water managers must be clear on the outcomes they want to achieve. While a basis for the Basin Plan was to improve the resilience of the environment so it is better able to cope through drought, the focus of its implementation is on flows rather than environmental outcomes in the environment.

Murray Irrigation has been working with the OEH for almost 10 years, and with the Murray Wetlands Watering Group prior to that, to facilitate the delivery of environmental water through our infrastructure to identified wetlands on private property. These projects achieve environmental outcomes including improved wetland understorey plant diversity and tree

# 1 Terms of Reference

health, a reduction in weeds and an increase in landholder awareness and participation. The project uses irrigation infrastructure channels to effectively deliver water to target wetlands with no impact on surrounding productive farmland.

Unfortunately, to date the MDBA will not recognise or acknowledge the value of these projects in delivering environmental outcomes as they are not associated with “overbank” flows, also known as floods.

Murray Irrigation has proposed that the private wetlands watering program should be included in the range of projects submitted under the sustainable diversion limit adjustment mechanism in the Basin Plan as they make effective use of environmental water, delivering targeted flows without negative third party impacts and can achieve significant outcomes in the landscape using less water.

**Recommendation:** NSW OEH should prepare a submission, supported by the Department of Primary Industries (DPI) Water to recognise the use of irrigation infrastructure to deliver environmental flows, reducing the amount of water to be recovered from NSW Water users under the Basin Plan.

## 1.2 The management, appropriateness and efficiency of reporting water market information (f)

Murray Irrigation has hosted a water exchange since 1997 with the first exchange being developed by Southern Riverina Irrigators for Murray Irrigation customers to effect transfers within the area of operations and the Murray Irrigation Water Access Licence. Since then, the Exchange has been automated and is now open to any account holder, from within or external to Murray Irrigation.

Government policy now means there is a connected market across the south of the Murray Darling Basin providing more opportunity to water users in our valley, however, it also means there is more competition and volatility in the market. Water market participants have to be more alert to market moves. Water is no longer an input, it is a commodity in its own right.

In the southern connected Murray Darling Basin there is significant opportunity for the movement of water between valleys and between States. There is also significant differences in how the different jurisdictions manage their water registers and report market information.

Rightly, there are limits to trade between Valleys to protect the rights of water holders, known as Intervalley Trade Limits (IVT). However, how these limits are managed and reported on varies between jurisdictions and the impacts can be significant.

	Murrumbidgee-Murray IVT	NSW to Victoria IVT	Barmah Choke trade limit
Limit	Net 100GL trade out of the Murrumbidgee. Net 0GL trade to the Murrumbidgee.	The lesser of net 200GL or a volume that keeps the risk of spill below 50 percent.	Trade from upstream of Barmah Choke to downstream is limited to the volume that has been traded from downstream to up.

# 1 Terms of Reference

Reporting	Website updated 9am daily. Trade opens when the IVT falls below 85GL.	Website updated live as trades are executed. Allows constant monitoring of available trade capacity.	Website updated when the MDBA is consulted about a trade and daily.
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**Recommendation:** NSW investigate developing a system that allows live updates of IVTs to provide better information for water markets.

There are several exchanges now operating in the Australian water market. Some, like H2OX and the WaterFind exchange operate across jurisdictions while others including the Murray Irrigation Exchange offer a service specialised in a single valley. The Murray Irrigation Exchange allows participation by anyone who has an exchange account, however, if they wish to use the allocation outside of the Murray Irrigation area of operations, the volume must be transferred off the Murray Irrigation licence through the WaterNSW approvals process and there may be a time delay.

Again, the difference between jurisdictions is significant. The Victorian Water Register has an automated process for allocation trade approval allowing trades to be approved within a matter of hours. On the Murray Irrigation Exchange, we can provide instant access to purchased volume if it is to be used within our area of operations because we are the approval authority. This instant access is attractive to water purchasers.

Unfortunately, the process through WaterNSW is not automated and therefore takes time for market participants to receive the required approvals.

**Recommendation:** NSW investigate developing a system for automatic approvals of temporary trade to improve the operation of water markets.

Information about water storages and river and stream flows has improved markedly over the years, however demand for better information has also increased.

In NSW allocation announcements are now made on the first and fifteenth day (or next business day) each month to inform water users of adjustments to allocations, until they reach 100 percent. DPIWater has also made an effort to provide more regular seasonal outlooks to forecast potential allocation improvements under different inflow scenarios. DPIWater has made a commitment to provide this information monthly (on the fifteenth) from August 2016.

There is an argument, however, that with the live river information that is now available, there should be better, and more regular allocation forecasts to provide water users with better seasonal forecasts which can be used in farm business planning.

**Recommendation:** NSW develop a methodology to provide more regular seasonal outlooks.

## 1.3 Any other related matter – cost of reform and cost recovery (i)

When considering opportunities to augment water supply in rural and regional NSW, any proposed new infrastructure must be considered against a robust cost-benefit analysis to ensure existing and future water users are not faced with unaffordable water bills.



# 1 Terms of Reference

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From the turn of the 20<sup>th</sup> Century until the 1960s, the focus for water planning and management was on growth and was funded by Government. Government water policy supported development and investment in irrigation and the construction of irrigation districts, particularly in the south of the State. In the late 1960's however, demand outstripped supply for the first time and volumetric limits were placed on entitlements in the NSW Murray.

In the 1980s the focus had shifted from development to sustainability and to the environment. By the 1990s, the farmers began to lobby for the ownership of the irrigation districts, the first environmental allocation was made to the Barmah-Millewa Forest and across the Murray Darling Basin the relevant State Ministers agreed to restrict diversions to sustain the rivers.

Since then there have been multiple reforms, all ostensibly to improve management of the Basin's water resources and resilience of the environment. What has been lost, however, is the impact these reforms are having on industry, Basin communities and their resilience and sustainability.

For example, Murray Irrigation's network was constructed at the peak of the growth and development focus of Government between the 1930s to the 1960s. It was built with an operating capacity of around 1,400GL per year. On privatisation in 1995 the company was issued almost 1,200,000 NSW Murray General Security entitlements (=1ML at 100 percent). Following more than 20 years of water reform and environmental water recovery programs, our long term forecast average annual delivery is now 600GL per year due to entitlement transfer to the environment. That means Murray Irrigation is now operating at 40 percent capacity, which is not an efficient way to operate a business.

**Recommendation:** NSW recognise the cost of water reform on industry and communities and take best efforts to minimise or mitigate negative impacts in the future.

NSW ensure that there is no further water recovery in NSW beyond currently announced programs and take all steps to ensure the full suite of SDL offsets offered under the Basin Plan SDL adjustment mechanism are realised.

The water reform has occurred at the same time as NSW fully adopted the principle of recovering water management and planning costs from users (irrigators) throughout the State. That is, irrigators now pay for a large portion of the management and maintenance of river infrastructure, including Dam safety (post 1997) and renewal and replacement of assets.

In NSW water management costs are shared between 'users' and the NSW Government on the basis of the 'Impactor Pays Principle'. This means that those costs are allocated to users that have contributed to the cost being incurred. This includes how the majority of the NSW Government contribution to Murray Darling Basin Authority (MDBA) costs are recovered.

MDBA costs are shared between the Commonwealth and relevant States, but the method of cost recovery differs in each jurisdiction. The Essential Services Commission in Victoria is the accredited as the price regulating authority and it is difficult to determine to what extent regulated water charges are subsidised by Government through their process. South Australia pays no regulated water charges and therefore water holders outside of irrigation trusts pay no ongoing water management or water use charges, rather all South Australian's pay a Natural Resources Levy.

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Murray Irrigation believes it must now be recognised that as the community expects, and governments impose higher environmental standards from river operations, so too must the community pay. It is now time to open the door for the costs of higher environmental standards to be attributed to the broader community rather than attributing such costs entirely to extractive users.

The intent of a cost share framework is commendable, however, it is our view that the current structure places significant burden on 'users' or irrigators while other impactors and beneficiaries of river systems and the wider community effectively get a free ride.

**Recommendation:** NSW conduct a review of the user share ratios to ensure it is equitable and applied to all 'users' so as to avoid irrigators subsidising other beneficiaries of NSW river systems.

NSW demand an open, transparent and public process to determine MDBA joint program costs to allow for scrutiny and ensure Basin Governments are only asked to fund effective and efficient activities with appropriate cost shares.

NSW recover MDBA costs from all taxpayers recognising joint program activities and river operations that deliver environmental outcomes are being conducted for the public good and should be considered a community service obligation.

## 2 Conclusion

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## 2 Conclusion

Water management in NSW has evolved over time to suit water availability and industry in the relevant valleys. Australia has a variable climate and the NSW system of allocations and multiple water products of varying reliability is suited to allowing flexibility in different water availability scenarios.

Since the turn of the century, the water market has increasingly played a more significant role in productive water use while at the same time, opening the way for investors to enter the market.

Increasing demand for environmental outcomes, decreasing volumes of available water due to Government water recoveries and increasing competition in the market is changing the way water holders operate. At the same time, water reliant businesses and irrigation infrastructure operators are having to adjust to a future with less water.

All of these mean access to timely and transparent information will be increasingly important to ensure a level playing field and allow better business planning.

At the same time, costs of water management – including any future augmentation of supply – must be appropriately shared across the community to recognise the public benefit of river infrastructure and management.

**Michael Renehan**  
**Chief Executive Officer**