



WaterNSW - Submission to the ACCC's inquiry into water markets in the Murray-Darling Basin

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Introduction

WaterNSW is pleased to provide this submission in response to the ACCC's Issues Paper "ACCC inquiry into the water markets in the Murray-Darling Basin (Issues Paper)."

As NSW's provider of customer transactions and dealings, in addition to other functions, WaterNSW is a key participant in Murray-Darling Basin water markets.

In this submission, we expand on WaterNSW's role in water markets in the Murray-Darling Basin (MDB), and make some observations on selected topics in the Issues Paper.

We look forward to the ACCC's interim report and further participation in this review process as it progresses.

WaterNSW's role in water markets in the Murray-Darling Basin

WaterNSW is a New South Wales (NSW) Government state owned corporation established under the *Water NSW Act 2014* (NSW).

WaterNSW is Australia's biggest water supplier. We own and operate 42 water supply dams across NSW, as well as hundreds of weirs, regulators and pipelines. We supply and deliver water through our infrastructure and the State's river systems to our customers, including Sydney Water, farmers, irrigators, regional towns and industry.



WaterNSW supplies raw water in bulk for both domestic stock and irrigation, as well as for drinking water purposes. Paramount to this is water supply security and reliability, which we

achieve through the development of infrastructure solutions. We then plan, build, operate and maintain that infrastructure, fulfilling our legislated objective. WaterNSW also seeks improvements in achievable water quality standards and contributes to the protection of public health and the environment through enhanced catchment protection practices in declared catchments.

The services we deliver include:

- **Source water protection:** protecting the Greater Sydney drinking water catchment to ensure safe water is supplied to Sydney Water, local councils and other distributors for treatment and distribution to their customers
- **Bulk water supply:** supplying water from our storages to customers in the Greater Sydney drinking water catchment and in the State's regulated surface water systems
- **System operator:** efficiently managing the State's surface and groundwater resources to maximise reliability for users through the operation of the State's river systems and bulk water supply systems for Rural Valleys, in collaboration with the Murray-Darling Basin Authority which directs the operations of the River Murray system
- **Infrastructure planning, delivery and operation:** meeting customer-defined levels of service consistent with NSW Government policy and priorities to increase the security and reliability of water supplies to our customers and the communities of NSW
- **Customer water transaction and information services:** providing efficient and timely services to our customers for water licensing and approvals, water trades, billing and meet their water resource information needs for surface and groundwater quantity and quality.¹

¹ See sections 6 and 7 of the *Water NSW Act (NSW) 2014*

WaterNSW's direct role in water markets concerns customer water transaction and information services. In New South Wales, other agencies, both State and Commonwealth, also play significant roles in water markets and their operation.

Relevantly:

- NSW Department of Planning, Industry and Environment – water: set water trading rules (e.g. inter and intra valley trading restrictions) and make allocation and carry-over decisions within frameworks set out in Water Sharing Plans made under the *Water Management Act 2000 (NSW)*
- NSW Natural Resources and Access Regulator: has responsibility for the compliance and enforcement of water laws in NSW such as investigating compliance with water obligations (e.g. water theft)
- Murray Darling Basin Authority (MDBA): is a Commonwealth agency responsible for oversight of the Murray Darling Basin Plan (the Plan) including Part 12 – Water Trading Rules.
- Independent Pricing and Regulatory Tribunal (IPART): sets prices for WaterNSW services in New South Wales under NSW legislation and is accredited by the ACCC to set bulk water prices for Murray -Darling Basin valleys in accordance with the Water Charge (Infrastructure) Rules and the ACCC pricing principles.

The ACCC's inquiry is into markets for tradeable water rights regarding water in the Murray-Darling Basin (MDB). Directly relevant to that are WaterNSW's customer water transaction and information services. In NSW, WaterNSW is the agency that processes water trades on behalf of customers. We interact with the NSW Land and Property Information Service who maintains the Minister's database of water entitlements. To enable WaterNSW to perform its functions, WaterNSW holds a mirror register of entitlements and also holds water allocation accounts. Once water is traded, WaterNSW is the agency that takes orders from water customers and ensures water delivery, also ensuring the debiting of water accounts following a 'water take'.

WaterNSW's perspective on the role of markets

Water markets and associated mechanisms have been established in Australia as a means to enable an increasingly scarce resource to be allocated to the highest value use in an economic sense. To that end, water markets are starting to develop and evolve. However, from a broader perspective social, community and environmental concerns are also relevant. In times of scarcity, for example, market outcomes may not meet the expectations of all stakeholders. WaterNSW recognises this and would encourage mechanisms to address broader concerns (such as drought support measures) be designed and implemented in a way that is complementary to (and outside of) the market, so that market mechanisms can operate as intended.

Effective water market outcomes are important in valuing water as a resource. However, they are also relevant to utilities such as WaterNSW, who carry out system operation and infrastructure planning and delivery functions. Market data and outcomes on matters such as consumer preferences and willingness to pay can inform decision-making around the capital and operating expenditure of utilities such as WaterNSW. Indeed, such information is critical to support decision making on long term, capital intensive infrastructure, such as dams, weirs and pipelines. Better information can help ensure that consumers can access the necessary infrastructure services that they require in a timely manner to meet their water requirements, and that they do not pay any more than necessary for those services.

Therefore, in the context of our direct customer water transaction services role as well as our system operation, infrastructure planning and delivery roles, WaterNSW encourages initiatives that promote more open and transparent markets in which consumers and other participants act and invest with confidence and security.



In response to the Issues Paper WaterNSW highlights some general observations on market trends and drivers, market transparency and information, market practices and behaviour, and regulation and institutional settings.

General observations – market trends and drivers

The ACCC is interested in exploring trends in water supply and demand since 2012, the impact of those trends on water prices and other market activity, and how market participants have changed. This submission highlights a couple of observed trends. Separately to this submission, WaterNSW is providing data and information from carrying out its water transaction and information services, to inform the ACCC's inquiry at a more detailed level.

As the owner and operator of the majority of NSW's major dams and provider of water transaction services, WaterNSW is well placed to make some key observations.

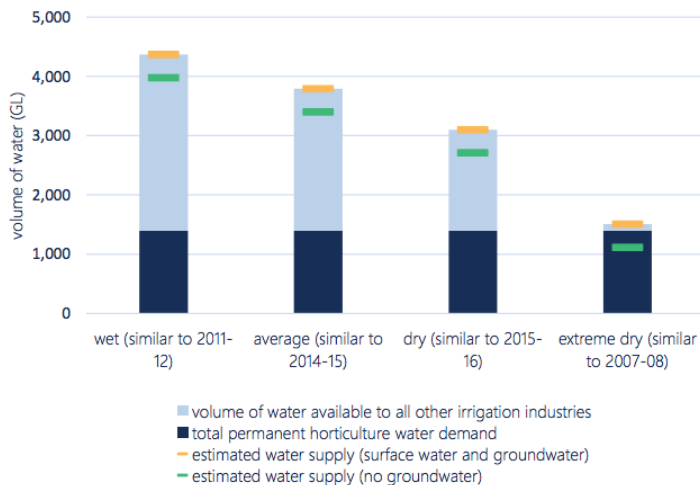
In terms of drivers and trends, WaterNSW is acutely aware that this submission is provided to the ACCC during a time of severe drought across the Murray Darling Basin. On the basis of known inflow records, this drought is unprecedented in the severity of the low inflows into our storages. The laws of demand and supply would therefore indicate that the price of water would increase – a situation reflected in the water markets, predominantly in the Southern Basin.

At the same time, it has been widely reported that recent agricultural trends may be driving movements of water prices.

In this context, WaterNSW refers the ACCC to the recent work of consultancy AITHER, *Water Markets Report, 2018-19 review and 2019-20 outlook, September 2019* (Water

Markets Report).² AITHER has referred to specifically to the rise of permanent horticulture as a trend.³

The AITHER graph is reproduced below.



Source: Aither, 2019.

FIGURE 8 WATER AVAILABILITY SCENARIOS AND BASELINE PERMANENT HORTICULTURE WATER DEMAND (AT FULL MATURITY), SOUTHERN MDB (EXCLUDING MURRUMBIDGEE)

Permanent horticulture or plantings typically enable the grower to receive a higher price for their crop compared to seasonable plantings such as rice and cotton. However, there is a higher capital investment associated for permanent plantings, with many years of tending before the crop is able to produce a return. The absence of water causes a specific issue for this class of investor.

Those producers of annual crops such as cotton or rice, in the absence of water, would not plant a crop. Any loss of a crop would typically only be seasonal, such as where a crop was planted but rains (and therefore water availability) did not eventuate to enable it to be harvested. For livestock producers, the absence of water/feed means that they

² AITHER, *Water Markets Report, 2018-19 review and 2019-20 outlook, September 2019* (Water Markets Report), section 2. Available at www.aither.com.au.

³ AITHER, *Water Markets Report*, section 2.3, Figure 8.

are unable to tend to stock going forward, but are able to sell their existing stock and obtain some return on capital (noting the significant issues and costs associated with re-stocking in future years).

For permanent horticulture the situation is different. The absence of water may mean that the tree or other plant will eventually die. In these circumstances, the producer would be at risk of not receiving a return on capital for those plantings mature enough to survive. The producer would have to wait for a substantial period of time before any new trees or plantings produce a return, assuming favourable hydrological conditions.

For this reason, access to high security water entitlements for permanent plantings would seem prudent. Those entitlements can be directly purchased from the market. We understand that holders of high security water entitlements have made them available through long-term leases and futures trading. However, the depth of this market and general availability of such instruments across the MDB is not known. More recently, however, anecdotally, we understand licence holders have become increasingly unwilling to sell entitlements as the value of water is now more widely appreciated and the underlying entitlement is now recognised as a key input into production by irrigators.

The onset of such a severe drought has undoubtedly caught some producers short. However, it should be noted that in some valleys, even holding high security water entitlements is not a guarantee of being able to receive water, as the water is simply not available, or unable to be delivered down the river system. This will naturally have an impact on trading.

General observations – market transparency and information

A number of issues have been raised in past reviews, audits and inquiries on trade price reporting, accuracy of data and availability of relevant information. These are well understood. Examples include the sporadic nature of mandatory price reporting, the fact that there is no 'single truth' or consistent reporting arrangements for Murray Darling Basin data as it is dispersed across various authorities and jurisdictions. Also, there are multiple processes and entities involved and different systems used for different purposes (i.e. water management, rather than market purposes as is the case with markets in their early stages of development).

A range of reforms to improve transparency in water information and data in NSW have been prioritised by the NSW Government. This includes:

- amendments made to the Water Management Act to support the future delivery of new transparency initiatives.
- creation of an environmental water hub.
- WaterNSW's water insights portal,
- creation of a new platform for access water information, informed by NSW Digital Government Strategy and other relevant policies, to help give stakeholders certainty that water is being managed appropriately.

There is a role for service providers to improve market transparency and information for customers, provided the legislative arrangements are clear and transparent to the service provider and the associated cost can be recovered from a price determination.

A number of third parties are also involved in water trading in the Murray Darling Basin, such as irrigation exchanges and water brokers. WaterNSW does not have any role in facilitating a transaction between a buyer and seller of water rights in NSW. Only once a buyer and seller agree to enter into a transaction and fill out the relevant form does WaterNSW action the fulfilment of the transaction.

However, there are a number of brokers and exchanges that operate, including in Basin trading, to assist customers secure trades (match buyers and sellers) and determine prices for trades. Brokers' websites provide price information of recent trades and graphs of historical prices for a given valley and product. However, this information is not verified and it is not clear from where this information is derived. Further this information is not consistent between service providers.

We understand that the services brokers facilitate are becoming more sophisticated, such as leases and forwards. Brokers and the services they provide appear to be playing an important role in enabling customers to secure appropriate water rights. From interactions with our customers, we observe that our larger, more sophisticated customers generally understand and are up to date with the main concepts underpinning the market such as high and low security entitlements, rules of trading within and between valleys (as relevant to the valleys they operate in), water allocation and prices for water. Our smaller customers are likely to be more reliant on a broker to provide them with the relevant information. Indeed, there does appear to be some asymmetry of knowledge/understanding among water users when it comes to understanding the market. In this regard, the role of exchanges and brokers in water markets may be an area that the ACCC could explore.

Water markets are not homogeneous. Due to the complexity of trading rules under each water sharing plan and physical constraints, in some valleys water can only be traded within the valley and not between valleys as in other areas. Some valleys have intra-valley trade constraints in the form of limits on the volume that can be traded or area-based constraints. Some water trade types have higher transaction volumes while others have

smaller volumes. For those valleys and trade types with smaller volumes there is less information upon which consumers can use to inform decisions.

Finally, the data and information, held by third parties, may also distort the accuracy of information that is reported (on the basis that reported information is only telling part of the story).

Generally, WaterNSW supports initiatives that improve information transparency as that helps inform more confident decision-making by consumers but also utilities in their planning and other functions. At the same time, we are acutely aware of the costs associated with providing further data and other implications (such as commercially sensitive information). In that regard, increased reporting and publication of data needs to be balanced against the costs of doing so.

General observations - market practices and behaviour

In this submission, WaterNSW raises two examples of market practices and behaviour that may warrant further consideration as part of the ACCC's inquiry – zero dollar reporting and event-based trading.

Section 12.48 of the Basin Plan 2012 provides:

12.48 Price of trade to be reported

(1) *If the trade of a water access right requires the approval of an approval authority, the person disposing of the water access right must notify the approval authority in writing of the price agreed for the trade.*

Note: See section 1.07 for the meaning of **approval authority**.

(2) *If the trade of a water access right does not require the approval of an approval authority but does require registration, the person disposing of the water access right must notify the registration authority of the price agreed for the trade.*

(3) *The notice must be given either at, or before, the time the approval or registration is sought.*

Section 12.48 of the Basin Plan requires that prices for agreed trades are to be notified as part of the trade process. Although trade prices are recorded, a large number of trades are priced at zero dollars. In a review of the issue, the MDBA found that in 2017-18, 35% of

trades in New South Wales were recorded at zero dollars and 33% in Victoria, and 44% across the MDB.⁴ . The MDBA observed:

“While there are legitimate instances of zero price trades (for example, the transfer of an entitlement between trading zones by the same owner, such as an environmental water holder, or an irrigator with multiple properties) it is implausible that almost half of the water trades in 2017-18 were for such reasons. In other words, it seems common practice for sellers to deliberately misreport the price of trades as zero dollars, and for states to accept this deliberate misreporting.”

WaterNSW also notes that event based trading, such as inter-valley trading windows, are not conducted consistently between MDB jurisdictions, with NSW using a first in first served basis and Victoria using a ballot. This may be an area for consideration by the ACCC to the extent that different approaches may create inappropriate or inefficient barriers to trade due to information asymmetry and other similar factors.

⁴ MDBA, *Water Trade Price Reporting under the Basin Plan, Part 1: Basin state processes and procedures for collecting water trade price information*, May 2019 (MDBA Report)

General observations – regulation and institutional settings

Currently, WaterNSW MDB valley prices are set by IPART, accredited by the ACCC to perform this function. IPART must consider the Basin Water charge principles and objectives in setting charges including the need to facilitate efficient functioning of water markets (including inter-jurisdictional water market). Prices for other services provided by WaterNSW are set by IPART in accordance with requirements under NSW legislation.

For the MDB, IPART currently sets charges so that 60 per cent of expected revenue is recovered from variable charges. WaterNSW currently levies the variable charge at the point of trade, where the buyer does not hold a NSW works approval (e.g. for interstate buyers/trades as part of the 2017 IPART Price Review). The ACCC has suggested that the practice of imposing the variable charge at the point of trade for interstate trades could distort trade flows and the distribution of gains from trade and has recommended levying the variable charge at the point of allocation as an alternative.

As part of this inquiry, the ACCC may wish to consider the appropriate interaction between the economic regulation of monopoly infrastructure in the MDB and water trading more generally. Also relevant here is consistency of approach to economic regulation across different MDB jurisdictions.

Water markets are evolving and adapting to new circumstances. This is due to a range of factors, some of which are outlined above, but also driven by changes in technology and other developments. Against this it should be noted that water trading arrangements are contained in water sharing plans and other similar instruments which are only amended on an infrequent basis. As a result, as the circumstances change the water trading arrangements may not be facilitating the best outcomes for consumers. Further, there may be inconsistencies between plans.

To date, these trading arrangements have been developed from a resource management perspective. As part of this review the ACCC may wish to consider mechanisms to enable trading arrangements within the MDB to be consistent across jurisdictions and to be developed from a market regulation perspective. In addition to trading arrangements, other aspects such as customer service and consumer protections should also be developed. Also for consideration should be mechanisms for trading and related arrangements to be adjusted in line with market and other developments in a timely manner. This may involve separating trading arrangements from bespoke Water Sharing Plans and placing them in a single, universal regulatory instrument, such as a code, that could be amended as needed. An open, transparent and timely process for amendment of trading and related arrangements would also be a necessary accompaniment to any such reform.