

# Water Market and Trading Information Session

**COUNCIL NAME**

Murray River Council

**WEB ADDRESS**

<https://www.murrayriver.nsw.gov.au/Home>

**SIZE**

11,865 square kilometres

**POPULATION**

12,000

## Overview of the project

This Case study is a summary of a Water Markets Information Session presented by Erin Smith Associate Director at Aither and Jeff Shannon a Water Broker from Rural Co Water on 29<sup>th</sup> Sept. 2022, hosted by Western Murray Land Improvement Group (WMLIG). The presentation was funded by Murray River Council's (MRC) [Building Our Communities in Advance Project](#) via support from Local Government NSW.

The water market is often difficult to follow and understand, with varying degrees of water literacy in the community. For this reason, information on the water market trends and drivers and water trading strategies were provided to the community.

The project builds on resilience principles and strategies of MRC's [Adverse Event Plan](#), 'continuous learning and improvement', 'build the capacity of the community', and 'provide clear, timely and accurate communication'. The project also aligns to NSW DPIE's [Western Enabling Regional Adaptation](#) project in the Riverina Murray which recommend that Government facilitate greater regional participation in water planning and management by improving opportunities for communities to better understand policy processes, and that the irrigated agriculture sector operates in response to market forces through a deep understanding of water risk.

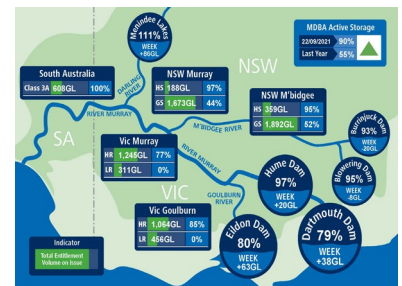
## How the project was carried out

23 people attend the information session at the Wakool RSL Club to learn about the current water markets and water trading. Erin presented virtually through Teams as Covid prevented her from being able to present in person and Jeff Shannon who live close by was able to present in person. This case study provides a range of reference links for people to access.

Erin presented information from Aither's most recent water report at the time and catered specific subject matter to the Murray Region. The slide deck included key findings presented in two water market reports released by the Victorian Department of Environment, Land, Water and Planning.

- Aither, 2020. Southern Murray-Darling Basin water markets: Recent and future trends and drivers [Aither Report \(waterregister.vic.gov.au\)](#)
- Aither, 2020. Water supply and demand in the southern Murray-Darling Basin [Final Report \(waterregister.vic.gov.au\)](#)

Jeff Shannon presented information on the current water market in both NSW and Victoria, the drivers for both permanent and temporary water supply and prices. and different strategies for securing water.



## Outcomes now and in the future

**Water recovery (buyback) has reduced the water available for irrigation and increased price.** Aither estimates that the impact of consumptive water recovery on southern Murray Darling Basin (MDB) water allocation prices between 2007-08 to 2007-18 (per ML in real \$ 2019) had **increased prices by \$58/ML** (\$148 no recovery vs \$206 with recovery).

**How is demand for water changing over time in the Southern MDB?** The demand for water is changing over time due to agricultural changes that are taking place such as an increase in large tree crops including citrus and almond in the lower Murray and Murrumbidgee, large scale cotton in the southern MDB new table and grape developments.

Aither estimates that the impact of demand growth from cotton and perennial horticulture on southern Murray Darling Basin (MDB) water allocation prices between 2007-08 to 2007-18 (per ML in real \$ 2019) had **increased prices by \$45/ML** (\$161 no recovery vs \$206 with recovery).



**REFERENCES**

Aither Presentation ‘Southern Murray-Darling Basin Water Markets: what are the trends and drivers that everyone needs to know?’

Ruralco Water presentation ‘Southern Australian Water Markets, Sept 2021

Estimated permanent horticulture water demand in the Lower Murray Zone is 1,247GL when existing plantings reach full maturity. Intervalley trade and carryover will become increasingly important tools for all irrigators. In an extreme dry year, this will mean a deficit of 749 GL for instance. But, across the connected Murray water supply will likely exceed permanent horticulture demand in most years.

**How might trends and drivers influence allocation prices in the future?**

- Different prices in different zones will continue.
- Allocation prices will likely be higher in the future and vary from year to year.
- The future climate sequence will be the biggest driver of prices in the future.

**What are the modelled allocation prices in the future?** Modelled median prices are between \$300 and \$370 per ML with prices highest in the NSW Murrumbidgee and lowest in the Greater Goulburn. This is a central price, not annual price prediction. In 50% of years, prices will be lower, and in the other 50% of years, prices will be higher.

**The future climate sequence will be the biggest driver of water allocation prices in the future.**

Potential changes in water demand influence prices to a lesser extent. See table below.

**Recent climate**

	No demand growth	Demand growth (known)	Demand growth (high)
No recovery	\$305	\$325	\$343
Recovery (100GL)	\$317	\$339	\$358
Recovery (500GL)	\$371	\$390	\$412

Assumes a repeat of observed water allocations and rainfall under recent climate conditions (2004-05 to 2018-19).

**Historical climate**

	No demand growth	Demand growth (known)	Demand growth (high)
No recovery	\$135	\$170	\$199
Recovery (100GL)	\$151	\$184	\$213
Recovery (500GL)	\$216	\$247	\$276

Assumes a repeat of the observed water allocations and rainfall under historic climate conditions (1895 to 2016).

Source: Aither, 2020. *Southern Murray-Darling Basin water market: Recent and future trends and drivers*

**Benefits and lessons learned:**

Attendees learnt about end of season carry over, the entitlement market, and how market prices respond to water availability. There are many factors that affect water pricing and water buybacks have contributed to increased water prices. Allocation prices are likely to be higher in the future and vary from year to year. The future climate sequence will be the highest driver of prices in the future.

Businesses need to consider water strategies to manage risk against potential temporary allocation price volatility to ensure water security in times of extreme dry. There is often a sensible mix balancing capital requirements with risk mitigation using a range of options/ products that are available:

- Permanent entitlements
- Temporary allocation in the spot market
- Forward allocation contracts
- Entitlement leases
- Carryover capacity

The workshop provided valuable information to the community which will be reinforced via the WMLIG website and newsletters. We will provide reference links to updated annual water market reports for the southern MDB as they are made available.

**More information**

**Contact**

**Name:** Roger Knight  
**Position:** Executive Officer  
**Phone:** 03 5453 1577  
**Email:** [admin@wmlig.org](mailto:admin@wmlig.org)



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