Who We Are
The Riverina and Murray Joint Organisation is a cooperation of eleven (11) Member Councils in southern NSW and operates under NSW Local Government Act 1993. Member Councils include Albury City, Berrigan Shire, Carrathool Shire, Edward River, Federation, Griffith City, Hay Shire, Leeton Shire, Murray River, Murrumbidgee and Narrandera Shire.

These Councils cover an area of nearly 75,000km² and a population of 150,000 people. The southern part of the region extends along the Murray River, from Albury City Council at the eastern end through to the Councils bordering on the far west, including Murray River and Edward River. The northern part of our region extends generally from Griffith City Council across to the regional Shires of Carrathool and Hay in the west. A regional map showing Member Councils boundaries is below.
RAMJO has a mix of large regional centres, medium sized irrigation based towns and industries in urban shires, through to a number of predominantly dryland farming shire areas, large in size but with a low population base.

The major regional centres of RAMJO are Albury City (approx. 55,000) and Griffith City (approx. 28,000). There are many and varied small, medium and large scale business across the region, with most stemming from an agricultural base. The region is home to several university bases and tertiary institutions, while maintaining its role as an important food and fibre source for Australian consumption and for export purposes. The region produces a wide range of summer and winter grain crops, fruit, vegetables, horticulture, viticulture, dairy and livestock. Agriculture directly employs 30,000 people in the region, which is 37% of the total regional employment.

RAMJO holds a unique position, in that the majority of Member Council communities have economies which are based on irrigated agriculture, or the secondary and tertiary industries which support these industries. Together, the RAMJO councils comprise the majority of irrigated agriculture in NSW. Therefore, our reasons for our interests in the water market is that we represent those communities which are impacted by the workings of the water trading market. Indeed, the Mayors and General Managers who represent these communities are well placed to advise on the functionality of the water trading market in this current environment.

It is not the intention of this document to provide a comprehensive review of the water trading market, nor is it to make detailed recommendations on how it should be amended. Rather it is intended to provide a strategic overview of the issues RAMJO believe are hampering the delivery of an optimal water regime and to suggest directions in which enhancements might be made. In doing so, the document recognises that some corrective issues are easier to address than others, and that some lie outside the scope of this inquiry.

While we accept that our focus as Local Governments is on our communities and the social and economic impacts which are to be addressed via the Independent Assessment of Social and Economic Conditions in the Basin, we also believe we have relevant input into the scope of this inquiry.

The content includes a range of options relating to the Terms of Reference and Scope as identified on Page 2 of the Issues Paper. We have provided the feedback via a broad range of options and RAMJO recommendations below.
Water Trading Market – General Input

The creation of an open trading system for water is one of the foundations on which ‘Chapter 12 – Water Trading Rules’ of the Murray Darling Basin Plan is predicated. Secondary to that is the principle that water finds its way to the “highest value use”, or as referenced in Page 8 of the Issues Paper under Principles and Objectives of Water Markets: “allocating scarce water resources to their most valuable and productive uses at any point in time, subject to appropriate rules and controls”. It is the belief of RAMJO members that the definition of “productive” has come to mean “most profitable” and consideration should be given as to whether this is the best measure of water use, or whether other criteria play a role in this measurement.

In practice, the commoditisation of water has led to some problematic outcomes, including corporate ownership of water by entities with no connection to the land, and whose ownership of water is directed solely at profit-making. The Hon David Littleproud raised this issue in May 2019 stating "Fourteen per cent of those trades every year are from corporates and individuals who don’t own land, so we’ve got to understand, is the market fit for future? Has it evolved into something that isn't equitable? Where is the market power? [And] Is it disproportionate?"  

In addition, the trading of water along the river systems, particularly in the Goulburn and Murray valleys, has produced enormous demands on delivery mechanisms for that water, placing constraint areas such as the Barmah choke under unsustainable pressure. In June 2019, the Murray Darling Basin Authority acknowledged to ABC’s Landline that the bank erosion (from too much water) was concerning.

RAMJO believes that the intention of the Water Trading Market, and the ability for primary producers to on-sell their water allocation, was a move in the right direction for those in the agricultural industry to create flexibility and opportunities for supplementary farm income. However, these unintended consequences have distorted the market and have decreased the accessibility of water for producers and threatened their livelihood. The Water Market Outlook released in August 2019 when water prices in most Murray Darling Basin southern regions were ‘trading in excess of $600 per ML’ states that the ‘high water allocation prices are likely to continue’ (pg.4).

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1 (Australian Government, 2012)  
2 (Sullivan, 2019a)  
3 (Jasper, 2019)  
4 (Sullivan, 2019b)  
5 (Department of Agriculture - Australian Government, 2019)
The following dot point include a range of options which RAMJO believes should be considered in this inquiry and the review into the operations of the water market.

**Options**

- That the water trading market move from an open market, to a restricted market. For example, water should only be able to be sold to and purchased by primary producers. This could be tracked and monitored via an ABN or another identifying registration or number.

- That water entitlements cannot be traded multiple times in one year and can only be traded from one primary producer to another.

- That water licenses currently owned by non-primary producers should be slowly recovered year-on-year, to prevent a collapse in water prices which would negatively impact farmers who have used this as a means to manage retirement or alternative off-land income.

- Recovery of water from non-primary producers could occur at a rate of 10% a year, depending on carryover limitations.

- There should be Basin-wide consistency on the regulatory environment for the water sharing plan terms relating to carryover percentages. This would allow for the stabilisation of water prices and the reduction of cross-border inter-valley transfers.

- Water brokers need to be properly regulated and declare conflicts of interest.

**RAMJO Recommendation**

RAMJO strongly supports the Australian Competition and Consumer Commission’s (ACCC) review into the water trading operations and functionality. Furthermore, a comprehensive review of this system is long overdue and regulatory reform across multiple areas is necessary to ensure a nation-wide plan goes hand in hand with a water trading market.

**Market Trends and Drivers**

Permanent plantings, especially of nuts, have proliferated in the Murray and Murrumbidgee valleys in recent years. The viability of these plantings is based on the value of their product per megalitre of water consumed, which is significantly higher than traditional crops such as rice, and much higher than pasture-dependent agriculture such as dairying.
The capacity of these permanent planting operations to pay $800 to $1,000 per megalitre for general security water has had an undoubted impact on the price of water. In current drought conditions, that places the price of water beyond the reach of those growing annual crops.

That said, these permanent plantings are not the only, or indeed the major, driver of current water costs. As in all free markets, it is an issue of supply and demand. No doubt these buyers are adding to the demand side of the equation, but the lack of supply is the major driver of price. The water is simply not available.

Permanent plantings have been a feature of all the valleys listed above for many decades. Sunraysia, in particular, has been a major long-term consumer of water for this purpose. Throughout that time, annual cropping and pasture production have been viable, albeit constrained by drought conditions when they occur.

When water does become more readily available, resumption of annual cropping will occur. It will be subject to the same price pressures that have always applied, including the price of water. No doubt the presence of these additional plantings will contribute somewhat to a higher price for that water.

Most of the water that is used for annual cropping is sourced from above the Barmah choke via the Murrumbidgee Irrigation Limited (MIL) or the Murrumbidgee system, whereas the vast bulk of permanent plantings are irrigated from below the choke. The current strain on the choke to deliver on current demands, let alone to cope with the demand for future expansion, is much more likely to constrain the further development of permanent plantings, unless a solution to the choke issue is found and pursued.

If future expansion of the permanent plantings can be achieved above the choke the pressure on the choke could be stabilised and ultimately reduced.

**Options**

- That options be explored to incentivise future permanent plantings to be pursued using water sourced from above the choke, rather than below it.
- That resources be made available to encourage innovation and adaptation to reduce farmers’ dependence on annual irrigated crops.
**RAMJO Recommendation**

RAMJO supports the right for farmers to undertake agricultural pursuits in their own interests. However, resources should be made available to encourage innovation and adaptation to reduce their total dependence on annual irrigated crops.

**Market Transparency and Information**

There is a lack of clarity in how transmission losses are calculated and where the financial liability for these losses should be accrued. Furthermore, the transfer of water entitlements from upstream to downstream sites has placed significant strain on river systems to deliver the water, particularly with respect to areas of constraint, such as the Barmah choke.

Additionally, the management of environmental water allocation (discussed further in the section on Market Participant Practices and Behaviour) is undeniably complex. Most observers don’t understand it, and it remains a substantial challenge for those tasked with its delivery. The broader acceptance of the value of the environmental flows would be enhanced if there were some better reporting of its results, and the extent to which it is doing what it is designed to do.

**Options**

- Where water is sold inter-valley, either the upstream or downstream licence holder (or a combination of both) should be liable for all or part of the transmission loss. This would reduce the inter-valley sales for profit (e.g. upstream at Goulburn Valley down to Lower Murray).
- Consideration might be given to incentivising upstream transfers, particularly when it involves a transfer from below a constraint to above a constraint. In circumstance where the establishment of adaptive agriculture in upstream areas is inhibited by the cost of land, incentivisation could stimulate such investments while reducing transmission losses.
- Clarity regarding transmission losses and how they are calculated would greatly reduce some of the sentiment and frustrations regarding the current water management arrangements.

**RAMJO Recommendation**

That Murray Darling Basin Authority (MDBA) and/or the ACCC provide further clarity around liability for transmission losses, and that consideration be given to mechanisms which encourage upstream trading of water, particularly when it is traded to areas upstream of constraints.
Market Participant Practices and Behaviour

RAMJO agrees with the prioritisation within the Plan for the environmental health of the Basin rivers. Nonetheless, the delivery of water for the environment via the Commonwealth Environmental Water Holder (CEWH) has changed the availability of water and has been marked by inefficiencies and inadvertent damage to the environment due to poor timing of flows. The ongoing damage being incurred at the Barmah choke is an example. The choke’s capacity has been steadily diminished by high sustained flows, causing bank slumping. This capacity reduction has resulted in a greater need to create overbank flows that create unseasonal flooding events and incurs greater transmission losses.

The capacity of the Darling to deliver any environmental flows has been decimated by the drought. Even so, over-extraction in the northern reaches of the Darling and Barwon through poor metering, illegal extraction and flood plain harvesting have significantly exacerbated this problem.

RAMJO believes that the further buyback of water for environmental use is unsustainable, and that the more efficient use of the available environmental pool will lead to improved outcomes.

The storage of environmental water in dams generally does not damage the interests of irrigators. However, in circumstances where large quantities of water are held in dams by the CEWH, there is a reduced capacity to hold irrigators’ carryover water for future years. When spill events occur, and environmental needs have been met, consideration should be given to reducing environmental allocations immediately following the spill to permit more space for irrigators to secure water for the following years.

The management of environmental water allocation is undeniably complex. Most observers don’t understand it, and it remains a substantial challenge for those tasked with its delivery. The broader acceptance of the value of the environmental flows would be enhanced if there were some better reporting of its results, and the extent to which it is doing what it is designed to do.

There is a widespread view within RAMJO communities that the bulk of the environmental flows are directed at maintaining the Lower Lakes and the Murray mouth in South Australia. Even if this is not true, better communication about outcomes there and elsewhere in the Basin would alleviate some of these concerns.
Options

- That MDBA provide a suite of transparency measures to demonstrate the effectiveness of its environmental water allocations across the Basin.
- That consideration be given an appropriate level of investment to maximise the delivery of water, including environmental water, around constraints, through the use of other rivers (e.g. the Wakool and Edward) and through the existing irrigation networks such as Murrumbidgee Irrigation Limited.
- That consideration be given to an independent evaluation of the most efficient way to deliver the environmental needs of South Australia, given the massive evaporative losses incurred with that current system.
- That allocation of funds into reducing those evaporative and seepage losses, other than buying back water, would be a more efficient and collaborative mechanism for delivering downstream requirements.
- That consideration be given to reducing environmental allocations within dams following spills and the meeting of environmental needs.
- That the recovery of the remaining 58GL of Sustainable Diversion Limits be put on hold until such time as all findings from relevant water-related enquiries and investigations are handed down.

RAMJO Recommendation

All of the above options, specifically clarity and transparency regarding the management of the Murray Darling Basin water flows.

Additional Potential Solutions

RAMJO has drafted series of solutions which should be considered in the context of this review. In particular, the future management of water, the trading market in which it operates and the future sustainability of all matters relying on the successful administration of water requires a holistic approach. This includes Federal and state governments working together and addressing the cyclical scarcity of water as the Australian reality it is, and create an environment where fair trading, and equitable and efficient use of water are considered as a nation, rather than industry versus industry, or state versus state.

In particular, it is evident that taking a step towards solving the issue of unaffordable water prices and ongoing water security in the Basin will require investment. Investment would equate to water security for all water customers (environmental, social and agricultural/economic purposes), ensuring all water-reliant sectors survive, and hopefully thrive.
Infrastructure Investment

Major opportunities exist within the Basin to enhance its efficient operation, water reliability and availability (and therefore pricing) through properly planned infrastructure development.

The types of infrastructure options fall into 4 main categories:

- Those directed at increasing total inflows into the Basin, such as river redirection
- Those directed at water retention and greater water reliability, such as dams
- Those directed at the reduction of water losses to the system, such as Lock Zero in SA
- Those directed at the more efficient transmission of water within the system, such as bypass mechanisms for constraints

The establishment 100 years ago of the extensive irrigation systems that have nurtured our Basin’s productivity was a truly nation-building enterprise. In the hundred years since, the productivity and water efficiency of the Basin agriculture has been able to keep pace with our needs. We have reached a point now where the impacts of the growing population and the constraints of drought and climate change demand a new investment to sustain that agricultural base.

The unhealthy state of the Darling is primarily a result of the drought. However, infrastructure initiatives involving dam development in its northern tributaries, and, longer term, realistic consideration of river redirection could make its flows longer lasting and more frequent. Similarly, the winding back of flood plain harvesting would further enhance flows, particularly if supported by downstream dam infrastructure.

Options

- Approach the Murray Darling Basin as a national piece of infrastructure, and undertake investment and asset maintenance as such.
- That the Federal government give consideration to the establishment of a permanent fund directed at the maintenance of the security of the sector in times of drought, or the investment into maintaining and improving the infrastructure supporting the industries and populations which rely on the Murray Darling Basin.
- That the Federal Government undertakes a comprehensive evaluation of future infrastructure investment requirements which secure both the environmental and productive requirements of the Murray Darling Basin for decades to come.
- A Sovereign Wealth Fund be established and maintained for addressing these matters.
RAMJO Recommendation

With the knowledge that inflows into the Basin are likely to decrease in the future, the natural supply and demand matrix will continue to see water prices be placed under pressure into the future. Increased efficiencies or inflows (via investment) will increase the water availability and therefore allow for the better management of available water, which would be reflected in water pricing.

RAMJO recommends the Federal Government undertake to create a Sovereign Wealth Fund, designed to invest in and maintain the Murray Darling Basin with a few to protect and sustain water availability. A suite of deliverables from this fund could be delivered for a holistic approach to water management, including (but not limited to):

- Increased water inflows
- Investment, in line with the best interests of the nation, into water reserves, dams, increased inflows and other such projects to secure water reserves for future generations and manage pricing
- Delivering on environmental flows and downstream requirements
- Reducing evaporation and seepage where water scarcity will become more prevalent in future decades
- Allowing the backbone of the regional NSW economy (agriculture), to thrive, communities to remain self-sufficient and Australia to maintain export volumes as part of a healthy economy
- Create a “Centre for Excellence” (an innovation hub) from the RAMJO region, with partnerships between CSIRO, State agencies, regional universities and industries to create best-practice models, products and recommendations for all nations struggling with access to fresh water. This could include partnering with future emerging industries in the energy, water, technology and space sectors, along with First Nation knowledge and practices, to best position Australia for the challenges and opportunities we face now and in the future.

Summary

With increased efficiency, tightened regulation and transparency from state and Federal governments, RAMJO believes that there are significant improvements which can be made in water trading operations, efficiencies, availability and pricing. We wish to see a fair and equitable water trading market fit for the future and which allows the industries which underpin our economies and communities to thrive.
References


