

Submission

ACCC inquiry into water markets in the Murray-Darling Basin

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Introduction

Thank you for the opportunity to contribute to the ACCC inquiry into water markets in the Murray-Darling Basin. We understand that the ACCC will make recommendations to enhance markets for tradeable water rights, including options to enhance their operations, transparency, regulation, competitiveness and efficiency.

This submission raises issues in relation to the themes identified in the ACCC's Issues Paper of:

- Market trends and drivers
- Market transparency and information
- Regulation and institutional settings; and
- Market participant practices and behaviours¹

MARKET TRENDS AND DRIVERS

Horticulture

Current water prices are expected to reach \$1,000 per megalitre this year.² The high prices mean that water traded to irrigate horticulture (nuts, olives, citrus and grapes) and crops such as cotton, rice, dairy and fodder can't compete on price. Nut revenue of \$2,000 to \$3,000 per megalitre of water is far more lucrative than fodder (\$150 to \$200 per megalitre), rice (\$150 - \$250 per megalitre) or cotton (\$300 – \$350 per megalitre).^{3,4}

¹ ACCC (2019) *Murray-Darling Basin water markets inquiry*, <https://www.accc.gov.au/focus-areas/inquiries-ongoing/murray-darling-basin-water-markets-inquiry>

² Hunt (2019) *Irrigators fear water prices headed to \$1,000 a megalitre*, <https://www.weeklytimesnow.com.au/news/water/irrigators-fear-water-prices-headed-to-1000-a-megalitre/news-story/20c5429e9bb7fd725c8a3d38c9b7b64b>

³ Dairy Australia (2019) *Future Focus: Dairy Industry Strategy Murray Region 2019*, <https://www.dairyaustralia.com.au/news-listing/future-focus-regional-dairy-industrystrategy?id=910D7B881ED94B50B3B8DEBF77041C57>

⁴ Irrigation Australia (2018) *Fluid water prices keep rice on production rollercoaster*, <https://www.irrigationaustralia.com.au/news/fluid-water-prices-keep-rice-on-production-rollercoaster>

In the southern basin, there has been a 70% growth in nut plantations over the last 12 years in the Murrumbidgee, Sunraysia and Riverland regions.⁵ Many of these plantations are on 'greenfield' sites, that is, land which was not previously irrigated.⁶

The Victorian government commissioned Aither to investigate the water supply and demand of the nut plantations, which said:

Aither's analysis suggests that directly available consumptive surface water supply within the lower Murray may only meet approximately 40 per cent of total existing permanent horticulture demand (at full maturity) under an extreme dry water availability scenario.⁷

In the River Murray, the new nut developments are at the end of the Murray near the South Australian border (Sunraysia and the Riverland). The delivery of so much water to the end of the river increases the amount of water lost in conveyance. Less water is therefore available overall because a large volume of water is lost throughout the river just to deliver it.⁸ In 2018-19 the additional conveyance contributed nearly doubled the average annual conveyance.⁹

Conveyance water is socialised across all users and is not directly borne by the water holders that receive the water. The increased conveyance costs are contributing to lower water allocations for other users. NSW General Security water holders have zero water allocations for the second consecutive year.¹⁰ That additional conveyance water could have been used to grow fodder.

⁵ Australian Nut Industry Council (2019) *Growing Australian agriculture to \$100bn by 2030*, https://www.aph.gov.au/Parliamentary_Business/Committees/House/Standing_Committee_on_Agriculture_and_Water_Resources/Agriculturegrowth/Submissions

⁶ Australian Nut Industry Council (2019) *Growing Australian agriculture to \$100bn by 2030*, https://www.aph.gov.au/Parliamentary_Business/Committees/House/Standing_Committee_on_Agriculture_and_Water_Resources/Agriculturegrowth/Submissions

⁷ Aither (2019) *Water supply and demand in the southern Murray-Darling Basin*, <https://waterregister.vic.gov.au/about/news/269-new-report-on-water-supply-and-horticulture-demand-in-the-murray>

⁸ Slattery and Campbell (2019) *Southern Discomfort*, [https://www.tai.org.au/sites/default/files/P742%20Southern%20Discomfort%20%20\[WEB\]_0.pdf](https://www.tai.org.au/sites/default/files/P742%20Southern%20Discomfort%20%20[WEB]_0.pdf)

⁹ MDBA (2019) *Losses in the River Murray System 2018-19*, <https://www.mdba.gov.au/sites/default/files/pubs/river-murray-system-losses-report-march-2019.pdf>

¹⁰ NSW Department of Planning, Industry and Environment (2019) *Water allocation statements*, <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/statements>

Impacts on other industries

Dryland beef and sheep farmers have been hand feeding stock for several years due to drought.¹¹ The lack of affordable fodder has quickly and drastically depleted dairy, beef and sheep herds across the basin. Meat and Livestock Australia explain that:

Consecutive months of record elevated female slaughter signal an additional wave of destocking, eroding the breeding herd and significantly hampering the ability of the herd to rebuild in the short term, once conditions improve.¹²

ABARES analysis confirms that herds are being slaughtered during this drought.

In 2018–19 drought conditions across many beef cattle producing regions of Australia led to elevated levels of cattle turnoff. ABARES estimates of 2018–19 slaughter and production have been revised up from [Agricultural commodities: March quarter](#) due to higher than expected slaughter since the beginning of the 2019 calendar year. In the 3 months to March 2019, the number of cattle slaughtered was the fourth highest level in 30 years despite the opening herd being among the lowest over that period.¹³

In 2018–19 the sheep flock is estimated to have fallen to its lowest level since 1904–05 due to prolonged drought conditions and a longer-term trend in land use towards cropping. The flock has declined sharply despite high sheep meat and wool prices providing a strong incentive to build flocks.¹⁴

The Basin's dairy industry is in dire conditions, with many farmers permanently leaving the industry and its ability to survive this drought is in question.^{15,16} ABARES explains:

Dry conditions and high input costs have contributed to a reduction in cow numbers and a decline in production. If realised, this will be the lowest level of whole milk production since 1994-95.

¹¹ Buy a bale (2019) *Buy a bale: Our story*, <https://www.buyabale.com.au/our-story/>

¹² Farmonline (2019) *Beef is slaughtering its future as drought continues to bite herd*, <https://www.farmonline.com.au/story/6216203/beef-industry-continues-to-slaughter-its-future-thanks-to-drought/>

¹³ ABARES (2019) *Beef and veal: June quarter 2019*, <https://www.agriculture.gov.au/abares/research-topics/agricultural-commodities/jun-2019/beef>

¹⁴ ABARES (2019) *Sheep meat: September quarter 2019*, <https://www.agriculture.gov.au/abares/research-topics/agricultural-commodities/sep-2019/sheep-meat>

¹⁵ Coughlan and McCulloch (2019) *Hanson can't milk support for dairy bill*, <https://www.theleader.com.au/story/6485803/hanson-cant-milk-support-for-dairy-bill/?cs=13063>

¹⁶ Dobson and Long (2019) *Climate change and basin plan forces prominent farmer to leave the Murray-Darling*, <https://www.abc.net.au/news/2019-05-02/dairy-farmer-moves-from-murray-darling-basin-amid-water-woes/11057982>

A further reduction in the national dairy herd is expected as farms continue to sell cows to reduce feed and support cash flow.¹⁷

The rice industry is also suffering, with the 2018-19 crop being more than 90% lower than the previous season, and less than 7% of a regular crop.^{18,19}

Ricegrowers' Association of Australia president and Moulamein grower Jeremy Morton said the harvest numbers are really significant for local and farming communities.

“You can't have a 90 per cent reduction in your income without having a significant impact both for the grower and the community,” he said.²⁰

This has resulted in a downturn of rice processing. Sunrice made 100 workers redundant in Deniliquin and Leeton last year, 32 Deniliquin workers redundant this October and another 100 workers this week in Deniliquin and Leeton.^{21,22}

The current nut plantations cannot survive if there is only enough water to meet 40% of their demand. It defies logic to continue to supply water to plantations that cannot survive while simultaneously allowing the dairy industry to collapse and the loss of valuable genetics of our beef and sheep herds.

Potential solutions

1. Water holders could pay the conveyance cost of water. This could be achieved via an exchange rate or removing the socialisation of losses so each water holder pays their own conveyance costs.
2. Requirement for horticulture to own a minimum amount of high security water.
3. State governments halt new horticulture developments on greenfield sites and place sustainable limits on permanent plantings based on water availability and a diverse agriculture sector.

¹⁷ ABARES (2019) *Dairy: June quarter 2019*, <https://www.agriculture.gov.au/abares/research-topics/agricultural-commodities/jun-2019/dairy>

¹⁸ Southern Riverina news (2019) *Rice Crop Falls Short*, <https://www.southernriverinanews.com.au/@news/2019/06/20/642364/rice-crop-falls-short>

¹⁹ Brown (2019) *SunRice cuts more jobs in NSW Riverina after second lowest rice crop on record*, <https://www.abc.net.au/news/2019-10-02/low-rice-crop-leads-to-sunrice-job-losses/11566748>

²⁰ Southern Riverina news (2019) *Rice Crop Falls Short*, <https://www.southernriverinanews.com.au/@news/2019/06/20/642364/rice-crop-falls-short>

²¹ Brown (2019) *SunRice cuts more jobs in NSW Riverina after second lowest rice crop on record*, <https://www.abc.net.au/news/2019-10-02/low-rice-crop-leads-to-sunrice-job-losses/11566748>

²² Foley (2019) *Murray-Darling water woes strip another 100 jobs from drought-hit rice towns*, <https://www.smh.com.au/politics/federal/murray-darling-water-woes-strip-another-100-jobs-from-drought-hit-rice-towns-20191126-p53e9k.html>

MARKET TRANSPARENCY AND INFORMATION

The transparency of market data is inadequate across all of the jurisdictions.

Of the four state registers, the NSW Water Register the easiest to navigate. Information is available of dates, volumes, price and Water Access Licence (WAL) numbers. The property where the WAL is located can be identified via the works approval associated with the WAL, although this is a cumbersome process that could be made much easier. There is no information available about ownership.

The Queensland register is only available for a search fee. The Victorian and South Australian trade registers are not intuitive and difficult to access.

Irrigation schemes

In NSW there is no water licence data publicly available for WALs within an irrigation scheme, as these are the company's private shareholder accounts. In some valleys, this represents more than half of the valley's total water shares. For example, Table 1 shows the water shares held within the Murrumbidgee valley.

Table 1: Water shares in the Murrumbidgee Valley

	High Security	General Security
Total Shares	364,279	1,891,995
Murrumbidgee Irrigation	283,309	601,958
Colleambly Irrigation	20,762	346,102
Total held in Irrigation Areas	304,071	948,060
Total water held in irrigation areas	83.5%	50%

Table 1 shows that in the Murrumbidgee, 83.5% of High Security and 50% of General Security is held within the Murrumbidgee and Colleambly Irrigation Districts, so the water register does not show details of those WALs or trades within the districts. The register does show trades in or out of the irrigation district, but the public can only see half of the transaction outside the district.

The lack of transparency due to no public access of WALs within an irrigation district erode trust and foster allegations of mismanagement. Two often repeated rumours from one irrigation district are:

- The irrigation company is a speculator in the market. If this is true, it is certainly against the interests of that company's shareholders and likely a breach of director's fiduciary duty to its shareholders. '
- Water 'saved' through infrastructure projects funded under the Commonwealth's efficiency program is supposed to be shared equally between the WAL holder and the Commonwealth. The irrigation scheme undertook an upgrade of delivery channels and they kept a share of the savings that was much higher than 50%.

The veracity of these rumours is unknown and without a public register of all WALs, they cannot be tested.

Delivery Entitlements

Delivery entitlements are created in the irrigation company's Constitution in some irrigation schemes. Accordingly, they appear to be financial instruments under the Corporations Act 2001 (Cth).

Delivery Entitlements (DEs) provide a simple and fair way to share the available flow rate during a supply restriction. Our channel system has a fixed capacity. The role of a DE is to share that capacity when required.²³

Delivery Entitlements are tradeable and attract charges. Water delivery cannot be guaranteed without Delivery Entitlements, so they are an important instrument for irrigators. There is no public register of Delivery Entitlements, their trade or transfer, or who owns them.

Potential solution

4. That all States adhere to the National Water Initiative and produce a public register for all water licences and trades, including licences within irrigation districts, and that should include the ownership of the licences.
5. The publication of a register of Delivery Entitlements, including date of issue, the cost of issue, trade details, ownership and associated works approvals.

²³ Murrumbidgee Irrigation (2018) *Delivery Entitlements: Frequently asked questions*, <https://www.mirrigation.com.au/Learning-Centre/Fact-Sheets>

REGULATION AND INSTITUTIONAL SETTINGS

Irrigation schemes

Irrigation schemes are typically managed through private companies or trusts. Individual irrigators are shareholders in the irrigation company. Regulation is limited to the Corporations Act. For example, the NSW Natural Resource Access Regulator has no jurisdiction within irrigation schemes.²⁴ This means there is limited ability for shareholders to seek arbitration from a regulator outside the irrigation company. For example, there is a longstanding dispute in the Murrumbidgee Irrigation Scheme relating to incorrect water meters. There is no external authority to assess the complaint or arbitrate, other than through Murrumbidgee Irrigation, who are the subject of the farmer's complaint.²⁵

The Australia Institute has received many anecdotal reports from farmers in one irrigation scheme about egregious actions by the scheme operators to the benefit of one or two irrigators. They claim to have been threatened that their water will not be delivered at critical times if they speak out. There seems to be no regulator or remedial course safely available to these farmers.

It is unclear which agency, if any, is responsible for the regulation of delivery entitlements.

Potential Solutions

6. Review governance arrangements regarding Irrigation Districts to ensure regulation of their operations and create or strengthen regulatory powers to ensure there is an adequate path for arbitration and remediation of shareholders within Irrigation Districts.

MARKET PARTICIPANT PRACTICES AND BEHAVIOURS

Tagged trading

There are several water licences in the Murrumbidgee that have a Murray works approval and vice versa. These WALs are colloquially known as 'tagged trade licences'. These licences

²⁴ NSW Government (2018) NSW Non-Urban Water Metering Policy, https://www.industry.nsw.gov.au/__data/assets/pdf_file/0017/205442/NSW-non-urban-water-metering-policy.pdf

²⁵ Calver (2019) Decades long dispute reaches a new low, <https://www.canberratimes.com.au/story/6275515/murrumbidgee-irrigation-escorted-by-security-to-remove-water-meters/?cs=14231>

allow water to be moved between valleys when intervalley account limits have been reached and intervalley water trade are otherwise unallowed. This is not available to other WAL holders.

Barmah Choke Trade Balance

The Barmah Choke is a naturally occurring narrow stretch of the River Murray that begins downstream of Cobram, Victoria and ends upstream of Echuca, Victoria. The Choke runs through the Barmah–Millewa Forest on the Victorian/NSW border.

The Choke restricts the flow of the River Murray to just around 7,000 ML per day. This is the lowest flow in any stretch of the River Murray. It presents a challenge for river management, primarily because it limits the delivery of irrigation water during periods of peak demand, generally in spring and summer.

A default trade restriction is in place at the Choke, this is necessary to protect water delivery to existing entitlement holders and for environmental reasons. The restriction means that trade downstream of the Choke may only occur when there is sufficient matching trade capacity available in the opposite direction which is called 'back trade'.²⁶

MDBA operates the River Murray and faces significant challenges to meet the increasing deliver demand at the South Australian border. MDBA also calculates the Barmah Choke trade balance. This is a conflict of interest.

Potential solutions

7. Existing 'tagged trade' licences are restricted to using water in the same valley as the works approvals on the licence, and cannot move water between valleys when intervalley accounts are closed.
8. The Barmah Choke balance is either prepared by an independent party, or subject to an annual independent audit by an independent auditor.

²⁶ MDBA (2019) *Barmah Choke trade balance and restriction*, <https://www.mdba.gov.au/managing-water/water-markets-trade/interstate-water-trade/barmah-choke-trade-balance>

Conclusion

Relying on the water market alone to decide the future of irrigation industries is resulting in:

- unsustainable plantations of horticultural development, particularly nuts;
- prioritising nuts over existing irrigation industries such as rice, dairy and fodder;
- insufficient irrigated fodder contributing to the decline of herds and genetics of dairy, beef and sheep; and
- increased water used in conveyance to deliver to nut plantations, which reduces the amount of water available for other crops (including fodder).

If the Victorian assessment is correct, in an extreme dry year there is only 40% of water available for the nuts at maturity, most of the nuts will die and the hardship inflicted on other irrigation sectors will have been for no benefit.

That is, relying on the water market alone is a policy failure for many agricultural sectors in the Murray-Darling Basin.

There is inadequate transparency of WALs and water trade, particularly within irrigation districts.

There is inadequate regulatory arrangements and options for arbitration and remediation for issues within Irrigation Districts.

There appears to be no regulation or transparency around Delivery Entitlements.

