

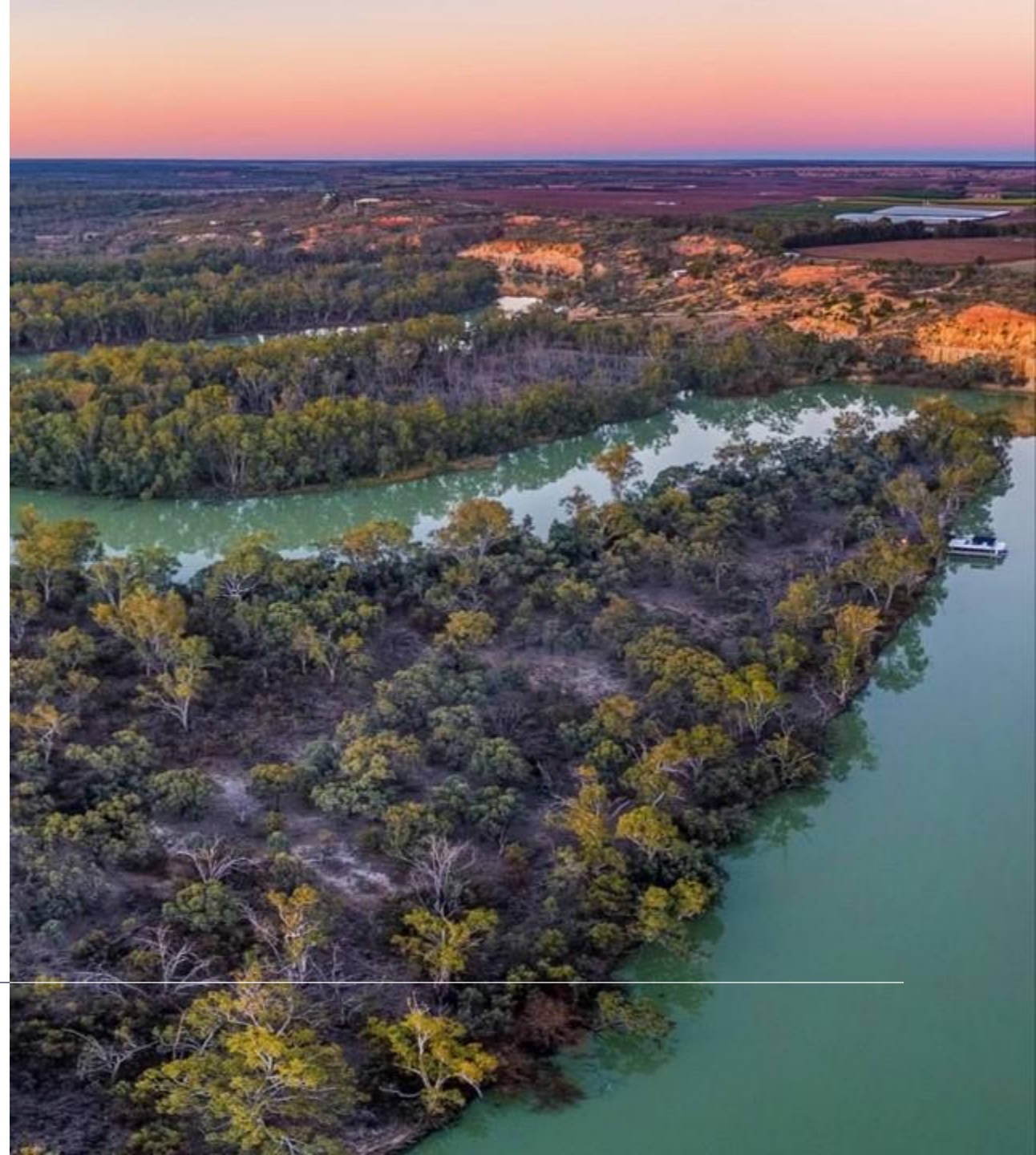
Southern MDB water markets – where to from here?

2020 Growers' Conference

Lower Murray Water

Chris Olszak | 20 October 2020

A I T H E R



Structure

2019-20 Year-in-review



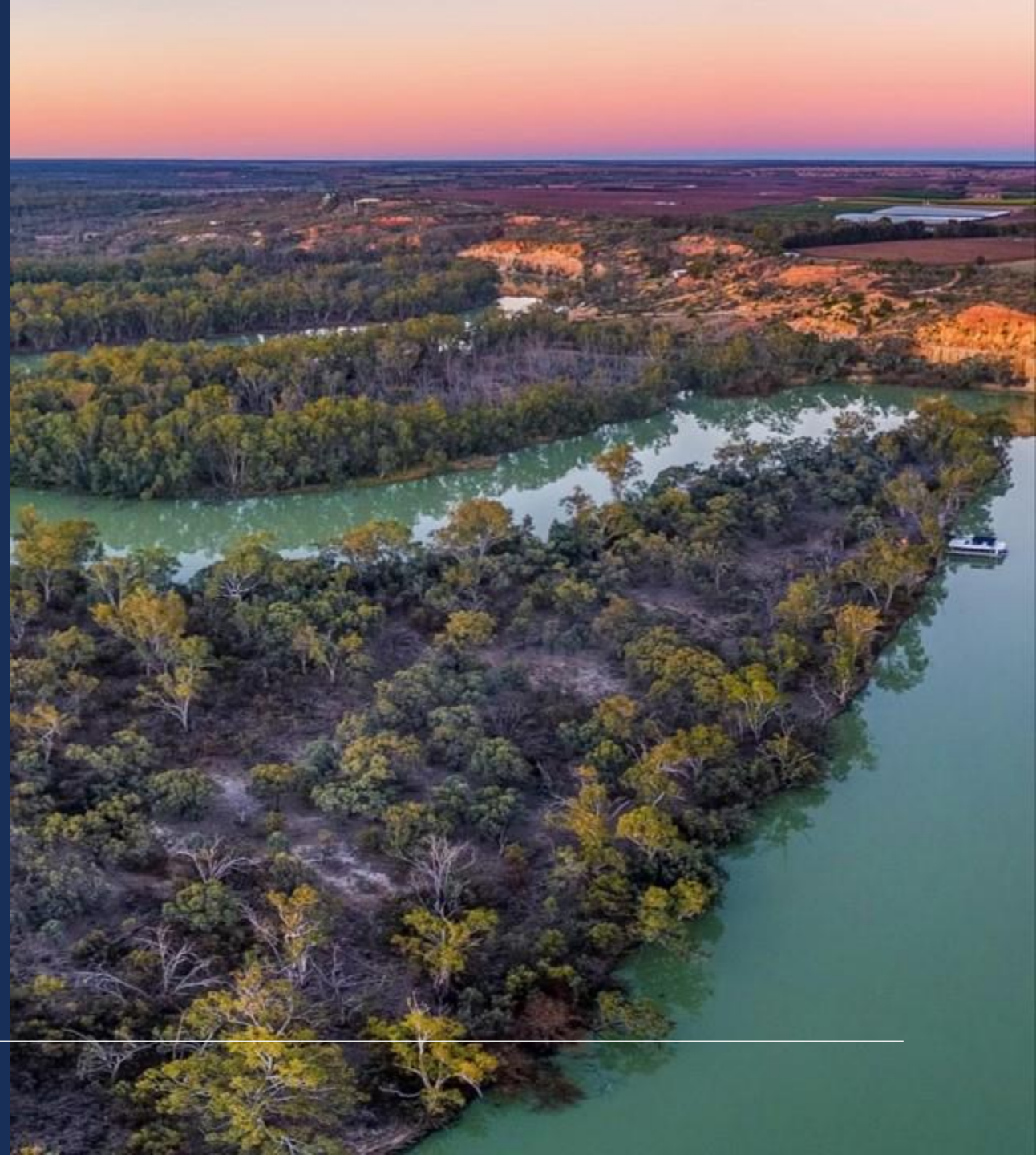
Outlook for 2020-21



Water supply and demand in the lower Murray



2019-20: Year-in-review



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2019-20 Southern MDB allocation markets

Facts at a glance



Estimated value of commercial allocation trade: **\$538 million** (approximately)



Annual average southern MDB allocation prices:

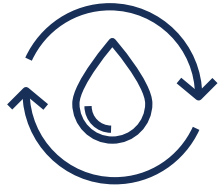
- **\$304 per ML** in NSW Murray (above Barmah)
- **\$644 per ML** in Vic 7 Murray (Barmah to SA)



Allocation prices **decreased 74%** between January and June 2020.

2019-20 Southern MDB entitlement markets

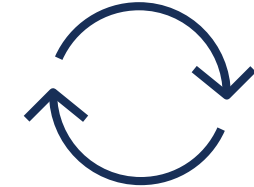
Facts at a glance



Value of total entitlement transfers (excluding ICs):
\$1,073 million



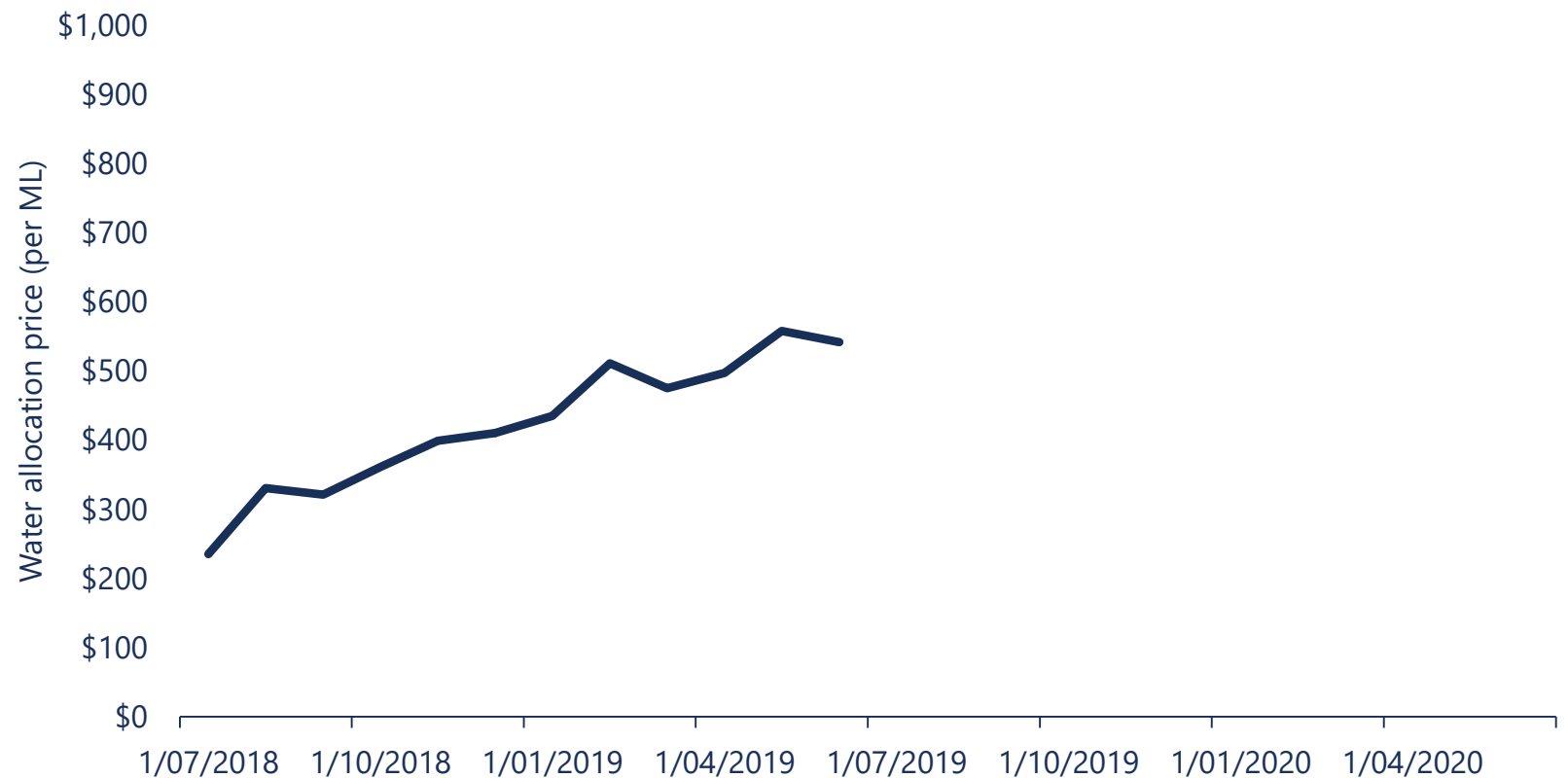
Total entitlement market value:
\$26.3 billion



Entitlement market turnover (excluding ICs):
3 per cent.

In 2018-19,
water allocation
prices steadily
increased
throughout the
year.

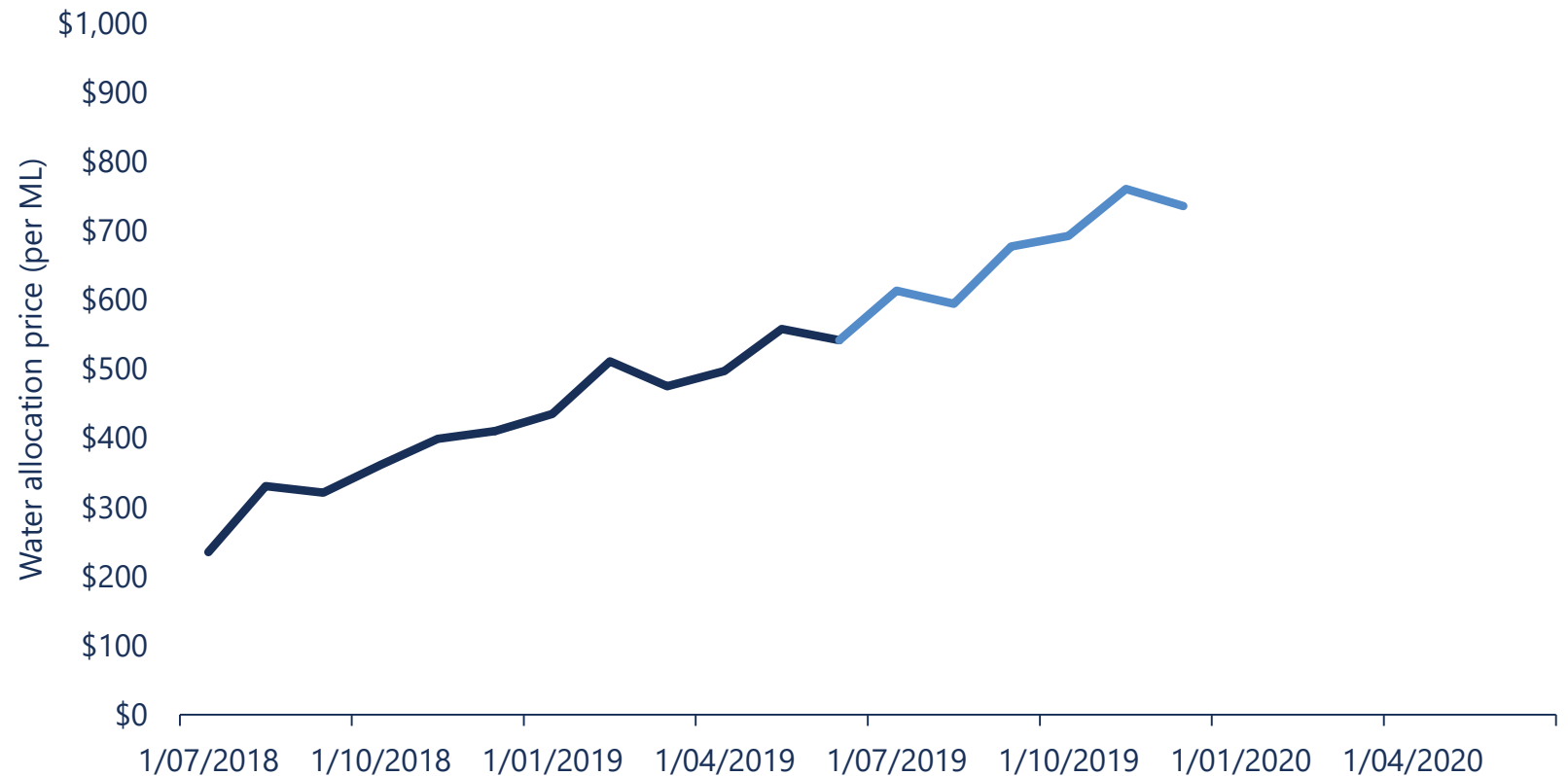
Monthly volume-weighted average allocations prices, southern MDB, (2018-19 to 2019-20)



Source: Aither, 2020. Based on Victorian, New South Wales, and South Australian water registers.

In the first half of 2019-20, prices continued the upwards trend from 2018-19.

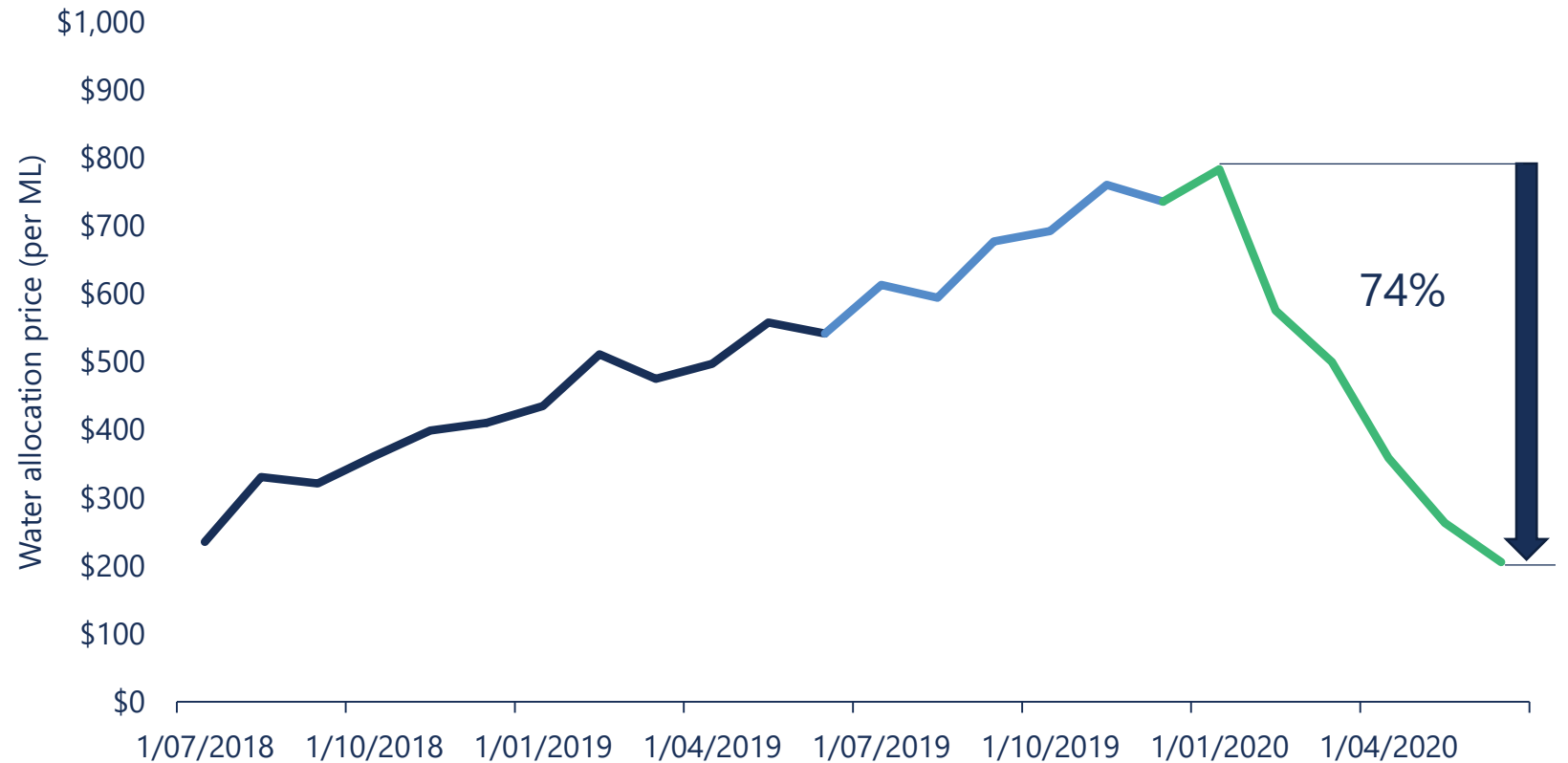
Monthly volume-weighted average allocations prices, southern MDB, (2018-19 to 2019-20)



Source: Aither, 2020. Based on Victorian, New South Wales, and South Australian water registers.

In the second half of the water year, prices tumbled more than 70 per cent.

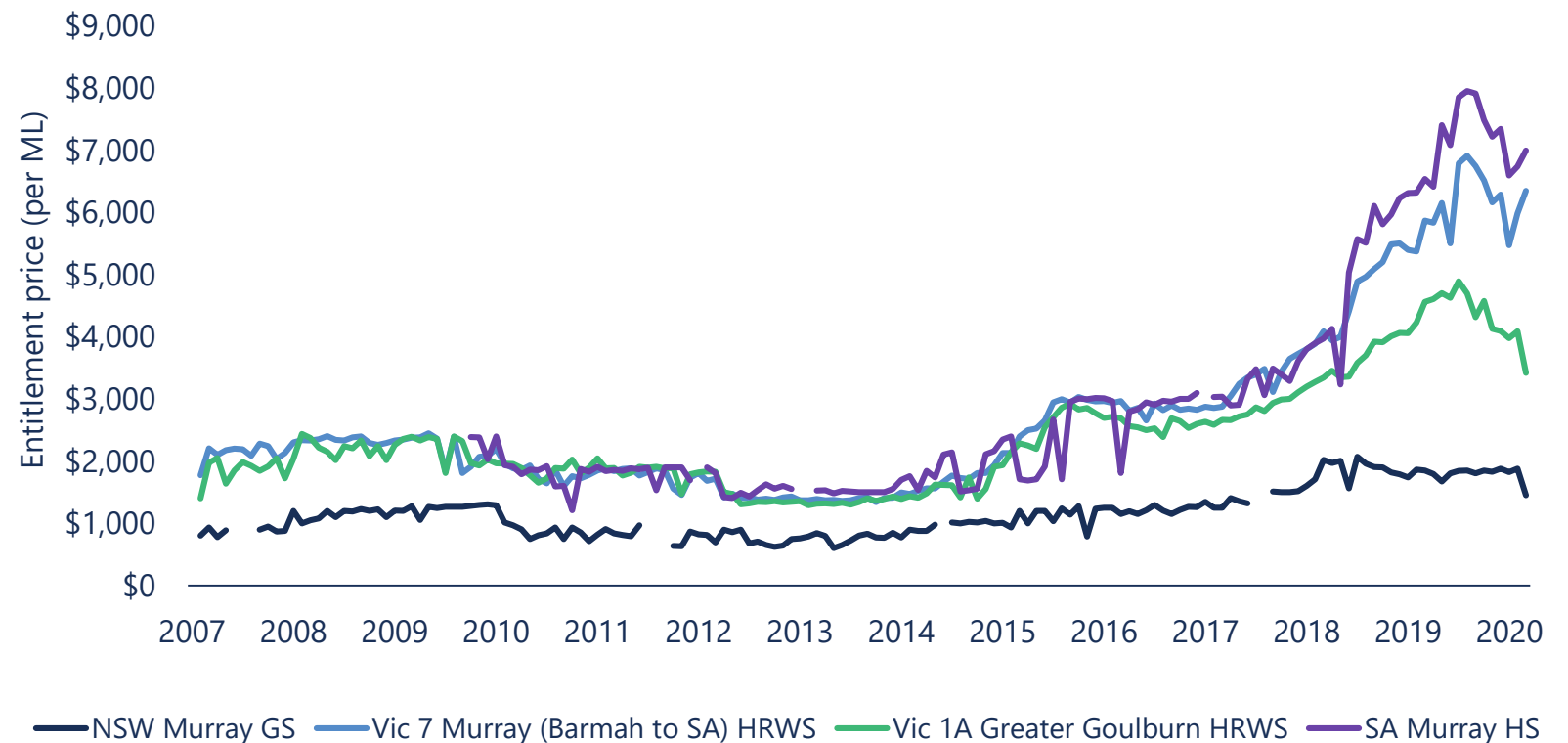
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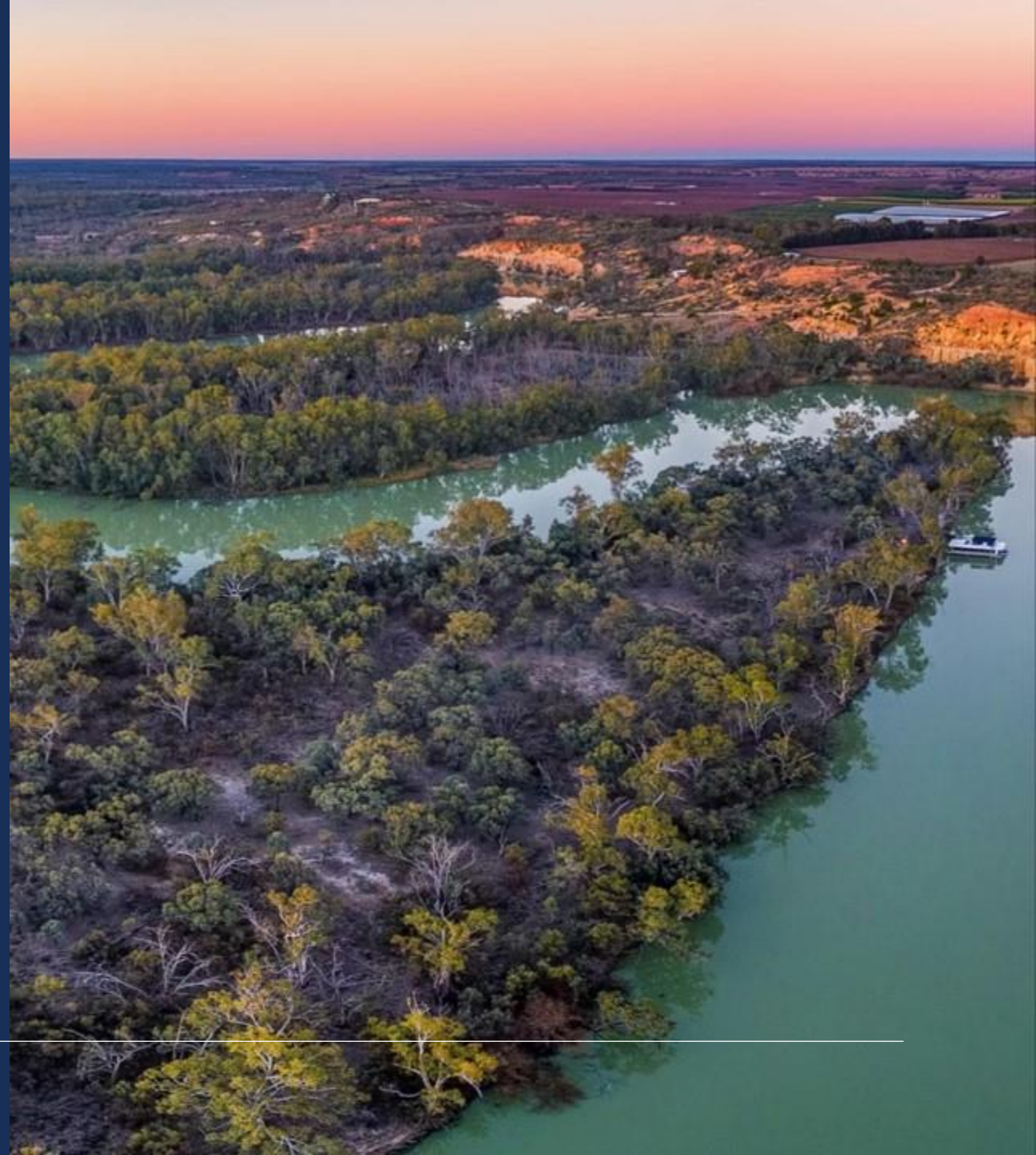
The value of entitlements has appreciated significantly over the last 5 years.

Monthly volume-weighted average entitlement prices, southern MDB, (2007-08 to 2019-20)



Source: Aither, 2020. Based on Victorian, New South Wales, and South Australian water registers.

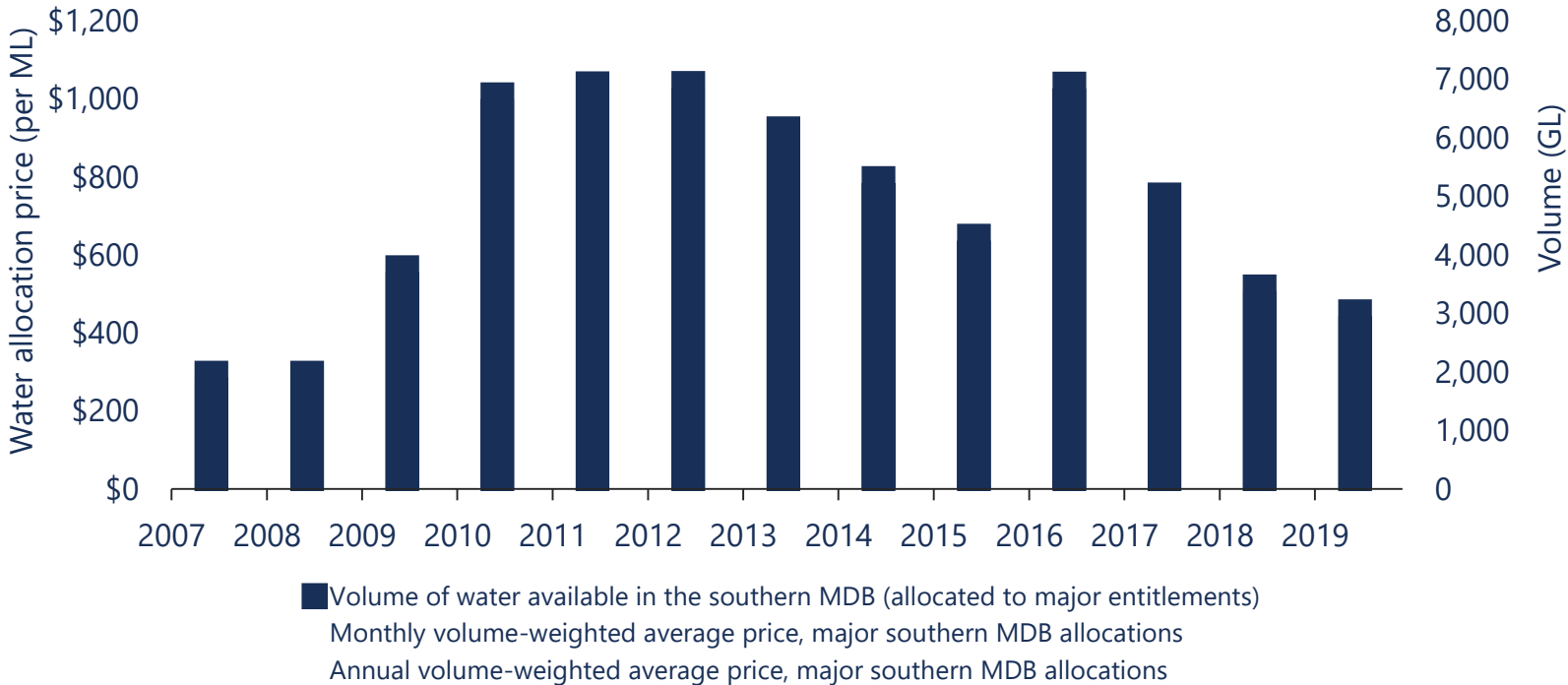
Outlook for 2020-21



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Water prices respond to changes in supply.

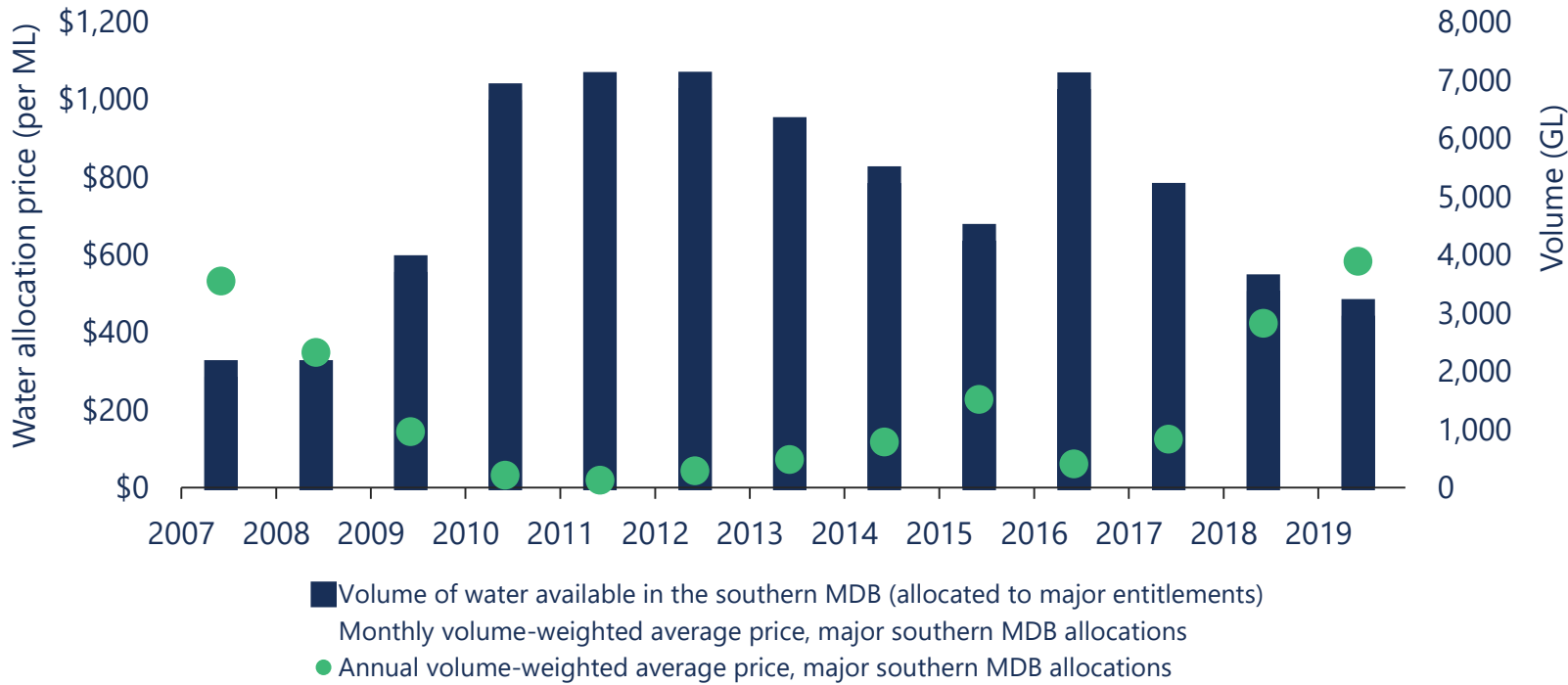
Annual and monthly volume-weighted average prices, and total water available in the southern MDB, 2007-08 to 2019-20



Source: Aither, 2020. Based on Victorian, New South Wales, and South Australian water registers.

Water prices respond to changes in supply.

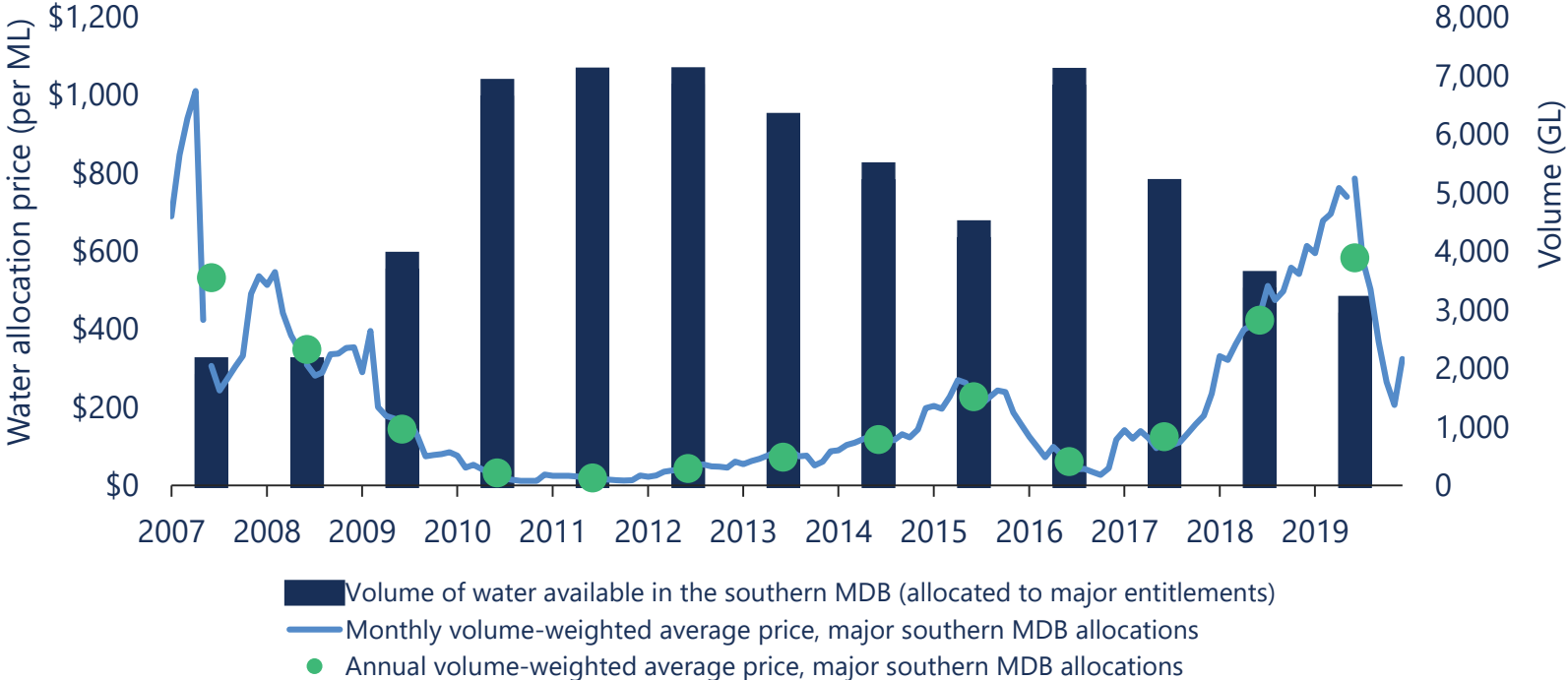
Annual and monthly volume-weighted average prices, and total water available in the southern MDB, 2007-08 to 2019-20



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Annual and monthly volume-weighted average prices, and total water available in the southern MDB, 2007-08 to 2019-20



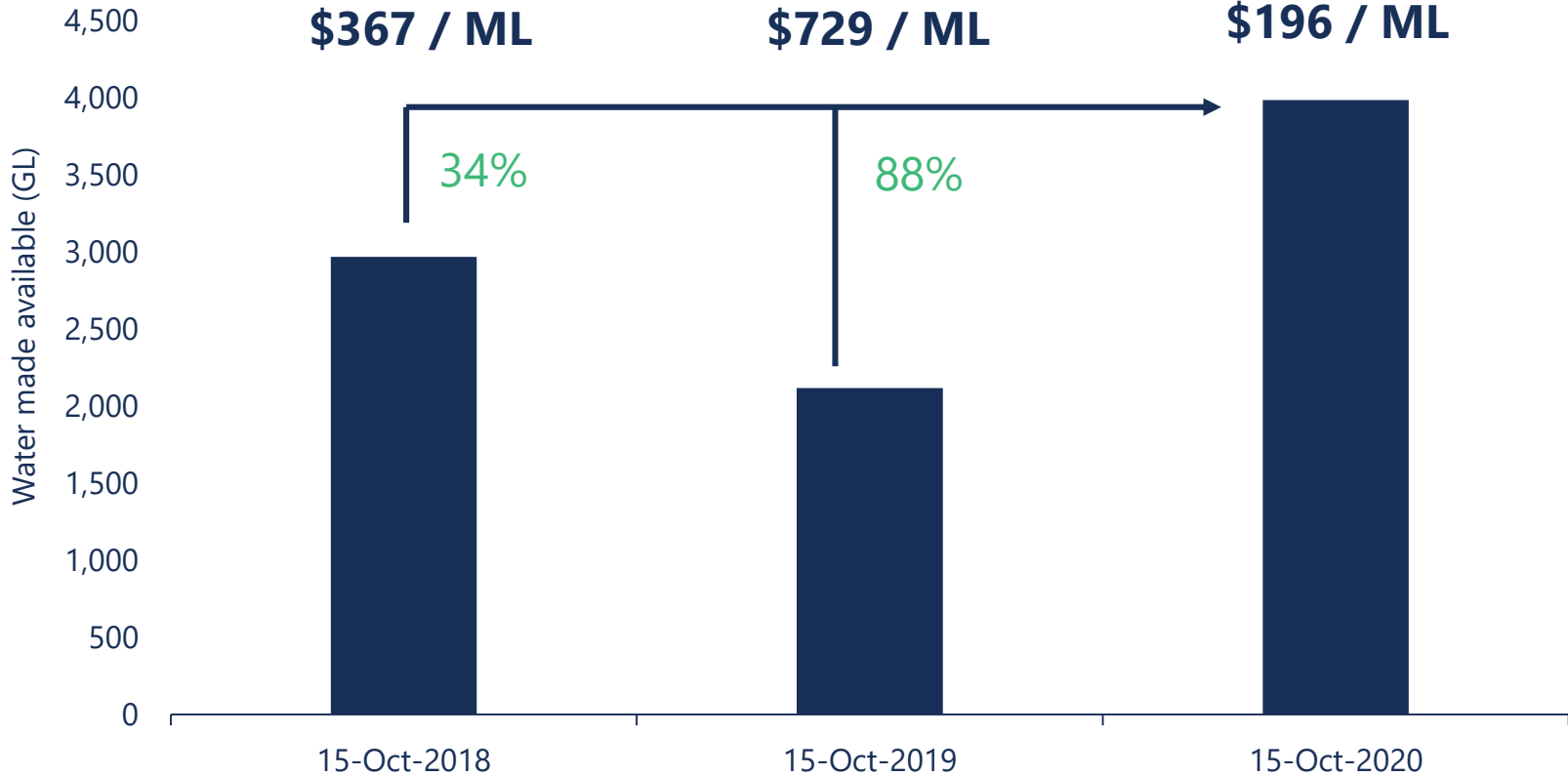
Source: Aither, 2020. Based on Victorian, New South Wales, and South Australian water registers.

After a slow start, water availability is now better than the last two years.

Prices shown are volume-weighted average prices across the southern Murray-Darling Basin in the week in which 15 October allocations were announced.

Water allocated to all major entitlements.

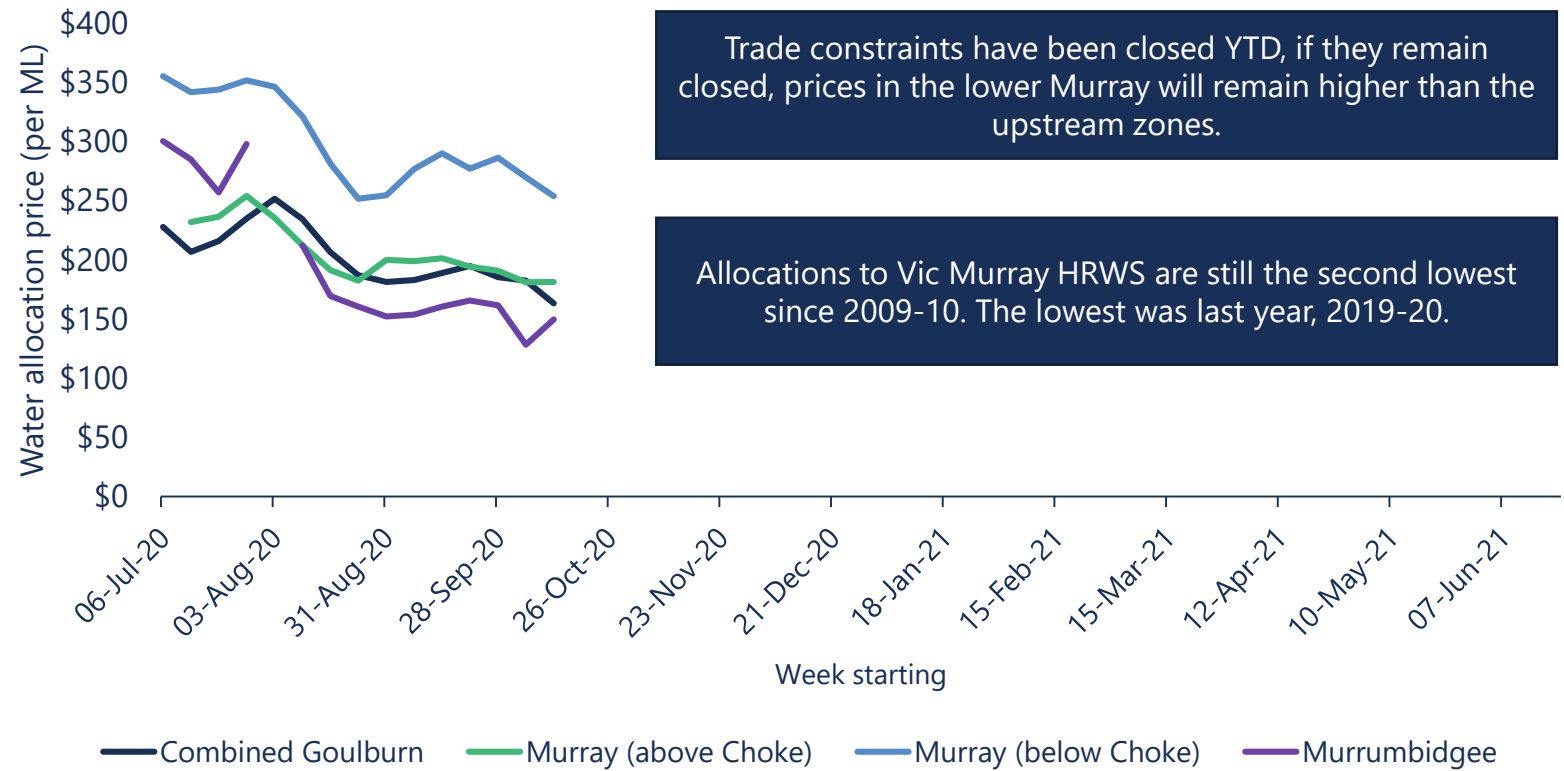
Estimated water allocated to major southern MDB entitlements, 15 October



Source: Aither, 2020. Northern Victoria Resource Manger and NSW Department of Planning, Industry and Environment.

Price divergence between upstream and downstream zones is a feature of 2020-21.

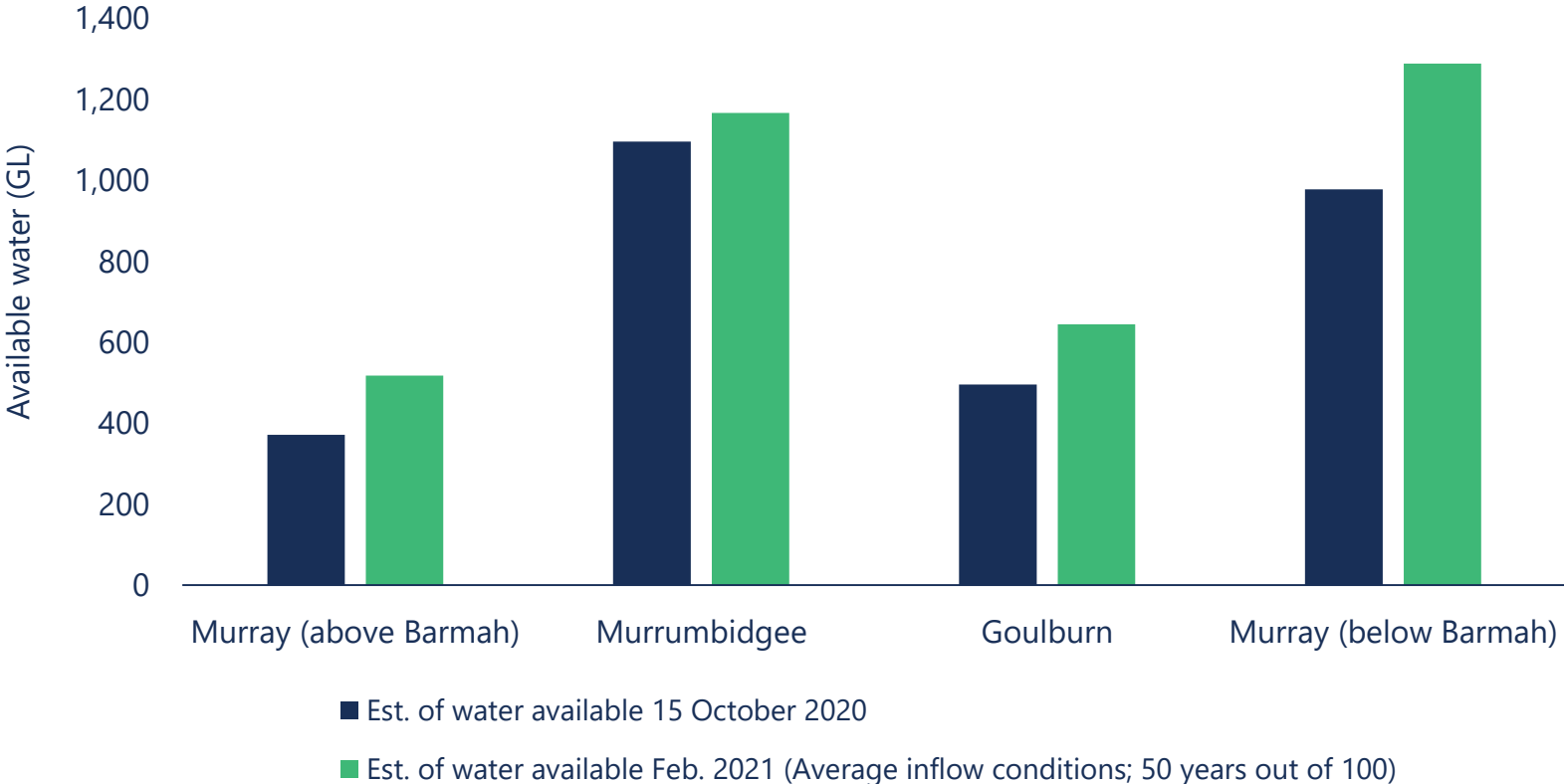
Weekly volume-weighted average allocation prices, southern MDB, 2020-21



Source: Aither, 2020. Based on Victorian, New South Wales, and South Australian water registers.

Irrigators should watch for improvements in allocations to Vic Murray HRWS

Current water availability and outlooks, major southern MDB consumptive entitlements, 2020-21

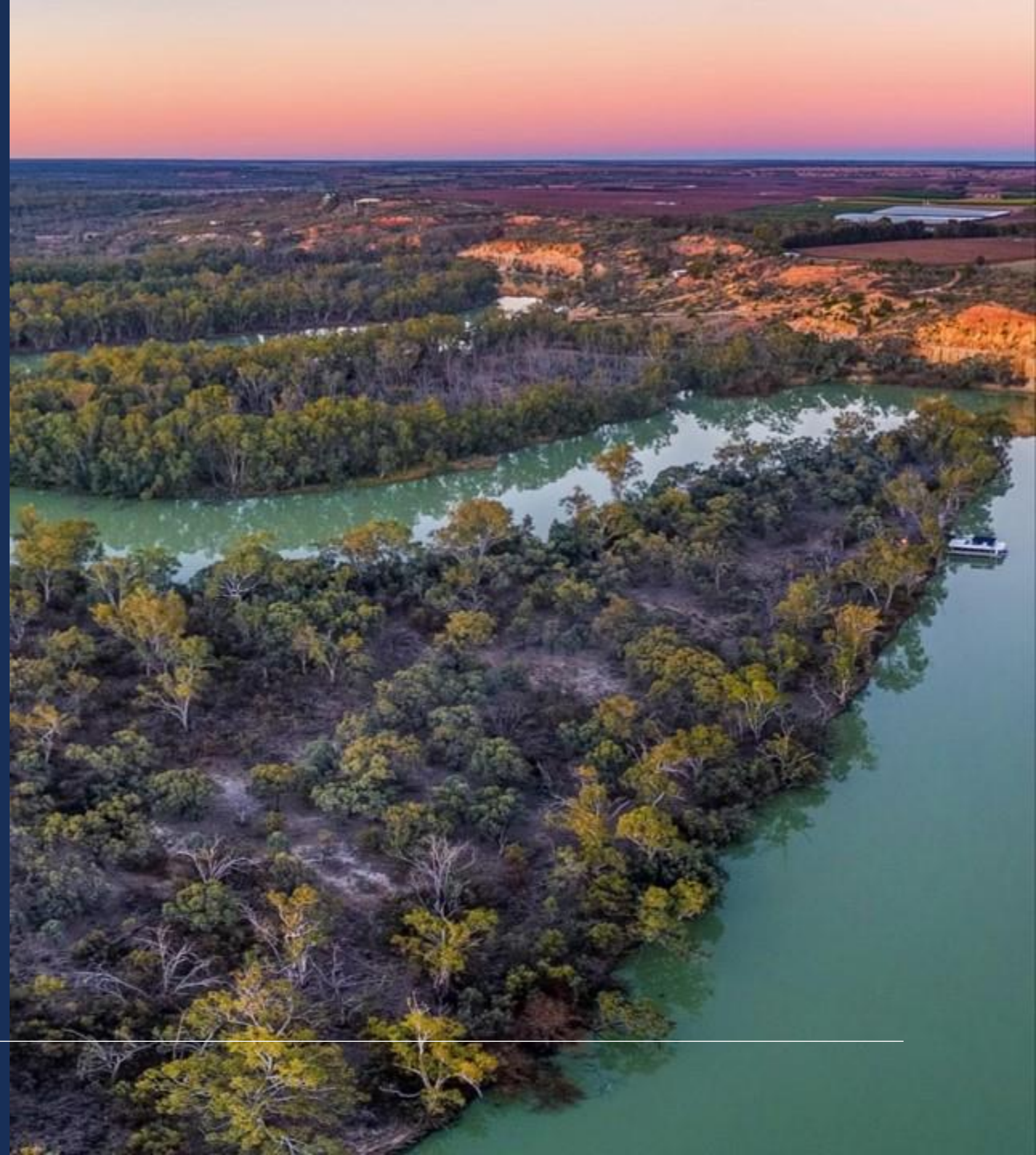


Source: Aither, 2020. Northern Victoria Resource Manger and NSW Department of Planning, Industry and Environment.

Water supply and demand in the lower Murray

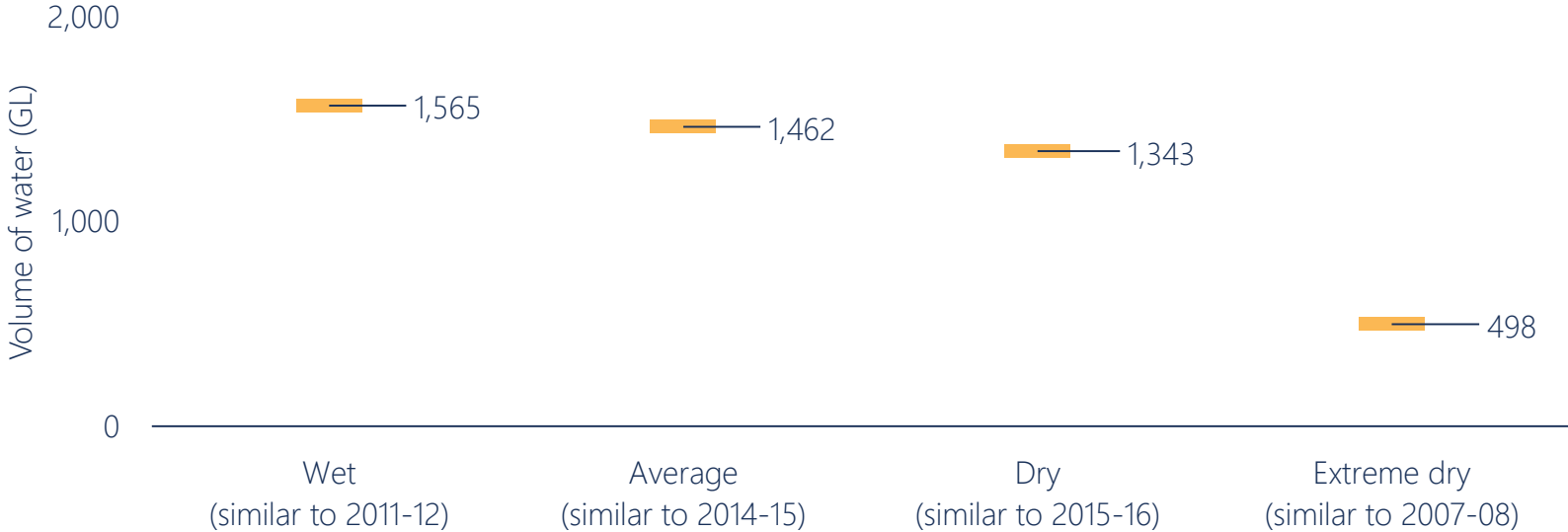
Scenarios

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Within-region water supply may vary by more than 1,000 GL between wet and extreme dry years.

Lower Murray – est. of within region water supply, four scenarios



Estimated volume of water allocations available for consumptive use in excess of permanent horticulture demand

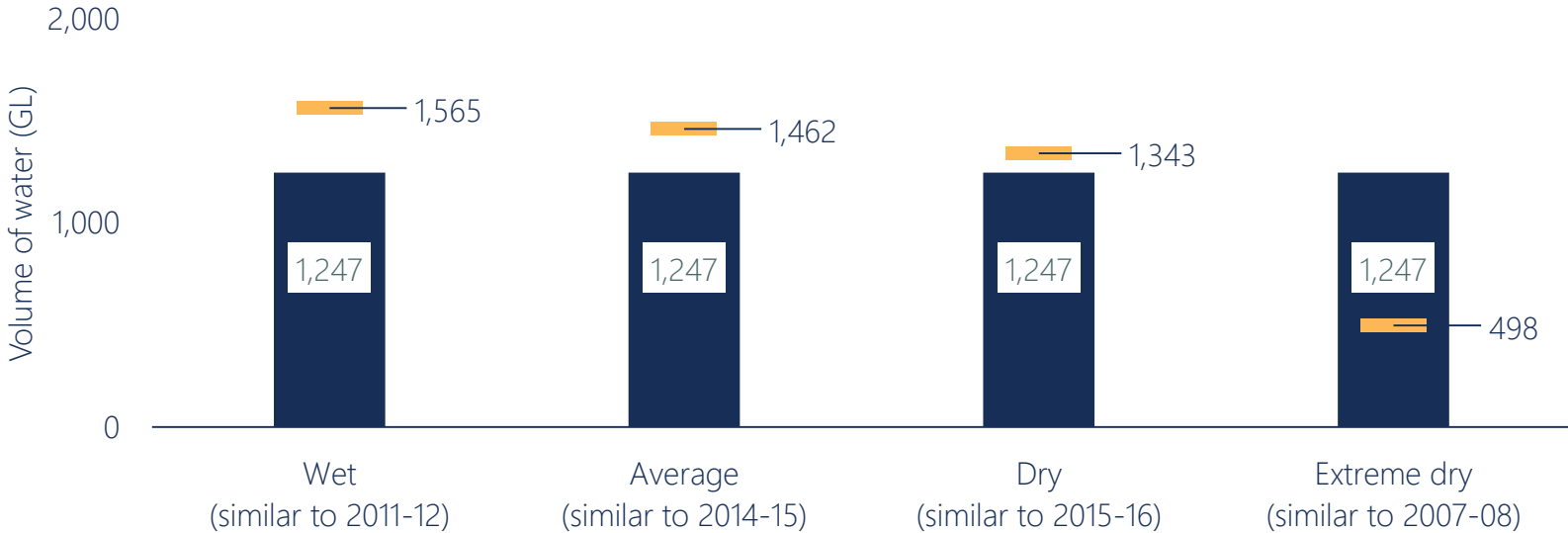
Estimated permanent horticulture water demand (1,247 GL)

— Estimated water supply (no groundwater)

Source: Aither, 2020. [Water supply and demand in the southern Murray-Darling Basin \(2020 update\)](#).

Water demand estimate = 1,122 GL (2018-19) + 125 GL from immature almond plantings.

Lower Murray – est. of water demand from permanent horticulture, existing plantings at full maturity



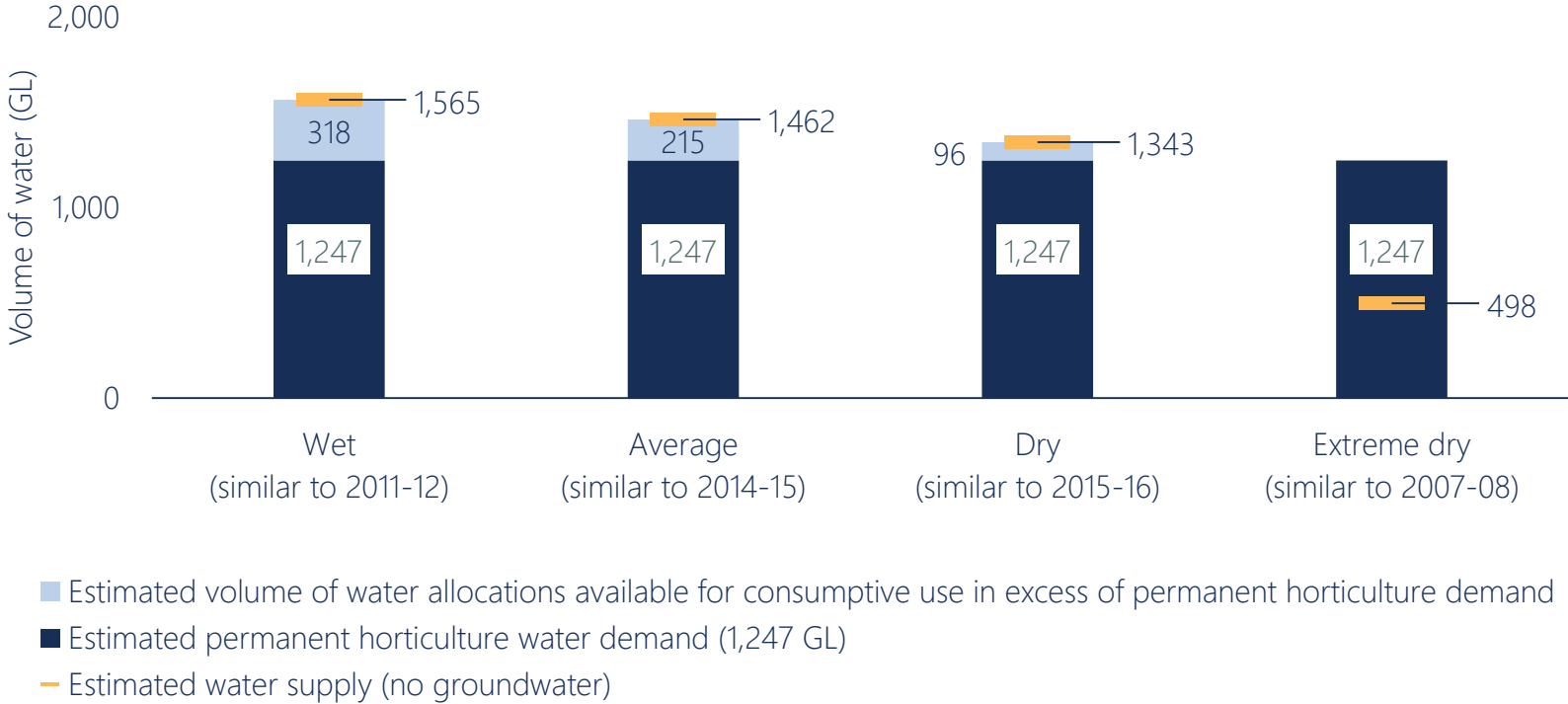
Estimated volume of water allocations available for consumptive use in excess of permanent horticulture demand

- Estimated permanent horticulture water demand (1,247 GL)
- Estimated water supply (no groundwater)

Source: Aither, 2020. [Water supply and demand in the southern Murray-Darling Basin \(2020 update\)](#).

In extreme dry years, water demand may outstrip water supply by two and a half times.

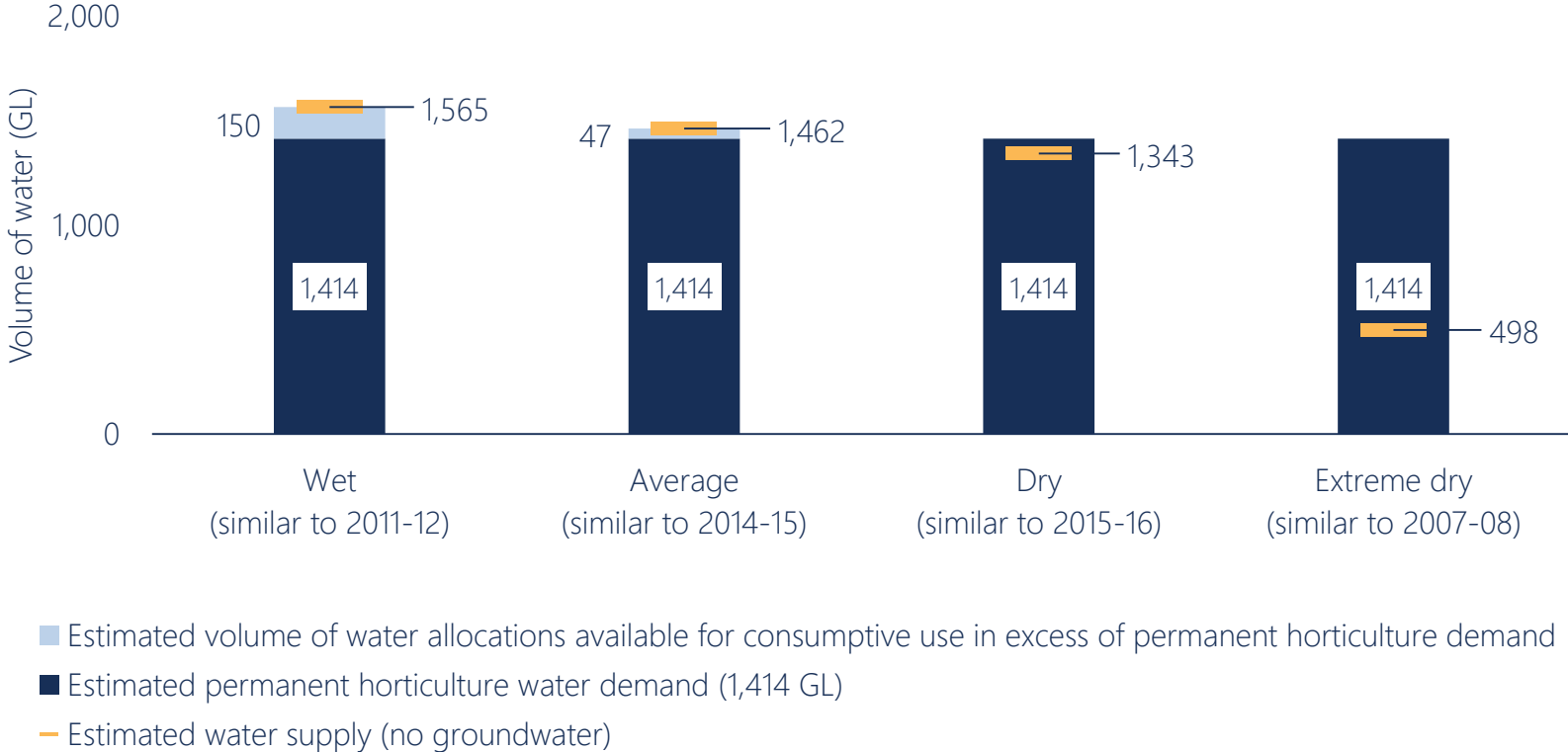
Lower Murray – est. of water demand from permanent horticulture, existing plantings at full maturity



Source: Aither, 2020. [Water supply and demand in the southern Murray-Darling Basin \(2020 update\)](#).

Water demand may increase by 167 GL if further planned developments occur, and there is no offsetting reduction in other horticulture.

Lower Murray – est. of water demand from permanent horticulture, existing plantings and potential plantings at full maturity



Source: Aither, 2020. [Water supply and demand in the southern Murray-Darling Basin \(2020 update\)](#).

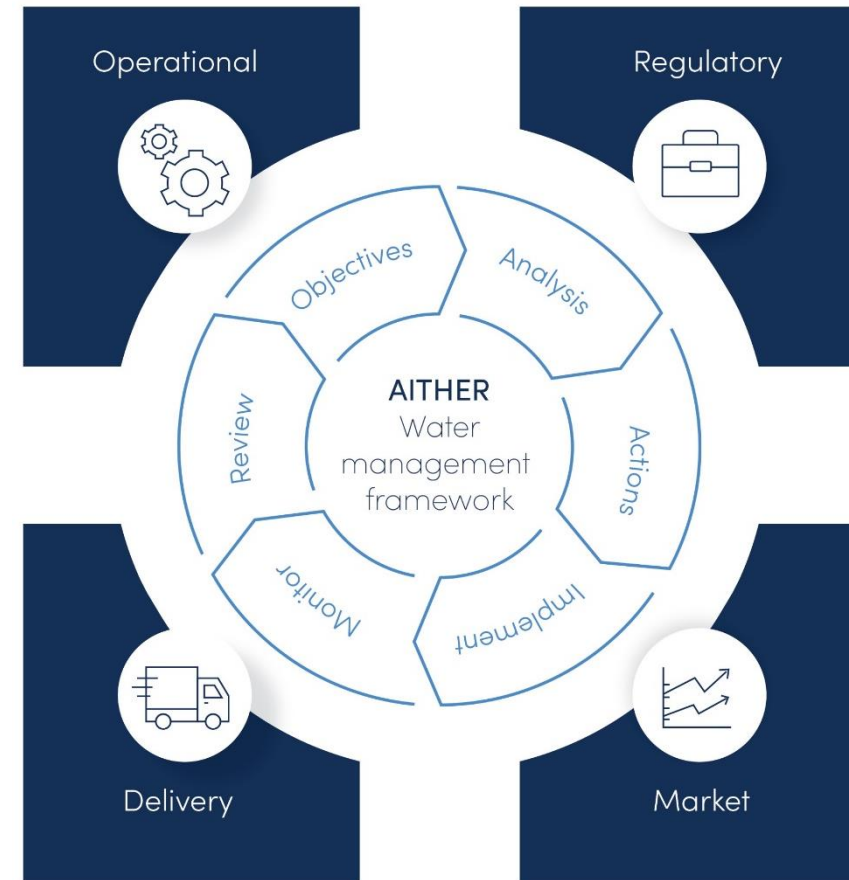
Managing risk

What's your plan for the short-term?

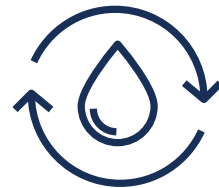
- How do you take advantage of lower allocation prices?
- If allocations open low in 2021-22?
- Have you considered all your options?

What's your longer-term business strategy?

- How are you going to execute?



Managing risk



Increasing significance of carryover:

- Approximately **1,200 GL** of water was carried over into 2020-21 on NSW and Victorian entitlements.
- Limited carryover capacity below the Choke, so parking water below the Choke is challenging.



What is the role of leases in your portfolio strategy?

Concluding points



There is a new normal with water prices – driven by changes in supply and demand.



Consider your options now – get good advice and talk to multiple people.



Consider how to take advantage of lower prices for future years.

Available now

Aither Water Markets Report 2020

The Aither Water Markets Report provides Australia's leading independent insights on southern Murray-Darling Basin water markets activity and outcomes, as well as an outlook for the year ahead.

[Access the report here.](#)



Aither's Water Market Analysis and Insights

Visit aither.com.au/products or email watermarkets@aither.com.au to find out more.



Water Markets Quarterly Email Updates

Freely available.



Monthly Water Market Insights Reports

Monthly independent snapshots of the important issues affecting Australia's water markets, including both market analysis and policy and management insights.



Southern Murray-Darling Basin Water Asset Valuations

Our monthly or quarterly independent southern Murray-Darling Basin water asset valuations provide an independent and timely assessment of key water products.

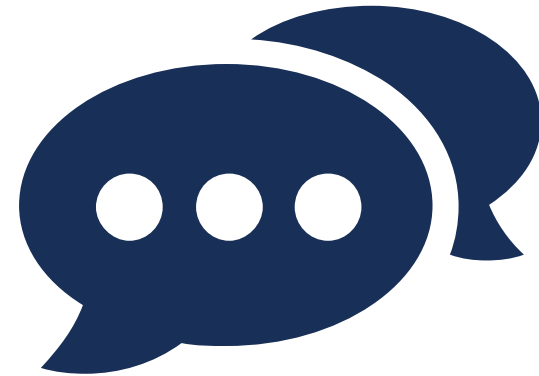


Aither Entitlement Index

Our Aither Entitlement Index provides you with simple, reliable and timely monthly snapshots of water entitlement performance throughout the southern Murray-Darling Basin.

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Questions



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Our Water Market Services

We are a team of award-winning, independent water markets, policy, and infrastructure advisors.

Every day we help businesses and governments make better decisions about scarce water resources.

We do this by providing high-quality information, insights, and analysis that help our clients design and implement strategies for successfully participating in Australia's water markets. Our team also provides policy and regulatory insights and infrastructure advisory services.

Whether you need custom-designed water strategies or assessments of your exposure to water-related risks and opportunities, we'll help you make clear, informed and confident water decisions.



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2020. Melbourne, Aither Pty Ltd.

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