



Director
Murray-Darling Basin Inquiry
Australian Competition and Consumer Commission
GPO Box 3131
Canberra ACT 2601

Online: <https://consultation.accc.gov.au/agriculture/murray-darling-basin-inquiry-interim-report/>

Friday 30 October 2020

Dear Director,

Murray Irrigation Submission into the Murray-Darling Basin water markets inquiry - interim report

Murray Irrigation acknowledges the ACCC team for the work undertaken in the investigation and development of its Interim Report and welcomes the opportunity to make our submission. The interim report is timely and we feel encouraged by its findings as it highlights the need for reform of outdated frameworks and rules. We are pleased to see the ACCC asking fundamental questions about the outcomes sought from a sustainable Murray-Darling Basin.

We are Australia's largest private, not-for-profit, irrigation company, delivering water to around 2,100 family owned landholdings that collectively own 823,977 General Security Water Entitlements. We also deliver water for the environment and operational use downstream. MIL operates in a key part of the southern basin and we promote this often-overlooked region as one of the keys to future sustainability of a well-run river system. MIL supports more flexible, outcome-based rules and regulations that reflect the sophistication and complexity of river operators and users.

As we noted in our response to the Sefton Review a fundamental need is for strategic management of the Basin to ensure fair outcomes for all users – the capacity of the existing Basin institutions to reform its management is questionable and fair outcomes have not been achieved to date and are not aligned with the intent of the National Water Initiative.

Our submission responds to 15 items of interest to Murray Irrigation that cover a range of topics. Overall we support this report and encourage the ACCC to articulate short-term improvements, carefully weigh up the cost versus the benefit of increased regulation and implications on entitlement holders whilst considering the physical constraints of river systems.

We thank you for the interim report and look forward to working with you in the development of improved market architecture to ensure a fair playing field is achieved for all water users. MIL supports the delivery of best outcomes for all Australians from our limited water resources.

Yours Sincerely,

Philip Endley
Chief Executive Officer



Murray Irrigation

ACCC Murray Darling Basin water markets inquiry

Submission to the interim report

30 OCTOBER 2020

Murray Darling Basin Water Markets Inquiry



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1 Executive Summary

Murray Irrigation welcomes the Interim Report. We acknowledge its wide coverage and recognition of Basin-wide issues that have led to serious issues. The Interim Report has been well-received by many of MIL's shareholders and customers.

The MIL covering letter notes the need for strategic management of the Basin; this strategic management is essential and it needs to be put in place, irrespective of institutional barriers.

Our submission notes the need for more specific solutions to improve both water markets and long-term operability of the river system. The water market needs to recognise the fundamentals of water management – water is precious, heavy and incompressible. Our key points in this submission are:

- We support the concept of open and transparent data. We believe these values should be reflected amongst other exchange users and to follow a Code of Conduct in terms of transparency and sharing of data back to the Central Information Platform. Where additional investment and process are required by future legislation this should be funded by Governments and not by IIOs or their irrigator customers.
- Barmah Choke: we support the former no trade downstream rule at the Barmah Choke and the concept of live and real time water trade against this trade rule and to demonstrate compliance against this rule. Not doing this undermines trust in agencies to manage the river water resources. There is deep community concern about the transparency and effectiveness of the current 'no net trade' rule and this has considerable impact on the 'social licence' of the water market.
- Trade and the physical characteristics of water: we share the ACCC's concern regarding the disconnect between trades and the physical characteristics of water and the river system. Delivering more water downstream "costs" more water in terms of conveyance and this can have a third-party impact by reducing the water available to other users.
- We believe there are three of these distortions (and there may be more)
 - o Interstate sharing rules downstream of the Barmah Choke should be formalised
 - o Flow Shares: We recommend that agencies consider the adoption of a "flow share" concept on extraction from rivers similar to what Irrigation Infrastructure Operators adopt when managing peak demand periods in channels. We believe the absence of this principle and limitation is a contributor to environmental damage to the Barmah Choke and the development of unsustainable agriculture in the wrong operational zones of the river
 - o Exchange Rates: The original NWI identified the use of exchange rates between different zones of the river, to recognise the physical cost in water losses (evaporation and leakage) of moving water long distances. A variety of mechanisms could be adopted to recognise this real impact on the Murray Darling Basin that would preserve the water market and sustain the river system
- Diversity of Agriculture: we are concerned that a Basin with a water market but without strategic management leads to outcomes not in the interests of regional communities or for Australia. Impacts are already evident, especially in the MIL and GMID operational areas.
- Basin Plan impacts: water acquired through government water policy reform should be acknowledged as a contributing factor to trade prices and subsequent trade behaviour.
- River Operation and Losses: the importance of river operation efficiency cannot be overstated. If the water market is to operate well there must be independent regulation of river operators, just as with IIOs and urban utilities. It is sometimes overlooked that conveyance water must work efficiently if the maximum amount of water is to be available for the environment and productive use through allocation mechanisms.
 - o MIL conceptual projects: there are opportunities to markedly increase efficiency of river operation and improve environmental outcomes in the MIL region and we are actively promoting two of these to river agencies. Both would increase operational efficiency and - subject to analysis - reduce losses. We will be happy to discuss these with the ACCC as examples.
 - o It is essential that river operations are run optimally with the key priority being to use the most efficient and least wasteful transmission options. There is significant potential to release more water for allocation in this way.
- Metering Compliance: compliant, accurate metering systems and the streamlined data from these systems will be important to align with market architecture and ensure that users are confident in the water market
- Communication: the communication of accurate and timely information to water users to improve fairer participation in water markets but to better understand the river operating environment, build more trust in market mechanisms and overall water management.

2 Background

Murray Irrigation is Australia's largest private irrigation company delivering water to over 2,100 family owned landholdings through 2,778km of gravity fed channels and operating \$1 billion of infrastructure. We have also owned and operated a water exchange since privatisation which has provided considerable value to our farmers within our area of operations.

Items of key interest to Murray Irrigation for this interim report are:

- Central Information and Data Transparency
- Single Exchange Platform
- Trade Rule Policy and Compliance
- Trade and Physical Characteristics
- Trade Transaction Processes
- Regulatory Safeguards
- Diversity of Agriculture and Farmgate Value
- Environment and Consumptive Water
- Volumes of Water Trade
- Basin Plan Impacts
- River Operation and Losses
- The Cost of Regulatory Compliance
- Metering Compliance
- Intervalley Trade (IVT) Limits
- Communication

Overall Murray Irrigation supports this interim report and encourages the ACCC to carefully consider the findings of the allegations that drove the instigation of this inquiry, the need to articulate short-term improvements, the cost versus the benefit of increased regulation, implications on change to property rights of entitlement holders and physical constraints of river/ water delivery systems.

3 About Murray Irrigation Limited

Murray Irrigation is a not-for-profit company owned by our shareholders who are our irrigator customers. We recover costs to deliver a high standard of customer service to deliver water and to maintain our extensive irrigation infrastructure.

3.1 Location

We are located in the Southern Riverina delivering reliable and productive water to around 2,100 family owned landholdings across 724,000 hectares through 2,778km of gravity-fed earthen channels.



3.2 Water and our modernisation journey

Water Entitlements on our bulk licence include 823,977 Units of General Security (non-government) and 193,826 Units of General Security (other), 279,786 Units of Conveyance, 121,704 Units of Supplementary, 137 Units of High Security – irrigation and 3,170 Units of High Security- urban

We have recently modernised our delivery system investing \$230M of government and company funds so that it can be operated remotely, accurately and timely – providing excellent service to our customers.

Our system is also critically placed to delivered targeted environmental water to a number of environmental assets and operational water to downstream users.

3.3 Water Exchange

We operate one of Australia's largest water exchanges trading an average of 101,304ML annually with an average gross market value of \$11.8M. This exchange has operated since 1999 and has been of considerable value for our customers to be able to trade water to other customers within our area of operations.

3.4 Key challenges

Since privatisation from a government owned entity to Murray Irrigation in 1995, government water policy reform and reduced rainfall have had a profound impact on the viability of our company. Water delivery has reduced from an average annual delivery of over 1,000GL from 1995 to less than 600GL average against an infrastructure base that remains at around \$ 1 billion.

4 Interim Report response items

A response to items of interest in the interim report is outlined as follows.

4.1 Central Information and Data Transparency

We support the concept of one information platform with real-time recording of trade data from all other exchange operators and transparency to support market operation. The system should focus on more specific trading zones at a sub-basin level rather than at a state level. Categorising the volume and type of trade will be an important aspect and a valuable information tool for customers before undertaking a trade transaction. We recognise that not all trades are between independent parties and involve a financial transaction, for example a business may own multiple water portfolio's in different valleys or trading zones. The information system should be able to categorise these transactions so that more accurate data and behaviour of trades is collected and monitored.

To develop this system governments should fund the implementation and maintenance of a trade portal with consistent, simple and cost free data links from IIO's back to this portal.

Murray Irrigation operates a water exchange and values open and transparent data. We believe these values should be reflected amongst other exchange users and to follow a Code of Conduct in terms of transparency and sharing of data back to the Central Information Platform.

Where additional investment and process are required by future legislation this should be funded by Governments and not by IIOs or their irrigator customers.

4.2 Single Exchange Platform

We do not agree with the concept of a single centralised transaction platform. An important component to competitive trade is customers and brokers leveraging some principles of market competition. Water could simply end up being the one price (either high or low) for a certain product type. Instead, we strongly support the information sharing principles outlined in item 4.1 supported by regulatory safeguards outlined in item 4.6.

We own and operate one of Australia's largest exchanges, it is tailored to suit our customers and we are willing to work with agencies regarding any revised regulatory systems to be in place.

Benefits of an exchange tailored for our customers includes the ability to develop and enforce our own trade terms, instantaneous water transfer of purchased water, competitive trades (MIL is not for profit), customer contact outside of working hours and updated live transparent trade data.

If we were to lose any of these abilities under a single exchange platform this would be of significant detriment to our customers and ultimately to our organisation.

It should be acknowledged in the report that IIO's are either not-for-profit, benefit to member or Government owned.

4.3 Trade Rule Policy and Compliance

We would like to remind agencies that in the early 90's the NSW government had adopted a “no trade downstream of the (Barmah) Choke” rule initially to reduce the level of water passing through the Barmah Millewa Choke in summer which was causing unseasonal inundation of this forest along with significant environmental damage.

The concept of no trade downstream of the Choke rule recognised that the choke had already sustained considerable pressure from river management in the 90's and the “no downstream trade” rule was to enable trades upstream but not back downstream to further reduce this detrimental pressure. We also note that the natural capacity of the Choke has reduced and this may be continuing.

The policy has subsequently been relaxed to “no net trade downstream of choke” which effectively places more pressure on the Choke and subsequent environmental damage.

Murray Irrigation recognises the value of effective water markets but it must also recognise the physical and environmental constraints associated with water delivery. Water is not only heavy and incompressible but it also evaporates and leaks; long distance transport of water comes with a cost that is not recognised in the water market. This must be rectified as a measure to improve operation of the water market and deliverability downstream. We return to this point below.

We support the former no trade downstream rule and the concept of live and real time water trade against this trade rule and to demonstrate compliance against this rule. Not doing this undermines trust in agencies to manage the river water resources.

4.4 Trade and Physical Characteristics

We share the ACCC's concern regarding the disconnect between trades and the physical characteristics of the river system. Delivering more water downstream “costs” more water in terms of conveyance and this can have a third-party impact by less water being available to another user. Trade rules that acknowledge a loss factor should be an important consideration so that third party impacts are not caused by certain trade behaviour.

As we note in item 3.3, the physical characteristics of water must be taken into account when improving the water market in the Murray Darling Basin. This is essential for long-term sustainability and to avoid setting impossible targets for the river operators to deliver water where it should not be supplied. At the moment the absence of such mechanisms provides an implicit subsidy to users in downstream zones of the Southern Basin.

There are some key principles we recommend considering regarding this matter:

1. **Sharing Flows:** The long standing principle in the Murray Darling Basin agreement is that Victoria and NSW share inflows, storages and river capacity on 50:50 basis. We note that this is not defined by any agreement on process or percentages. This lack of definition is a dangerous and distorting anomaly, especially because of Victoria's reliance on very high downflow percentages during the horticultural season. Should either state exceed a fair percentage it should be up to that state to address the matter, perhaps through a ‘borrow’ arrangement. These are matters of State jurisdiction but have national consequence.
2. **Flow Shares:** We recommend that agencies consider the adoption of a “flow share” concept on extraction from rivers similar to that adopted by Irrigation Infrastructure Operators when managing peak demand periods in channels, that is, when demand exceeds capacity. For example, river users downstream of the choke would need to own a “flow share” specifically attached to the extraction point on the river that can guarantee a flow rate at specific high-risk times of the year. Put simply, if you develop in part of a river with no flow share the risk is that the crop may not be delivered the volume of water required to meet its demands and this would then determine limits on development. In rolling out a flow share concept learnings from Irrigation Infrastructure Operators would be important.

3. **Exchange Rates:** The original NWI identified the use of exchange rates between different zones of the river, to recognise the physical cost in water losses (evaporation and leakage) of moving water long distances. A variety of mechanisms could be adopted to recognise this real impact on the Murray Darling Basin – we regard this as essential. Mechanisms could include a transaction levy on downstream trades or the use of delivery shares with the same impact.

We do not support the idea of a “storage share” outlined in the report. There are already several well-considered rules in place along the principles of managing storages 50:50 with NSW and Victoria. It also introduces another complex rule for water users that does not need to be in place.

Where trade or delivery between eligible zones occurs within rules, any additional conveyance losses resulting from the trade should be borne by the recipient of the traded water as a percentage of modelled loss. Loss can occur depending on the distance downstream and at a particular demand period within the year. An example is a trade during peak demand which can contribute to “overbanking” and hence much higher losses compared to a similar trade during another time of the year when flows are well within the banks of the river.

By socialising increased losses, water available for General Security allocation is subsequently reduced. Similarly, the increased losses incurred by the transfer of large volumes of held environmental water also reduces General Security allocation unless a loss factor is applied.

Murray Irrigation recommends that additional losses incurred from the transfer of large volumes of environmental water should be debited against the environmental allocation.

4.5 Trade Transaction Processes

There is room for improvement in this area and this should be streamlined across states so that transactions are within minutes or hours, not days or weeks. We agree that the availability of water market data needs to be improved, simplified and standardised across the states and trading zones.

Murray Irrigation supports the concept of consolidating or harmonising the roles or institutions to streamline and save administration costs involved with trade transactions between valleys and states where trade rules permit.

4.6 Regulatory Safeguards

We support the concept of introducing regulatory safeguards to brokers similar to that are applied to real estate agents, stock brokers or stock and station agents.

We note that drivers for this report were allegations of corruption or market manipulation. We would like the final report to outline a response to these allegations or if the ACCC has found any harmful impacts of bad behaviour and how these behaviours should be regulated.

4.7 Diversity of Agriculture and Farmgate Value

We recognise and value the benefits of water trade. We are also concerned that this can lead to outcomes not in the interests of regional communities or for Australia. A potential negative outcome is that most water is traded into one concentrated industry type which causes the original or more diverse industries (and communities that depended on it) to collapse. The loss of diversity then increases national agricultural risk. We feel there is strong merit to encourage water trade using a more regional approach and supporting the principle of more diverse industries, especially when it comes to producing food.

We urge caution in reference to 'farmgate' value of products and water trade. There are a number of industries that grow food at a lower farmgate value than value-added locally (ie multiplier effect) – which then provides significant community benefit and much higher 'value' to that produce.

4.8 Environment and Consumptive Water

The interim report mixes water acquired for the environment with consumptive water when it comes to considering entitlements, water use and allocations. This leads to a number of incorrect assertions around what is happening. We regard it as important to break down data comparisons further so that better analysis of trade trends can occur.

We feel that the use of environmental water in some cases can have an impact on water markets and potentially water allocations. The use of Held Environmental Water between valleys or trading zones can compete against productive water, especially in times of restrictions and could result in increased conveyance losses – ultimately it is a change to that water from its original intended use and the implications of this need to be better understood.

4.9 Volumes of Water Trade

The volumes of water traded used as a reference point appear to be high (around 1.5 times the total volumes allocated). The report does not attempt to identify these volumes and consider how much trade is simply selling the same water a number of times or simply the chain of transactions needed.

4.10 Basin Plan Impacts

Reduced volumes of consumptive water in the report was predominately attributed to dry conditions and subsequent lack of inflows. In Murray Irrigations licence approximately 30% of water entitlements has been acquired for environmental purposes with a large portion of this attributed to the Basin Plan. This recovered volume has had a very significant impact on available volumes for consumptive use and hence the supply and demand dynamics of water. Water acquired through government water policy reform should be acknowledged as a contributing factor to trade prices and subsequent trade behaviour.

4.11 River Operation and Losses

The importance of river operation efficiency cannot be overstated. There are three main categories of water use, being:

- Conveyance water, used to 'run the river';
- Environmental water, used to maintain the health and sustainability of the environment; and
- Productive water

If the water market is to operate well each of these must operate efficiently. The emphasis for many years has been on efficient use of productive water.

However it is sometimes overlooked that conveyance water must work with similar efficiency if the maximum amount of water is to be available for the environment and productive use through allocation mechanisms. We are aware that there are opportunities to markedly increase efficiency of river operation and improve environmental outcomes in the MIL region and we are actively promoting two of these in the MIL area of operations to river agencies. Both would increase operational efficiency and, subject to analysis, reduce losses. We will be happy to discuss these with the ACCC as examples.

It is essential that river operations are run optimally with the key priority being to use the most efficient and least wasteful transmission options. There is significant potential to release more water for allocation in this way.

4.12 The Cost of Regulatory Compliance

Identified throughout our submission is support for various areas of water market reform, however, Murray Irrigation does not support the financial burden of this reform being attributed to consumptive water users or IIO's. Murray Irrigation welcomes sensible reform changes along with appropriate financial support from governments to review, develop, implement and maintain this market architecture. No further financial burden should be placed on IIO's who are already suffering under the weight of water reform imposed over many years.

In terms of who should be the regulating body, this should be an expanded scope of an existing entity rather than establishing an entirely new independent regulator which is likely to be costly and hence increase administrative burden and cost.

4.13 Metering Compliance

Although not the focus of this report it needs to be acknowledged that accurate and compliant water metering data is interlinked to water markets, transparency and accountability. We support any activities to accelerate compliant metering systems across all states to meet a specific standard.

This principle should not only apply to consumptive water, but also to environmental water use whether it be for Held Environmental Water or Planned Environmental Water. Given the vary large volumes of water for this purpose any incorrect measurement will have implications for water availability to other entitlement holders.

Compliant, accurate metering systems and the streamlined data from these systems will be important to align with market architecture and ensure that users are confident of the integrity of the water market.

4.14 Intervalley Trade (IVT) Limits

We feel that IVT rules play an important part in managing water availability and deliverability in the basin and should be revised with the intent to ensure they play a role in reducing conveyance losses and that water traders can participate in a fair and transparent manner.

Measures should be in place to remove grandfathered tags as this can be inequitable (especially when there is a trade restriction in place) and potentially impact other general security holders.

4.15 Communication

Water is complex- there are a vast array of rules and requirements for allocating, operating and delivering water for a variety of users. Water trade is another complex matter to add in addition to this. A strong focus of water agencies should be the continual improvement of accurate information and communication in a timely manner and through mediums in which water users can understand. This also applies to any other form of water use, for example for environmental purposes, so that water users better understand the river operating environment, can build more trust in market mechanisms and overall water management.

This has already been recognised by other reviews into the Basin and requires the development of a single trusted information source.