SUBMISSION

Murray-Darling Basin water markets inquiry

November 2019
Introduction

The NSW Irrigators’ Council (NSWIC) is the peak body representing irrigation farmers and the irrigation farming industry in NSW. Our Members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries. Through our members, NSWIC represents over 12,000 water access licence holders in NSW who access regulated, unregulated and groundwater systems.

NSWIC engages in advocacy and policy development on behalf of the irrigation farming sector. As an apolitical entity, the Council provides advice to all stakeholders and decision makers.

Irrigation farmers are stewards of tremendous local, operational and practical knowledge in water management. With over 12,000 irrigation farmers in NSW, there is a wealth of knowledge available. To best utilise this knowledge requires participatory decision making and extensive consultation to ensure this knowledge can be incorporated into best-practice, evidence-based policy. NSWIC and our Members are a valuable way for Governments and agencies to access this knowledge.

NSWIC welcomes this public exhibition as an opportunity to share local, practical and operational knowledge and expertise in water management. NSWIC offers the expertise from our network of irrigation farmers and organisations on an ongoing basis to ensure water management is practical, community-minded and follows participatory process.

This submission represents the views of the Members of NSWIC with respect to the Australian Competition and Consumer Commission’s (ACCC) Murray-Darling Basin Water Markets Inquiry. Each member reserves the right to independent policy on issues that directly relate to their areas of operation, expertise or any other issues that they deem relevant.
## NSW Irrigators’ Council’s Guiding Principles

<table>
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<th>Integrity</th>
<th>Leadership</th>
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<tr>
<td>Environmental health and sustainable resource access is integral to a successful irrigation industry.</td>
<td>Irrigation farmers in NSW and Australia are world leaders in water-efficient production with high ethical and environmental standards.</td>
<td>Evidence-based policy is essential. Research must be on-going, and include review mechanisms, to ensure the best-available data can inform best-practice policy through adaptive processes.</td>
<td>Irrigation farmers are stewards of tremendous knowledge in water management, and extensive consultation is needed to utilise this knowledge.</td>
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<tr>
<td>Water property rights (including accessibility, reliability and their fundamental characteristics) must be protected regardless of ownership.</td>
<td>Developing leadership will strengthen the sector and ensure competitiveness globally.</td>
<td>Innovation is fostered through research and development.</td>
<td>Government and industry must work together to ensure communication is informative, timely, and accessible.</td>
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<td>Certainty and stability is fundamental for all water users.</td>
<td>Industry has zero tolerance for water theft.</td>
<td>Decision-making must ensure no negative unmitigated third-party impacts, including understanding cumulative and socio-economic impacts.</td>
<td>Irrigation farmers respect the prioritisation of water in the allocation framework.</td>
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<td>All water (agricultural, environmental, cultural and industrial) must be measured, and used efficiently and effectively.</td>
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<td>Collaboration with indigenous nations improves water management.</td>
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Overview

NSWIC strongly welcomes the ACCC Murray-Darling Basin Water Markets Inquiry.

A well-functioning, transparent and effective water market is critical to a prosperous, sustainable and viable irrigation industry. The policy position of NSWIC is that the water market must foster confidence from all water users by being transparent, simple to use, based on well-informed price data and sound reporting. The water market must also facilitate the secure, sustainable and productive use of water resources, in a manner that supports the ongoing prosperity and needs of all water users.

NSWIC notes that the water market is relatively new and continues to mature. Water markets are also a very unique type of market. As a result, there are evidently a number of ‘growing pains’ which will require attention to ensure the market continues to mature to deliver the intended outcomes, whilst not having adverse third-party impacts. The water market pre-dates the Murray-Darling Basin Plan, with the expansion of water markets arising from a broader suite of reforms underpinned by the Council of Australian Governments (COAG) Water Reform Framework initiated in 1994, and then the National Water Initiative (NWI)\(^1\) in 2004. As a necessary precondition to the development of the water market, was the separation of water from land, which enabled water to become a tradeable property right.

Under the NWI, water market and trade arrangements were to:

- \(i\) facilitate the operation of efficient water markets and the opportunities for trading, within and between States and Territories, where water systems are physically shared or hydrologic connections and water supply considerations will permit water trading;
- \(ii\) minimise transaction costs on water trades, including through good information flows in the market and compatible entitlement, registry, regulatory and other arrangements across jurisdictions;
- \(iii\) enable the appropriate mix of water products to develop based on access entitlements which can be traded either in whole or in part, and either temporarily or permanently, or through lease arrangements or other trading options that may evolve over time;
- \(iv\) recognise and protect the needs of the environment; and
- \(v\) provide appropriate protection of third-party interests.

Despite the premature of Murray-Darling Basin water markets, they are described as some of the most sophisticated water markets in the world.\(^2\) The development of water markets has created significant benefits to irrigation farmers – most significantly by securing a property right for water which has strengthened the security and certainty of water access for farmers. Market development and trade reforms have also enhanced the value of irrigated agriculture; facilitated the inflow of capital; become an ‘insurance mechanism’ or buffer in times of drought; and led to greater flexibility for water users to respond to changes in water availability, commodity prices, and other factors.

However, in recent times, there has been growing concerns from water users (and the general public) that the market, together with complex government rules and regulations, are not delivering as originally intended. These concerns include the surge in the price of water which threatens the viability of certain crops and is driving a shifting trend in agricultural production and water demand; the ability of the market to protect from third-party impacts (including the environment); a lack of transparency and access to timely information; as well as the existence of non-competitive conduct. NSWIC also acknowledges that amongst industry, there are concerns over the ownership of water by non-water users, which undoubtedly should be thoroughly assessed as part of this Inquiry to allow for evidence-
based decision making - whilst mindful of the significant negative impacts for irrigation business if restrictions on ownership were put in place.

Consequently, NSWIC sees the ACCC Inquiry as arriving at a critical point in time to ensure the Basin water markets continue to mature in the optimal way to reach their full potential and deliver the intended outcomes, whilst responding to any adverse impacts which have developed.

**Summary:**

NSWIC firmly supports water markets as a mechanism to allocate scarce resources, but acknowledges that as a relatively new mechanism, the further maturation of the water market must necessarily involve measures for further improvement to respond to a number of growing concerns.

*The water market must foster confidence from all water users by being transparent, simple to use, based on well-informed price data and sound reporting.*

*Due to the complexity of the market, any change to market operations must have the utmost caution to not lead to adverse impacts, by ensuring full examination of potential ramifications, and having full respect to protecting water property rights, avoiding third-party impacts, as well as fostering stability and confidence.*

**Submission**

**Water Property Rights and the importance of the water market to irrigation farmers**

The development of water markets led to the development of water property rights. Water property rights are integral to irrigation farmers, and the irrigation industry, and are a fundamental guiding principle of NSWIC. The guiding principle of NSWIC is that: *water property rights (including accessibility, reliability and their fundamental characteristics) must be protected regardless of ownership.*

The separation of water entitlements, from land titles, as a necessary precondition to the creation of water markets, solidified the creation of water property rights. This led to the development of a previously unprecedented level of protection, security, certainty, stability and formality over the nature of water access by irrigation farmers.

Water markets have also had many other positive outcomes for irrigation farmers. Market development and trade reforms have enhanced the value of irrigated agriculture; facilitated the inflow of capital; become an ‘insurance mechanism’ or buffer in times of drought, and led to greater flexibility for water users to respond to changes in water availability, commodity prices, and other factors. The water market has also allowed new ‘water products’ to develop, which has allowed farmers increased ability to manage risks (in terms of water supplies) and their finances (e.g. cash flow).

NSWIC also notes that the water market has facilitated water recovery under the Murray Darling Basin Plan, through the purchasing of water entitlements from willing sellers. To that end, the water market should be considered as an enabler of meeting the environmental objectives sought under the Basin Plan. Evidently, the continual reduction to the amount of water available for irrigation farmers (as a result of the Basin Plan, and a suite of reforms), has changed the operating environmental for irrigation farmers significantly, and has undoubtedly had impacts on the operation of water markets.

The current devastating drought (worst on record) creating significant supply-side issues (with less than 1% of typical inflows) – has been coupled with the largest water reform in the nations history
which also has significant supply reductions to water availability. Consequently, there is significant angst around the impacts of water reform. In that context, it is important to look at the opportunities for the water market regarding:

- What water market objectives could best ensure the agricultural industry prospers into the water?
- What could be done, through the water market, to see improvements to conditions for irrigation farmers and communities?
- How could the water market foster a more secure and productive operating environment for water users into the future?
- Can the water market have a role in improving socio-economic conditions in the Basin?
- How can the challenges of the water market best be addressed for long-term benefit to ensure improved outcomes, without adverse impacts?

**Core Principles in the consideration of changes**

The water market is inherently complex. Any changes to market operations or trade rules thus must follow a clear and transparent process, with full examination of potential ramifications to ensure no unmitigated adverse impacts.

Any change to the water market must abide by key principles, such as those outlined in the NWI. For NSWIC, core principles which must be upheld in any proposed changes to the water market are:

- Water property rights (including accessibility, reliability and their fundamental characteristics) must be protected;
- No unmitigated third-party impacts (including the environment); and
- Certainty and stability is fundamental for all water users.

**Recommendation:**

*Any proposed change to market operations must follow a transparent process with full examination of potential ramifications to ensure no adverse impacts, owing to the complexity of the water market.*

*Core principles (such as those outlined in the NWI) as well as the utmost protection of water property rights, no unmitigated third-party impacts and certainty/stability are fundamental in the consideration of any changes.*

**Transparency**

One of the core recommendations of NSWIC is improving the transparency of water markets – including the availability and accessibility of information – which is fundamental to ensuring fairness, proper conduct, and that the market is operating effectively.

The issues around transparency can be categorised as follows:

- **Availability** - There is significant market information that is available through trading platforms. The problem is that there is a lack of timely market information available to market participants.
- **Complexity** - NSWIC notes that the complexity of the water market is unfavourable to transparency, as confusion often arises around the various water products and exchanges.
- **Anti-competitive or unethical behaviour** - It is critical that information is publicly available, and accessible, for competition authorities to be able to determine what constitutes anti-
competitive or unethical behaviour, and for clear processes to outline how such behaviour is managed. If insufficient information is available, assessment of market behaviours is constrained.

- **Data and reporting** - The market price data published by Murray-Darling Basin Authority (MDBA) relies on state water registers that often take up to several months to be brought up to date. These registers are considered to have poor quality control and are often published with errors and inconsistencies. In 2019, the MDBA conducted an audit of water trade price reporting with the purpose of: (1) assessing the effectiveness of processes and procedures of each Basin state to collect, validate and reporting accurate water trade pricing information; and (2) assessing water traders’ compliance with the requirement to report accurate price information. The findings included that no Basin state had robust arrangements for accurate price information (including some data being incomplete or inaccurate); as well as a multitude of complexities which resulted in no single point of truth. Applications such as Waterflow™ provide useful information, and are a positive step forward, but they also rely on government agencies and sources such as the state water registers as a primary source. Further, while NSWIC acknowledges there are many legitimate instances of $0 trades, it is difficult to have confidence that all trade prices are reported accurately.

- **Accessibility** - Relevant information is distributed amongst several agencies. Water users must be informed about where to access information, and also in some cases search fees are involved for access. Access to information is also constrained by privacy and confidentiality provisions that might create a perception of lack of transparency and so undermining public confidence in the market. Resource poor market participants may be disadvantage if they rely on publicly available information and unverifiable sources in making significant financial decisions. This is an approach they won’t normally adopt in other areas of their operation, such as cropping decisions for which they often seek professional advice.

This ACCC Inquiry should focus on identifying ways to improve transparency and integrity in water markets to ensure confidence in the industry and community at large.

**Recommendation:**

*State water register information needs to be consistent, timely and up to date.*

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**Alignment with Productivity Commission Recommendations for the Water Market**

NSWIC notes that the Productivity Commission recently made a number of recommendations relating to water markets, as part of the *Murray-Darling Basin Plan: Five-year assessment*. The recommendations from the Productivity Commission have been widely supported across industry, and are seen as critical and constructive steps forward in improving the implementation of the Basin Plan, and the management of Basin water resources more broadly.

The Basin Plan contains water trading objectives including: facilitating the operation of efficient water markets, protecting the needs of the environment, providing appropriate protection to third parties and minimising transaction costs on water trades through good information flows (s.5.07(1)).

Chapter 12 of the Basin Plan – water trading rules – augment previous reforms relating to water training. In the context of water trading rules, the Productivity Commission found that overall some restrictions have been made in remaining inconsistent trade restrictions, but there is scope to do more.

*Excerpt from Productivity Commission - Murray-Darling Basin Plan: Five-year assessment*

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Trade in the Basin has increased significantly in the past 30 years, supported by reforms that have reduced barriers to trade and improved market information.

The Basin Plan trading rules aim to promote efficient water markets by introducing new requirements to improve market information and support confidence in the market, and by providing a mechanism to validate or remove restrictions on trade.

- However, more should have been done since 2014 by the Murray-Darling Basin Authority (MDBA) and Basin States to review restrictions on trade and resolve compliance matters raised to date.

- Basin Governments should be proactive in their market stewardship role. A priority should be examining the effects of changes in trade and water use patterns on the environment and other third parties.
  - It is important that Basin Governments are timely and transparent about how these issues are managed and have protocols in place for effectively communicating any policy changes to the market.

The Productivity Commission found that market information and market confidence have improved as a result of the Plan, but there is still room to reduce transaction costs. Furthermore, the Productivity Commission found that whilst the Basin Plan focuses on removing inconsistent trade restrictions, the ongoing development of water markets has seen emerging risks and issues, which will may require new trade restrictions into the future. This includes risks around environmental values, as well as deliverability risks (as later outlined in this submission).

**Recommendation:**
Alignment with the recommendations of the Productivity Commission is encouraged, particularly in areas where the government response to the Productivity Commission may need to be furthered.

**Integrity**
Integrity is fundamental and non-negotiable in the management of water resources.

NSWIC fully supports the ACCC taking immediate action if any anti-competitive behaviour or evidence of market manipulation is found. Industry insists that a zero-tolerance approach is taken, with the full force of the law if a breach of the law is identified.

Ensuring integrity in the water market involves managing both actual instances of wrong-doing, as well as perceived instances. Critical recommendations to ensure integrity in the market are outlined below.

**Recommendation:**
- If unlawful wrongdoings have occurred, the full force of the law must apply, with a zero-tolerance approach.
- Where actions are not unlawful, but behaviour is considered unethical or poor conduct, then rules should be strengthened to improve conduct and practices, ensure ethical standards/conduct and disincentivise poor behaviour.
- If allegations are made, but are not substantiated, these should be publicly dismissed as false claims to ensure public confidence is not undermined unnecessarily.
Regulations

NSWIC is aware of media reports on the impact of carry-over and continuous accounting rules on the market and a perception that they distort market operations. These rules are widely supported by irrigation farmers as they are critical to business practices and water access. Whilst investigation is always supported to ensure a sound evidence base to inform decision-making, it is critical that these rules are recognised as absolutely fundamental.

Carryover rules vary across valleys – for a reason – largely due to factors such as storage sizes and reliability. NSWIC is of the position that these current rules should be maintained, as they are an effective tool for managing supply-shortages and allowing licence holders to make decisions that serve their best interests and business needs. We are not in favour of ad hoc rule changes that may be of short-term convenience under the current circumstances but create long-term uncertainty and jeopardise optimal water usage.

The ACCC should, however, consider if aspects of carryover do have unintended consequences or unfair impacts on water markets. If there are found to be adverse impacts, sufficient evidence and understanding of further risks and consequences must occur before any changes are proposed.

**Recommendation:** Maintain the current carry-over and continuous accounting rules ensuring they don’t contradict existing regulations as they relate to individual valleys and catchments.

Whilst investigation into areas of concern is always welcomed to ensure the best possible evidence base to understand the issue, an extremely cautious approach must be adopted where changing rules would significantly alter critical practices and operations of businesses, and threaten viability.

Deliverability

Whilst the focus of recent reforms, such as the Basin Plan, has been on removing trade restrictions, a number of separate but related matters have emerged which now may require intervention in the market to ensure broader objectives can be achieved.

There are evidently a number of externalities arising from the market, which require arrangements in place to manage. For example, arrangements must recognise the socio-economic impacts (and the unevenness of impacts), as well as riparian impacts, and changes to river operations, brought about by the changing patterns of water use borne through the water market.

One key example is the growing concern around ‘deliverability’.

There are growing issues of deliverability, primarily in the Murray region of NSW. Deliverability refers to the ability for water to be physically delivered to the water user, relating to the channel capacity of river systems and constraints within the system. Simply, there is growing concern that the river system simply cannot deliver the required volume of water to all water users (agricultural, environmental, and domestic).

Deliverability concerns are a result of increasing downstream demand (from growing irrigation developments, and large parcels of environmental water delivery), and a declining capacity of the river (siltation, erosion, etc.).

The consequence for irrigation farmers is a risk to both the reliability of water entitlements, and risk to the accessibility of allocations. The risk to reliability is a result of substantial losses in the system.

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reducing the total water balance; and the risk to accessibility is a result of the physical capacity of the system to deliver desired volumes of water.

The key deliverability issues include:
1. Sharing arrangements between states (bulk water within whole system);
2. Sharing arrangements within states (priority rights along the river);
3. Impact of environmental water delivery on other water user’s delivery (i.e. management regime for environmental water and consideration of better options);
4. Regulation of new developments to address long-term deliverability risks - acknowledgement/understanding of the risk of new irrigation development going in; and
5. Data availability and accessibility (greater transparency and greater level of involvement by the irrigation sector in the governments consideration of options for addressing deliverability).

In addressing deliverability, the core principles to be respected are:
1. Seek to minimise operational losses;
2. Maintain NSW irrigators’ access to water (security of property rights);
3. Improve the understanding of risk, and the management of risk, for all water users (historical and new);
4. Provide certainty through formalised regulations;
5. Put in place arrangements that seek to maximise NSW irrigation access and production;
6. Ensure regulations are developed in consultation with stakeholders.

NSWIC are currently investigating a number of options to present to Government as recommended responses to manage deliverability risk. The options under investigation include Individual Daily Extraction Limits (IDELs), or a system of tradable Delivery Entitlements (market-mechanism). NSWIC would welcome the opportunity to discuss these options in further detail.

NSWIC are also aware that the Basin Ministerial Council is investigating delivery shortfalls on the Murray River, and is conducting modelling and analysis. NSWIC recommends that the ACCC is engaged with those investigations.

In summary, it is the position of NSWIC that trade rules must recognise physical constraints and the capacity of the system, uphold and value water property rights, be respectful to riparian impacts, and avoid third-party impacts.

**Recommendation:**
A clear and transparent mechanism to manage deliverability risks is required.

**Market Trends and Drivers**
NSWIC acknowledge that there are a number of drivers of current market trends. These include:

- **Climate:** Fluctuations in weather patterns, especially with respect to rainfall and evaporative demand conditions, directly impact floods and droughts and hence, water availability. This has become especially critical over the past three years, where diminishing water supply has had a very significant impact on the market, as evidenced by allocation prices increasing by up to five times over that period.
- **Market:** Market factors that impact on water price include availability, reliability, licencing, crop price, investment history, etc.
• **Natural barriers:** Most of the natural barriers to deliverability and hence to market operations are well known and understood. For instance, the flows capacity of 7.0 GL per day through the Barmah Choke represents a major constraint on trade between the Upper and Lower Murray River. Water traded from upstream to buyers below the Choke should cancel out to maintain a balance of zero.

• **Regulations:** Water users have been consistently using below allowable limits, which is demonstrated by the significant accumulation of cap-credits, and expected accumulation of SDL credits. An understanding of how changing irrigator behaviour (as a function of many factors, including the regulatory environment) impacts on the water market, would be valuable to inform future management of the market.\(^5\)

**Market Participants**

NSWIC recognise the concern expressed by many within industry about non-water users participating in the market. NSWIC appreciate these concerns around drivers of water prices, as well as how rules impact on market outcomes. However, it must also be recognised that the very participation of non-water users has led to positive outcomes for water users – e.g. enabled the development of new and more sophisticated water products, as well as new sources of capital.

Any intervention, if undertaken, regarding non-water users must be incredibly cautious of the negative impacts for irrigation businesses which would likely arise as unintended consequences of such interventions, and thus any proposal must undergo rigorous assessment and modelling to truly understand the risks.

**Long term role for the ACCC**

In the interests of integrity, and in ensuring the further development of the water market delivers on intended outcomes without adverse impacts, NSWIC recommends that the ACCC has a continuing role.

**Recommendation:**

*The ACCC should have a role in overseeing the further development of water markets, with a particular focus on monitoring and responding to any anti-competitive behaviour, market manipulation or unintended adverse impacts that emerge into the future.*

**Conclusion**

NSWIC welcomes the opportunity to contribute towards the ACCC Inquiry.

NSWIC recognises that there are legitimate significant concerns around the integrity and operation of the water market, and we hope this Inquiry can assist to foster increased confidence, effectiveness and operation of markets.

NSWIC reiterate that the development of water markets has provided unprecedented benefits for water users – most significantly being the establishment of water property rights which have fostered security and certainty for water users - as well as other benefits.

As water markets continue to develop and mature over time, it will be paramount to ensure that the intended outcomes are delivered, whilst unintended adverse third-party impacts are addressed.

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We welcome further discussions on any of the matters raised in this submission, and look forward to our ongoing participation in this process where possible.

Kind regards,

[Signature]

Luke Simpkins
CEO
NSW Irrigators’ Council