

Water entitlement market price report – March 2019

Murray-Darling Basin

A Final Report prepared for the Department of Agriculture and
Water Resources

Friday 12 April 2019

A I T H E R

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Introduction

This water entitlement market price report has been prepared by Aither on behalf of the Australian Government Department of Agriculture and Water Resources.

This report includes details regarding Murray-Darling Basin water entitlement prices and trade activity. The entitlement types included within this report are detailed below:

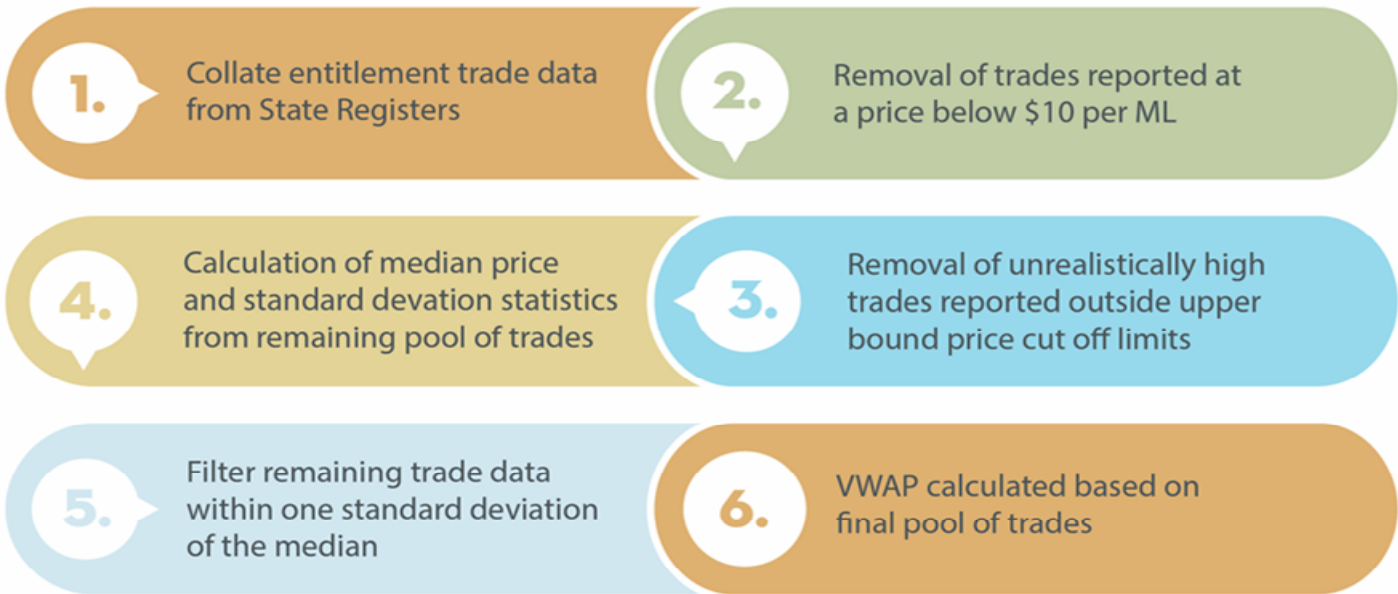
Southern Murray-Darling Basin Entitlements

SA Murray 3A, Vic 6 Murray HRWS, Vic 6 Murray LRWS, Vic 7 Murray HRWS, Vic 7 Murray LRWS, Vic 6B Lower Broken Creek HRWS, Vic 6B Lower Broken Creek LRWS, Vic 1A Greater Goulburn HRWS, Vic 1A Greater Goulburn LRWS, Vic 1B Boort HRWS, Vic 1B Boort LRWS, Vic 3 Lower Goulburn HRWS, Vic 3 Lower Goulburn LRWS, Vic 4C Lower Campaspe HRWS, Vic 4A Campaspe (Eppalock to WWC) HRWS, Vic 4A Campaspe (Eppalock to WWC) LRWS, Vic 5A Loddon HRWS, Vic 5A Loddon LRWS, Vic 5B Bullarook HRWS, Vic 5B Bullarook LRWS, NSW Murray HS, NSW Murray GS, NSW Murray Irrigation Limited GS, NSW Murrumbidgee HS, NSW Murrumbidgee GS, NSW Lower Darling HS, NSW Lower Darling GS.

Northern Murray-Darling Basin Entitlement types

NSW Macquarie GS, NSW Lower Namoi GS, NSW Upper Namoi GS, NSW Gwydir GS, NSW Border Rivers GS A, NSW Border Rivers GS B, NSW Barwon-Darling Unregulated A, NSW Barwon-Darling Unregulated B, NSW Barwon-Darling Unregulated C, NSW Lachlan GS, QLD Condamine-Balonne (St George) Supplemented, Condamine-Balonne QLD Condamine-Balonne (Lower Balonne) Unsupplemented, QLD Condamine-Balonne (Upper Condamine) Unsupplemented, QLD Central Condamine Alluvium Groundwater (1, 2, 3 and 4), QLD Upper Condamine Alluvium Groundwater (Dalrymple Creek) Groundwater, QLD Upper Condamine Alluvium Groundwater (Oakey Creek) Groundwater, QLD Condamine-Balonne Lower Balonne Overland flow, QLD Border Rivers Supplemented (Macintyre Brook), QLD Border Rivers Unsupplemented.

A brief summary has been provided below:



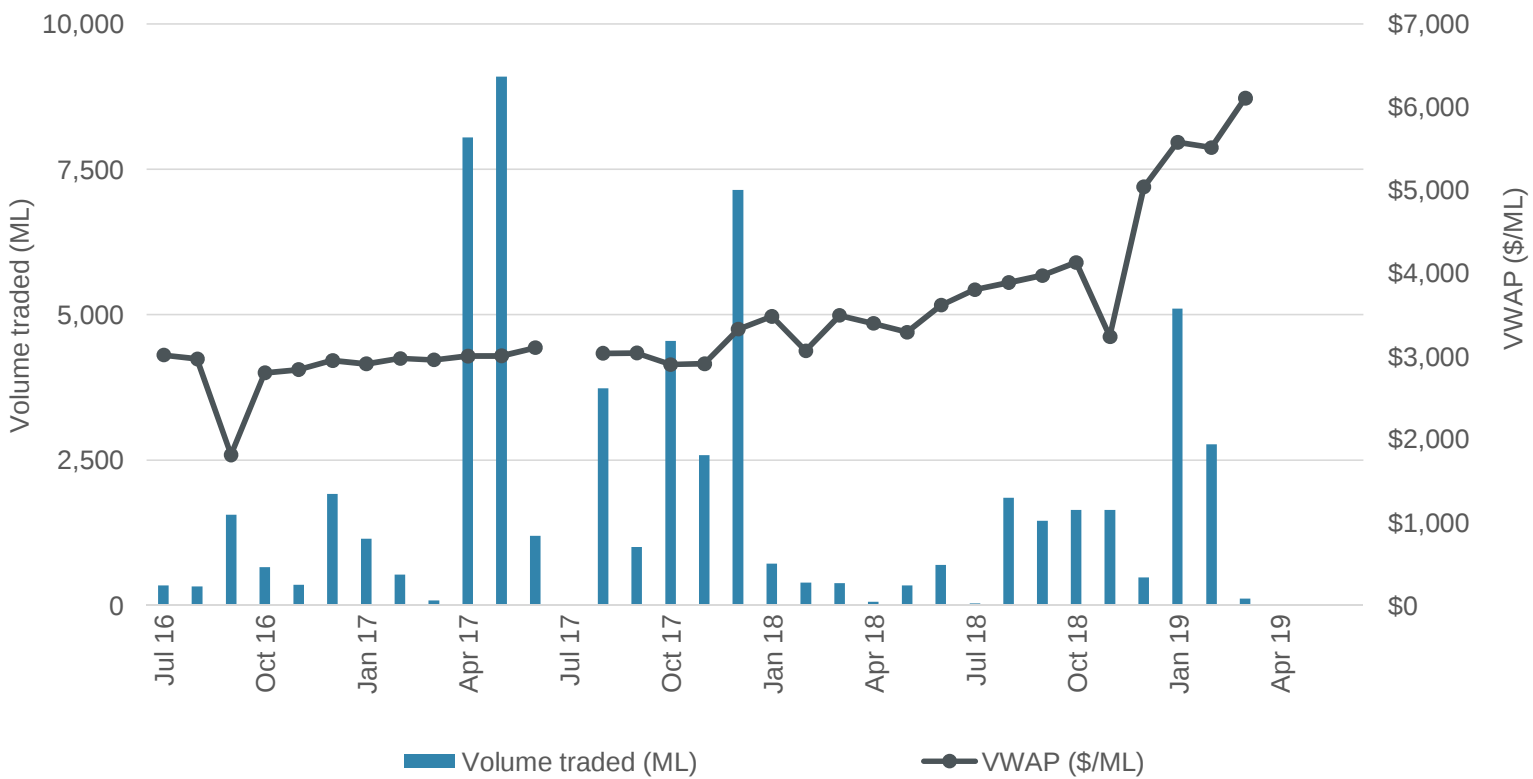
SA Murray

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
SA Murray 3A	\$6,107	\$6,300	5	118	24	\$5,500 - \$5,900

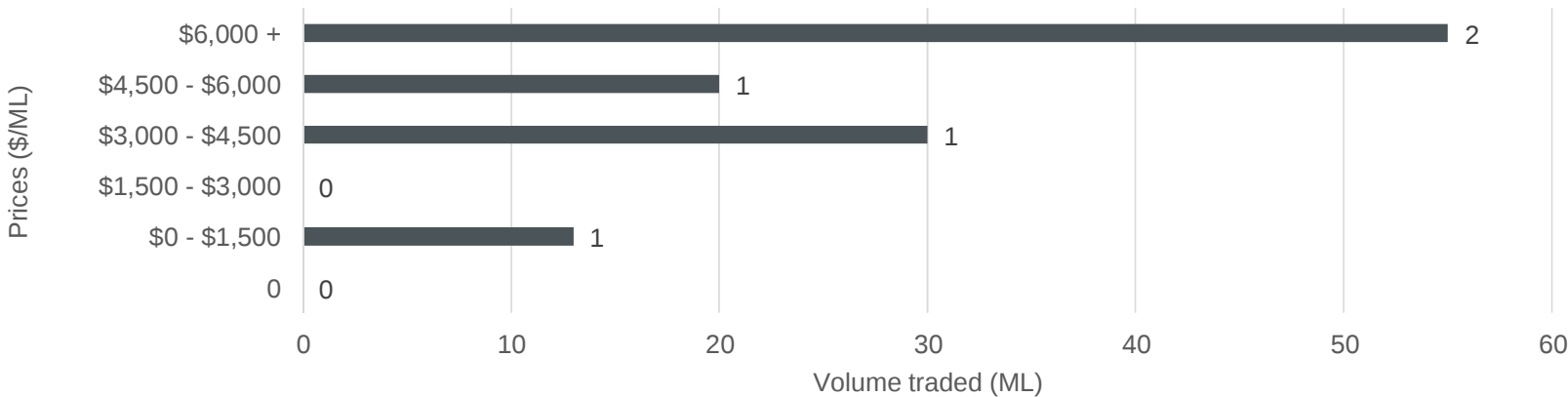
Source: Aither, 2019. Based on the SA Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the SA Water Register.

Market price range, March 2019



Source: Aither, 2019. Based on the SA Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

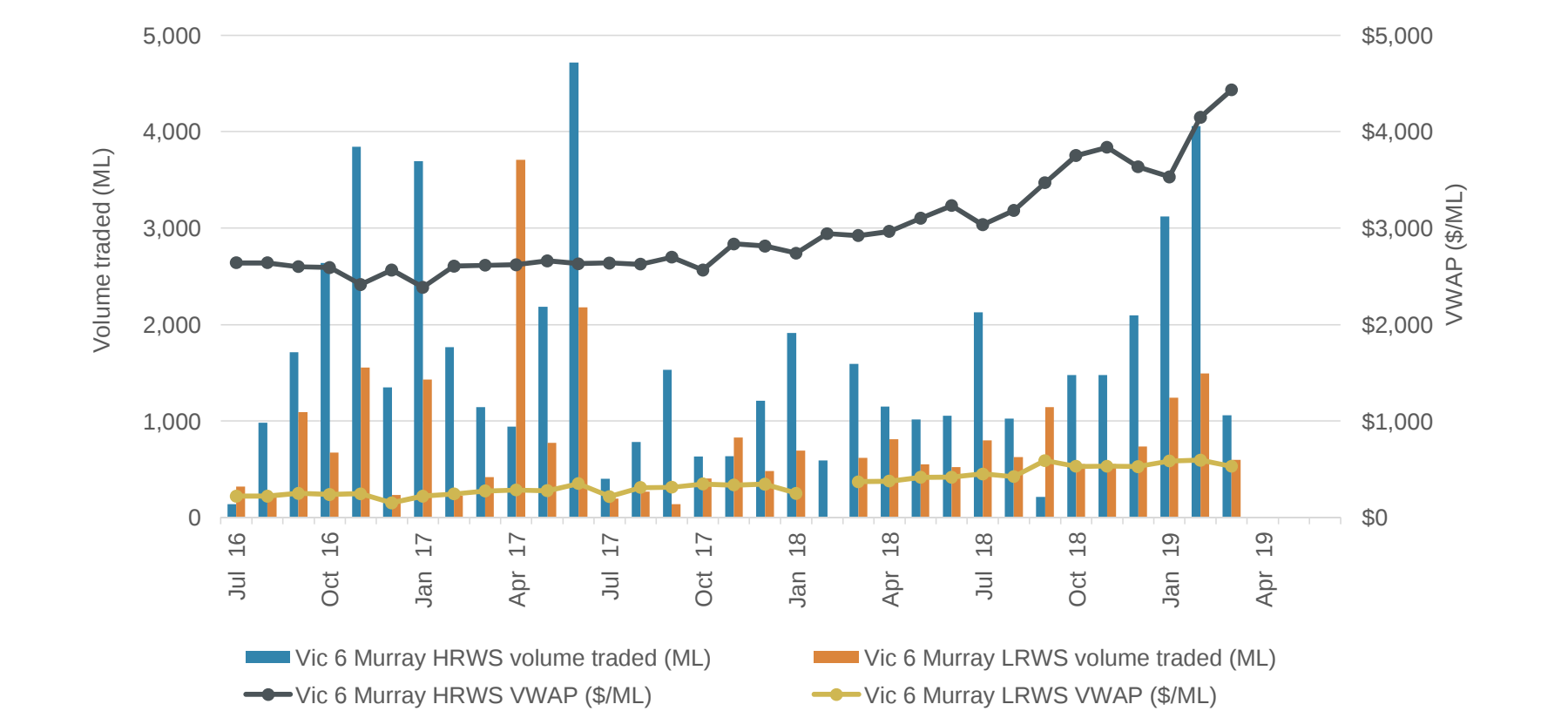
Vic 6 Murray

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 6 Murray HRWS	\$4,434	\$4,900	13	1,058	81	\$4,200 - \$4,600
Vic 6 Murray LRWS	\$528	\$530	7	597	85	\$500 - \$600

Source: Aither, 2019 Based on the VIC Water Register and quotes sourced from water brokers.

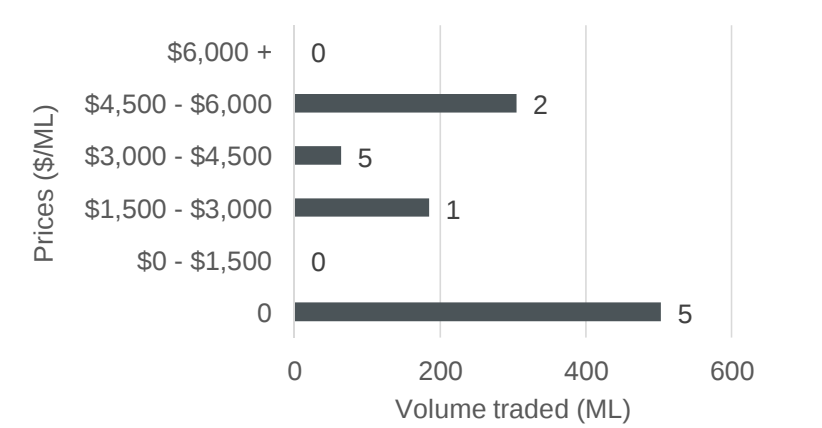
Market prices and volumes, July 2016 to June 2019



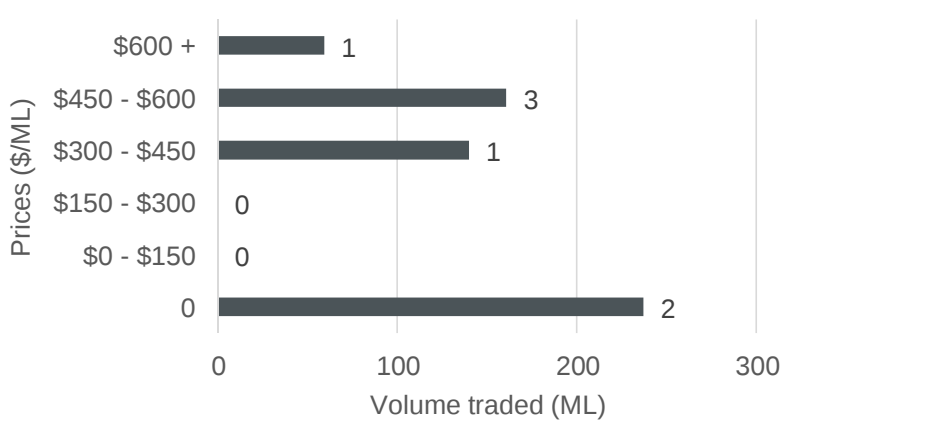
Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019

Vic 6 Murray HRWS



Vic 6 Murray LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

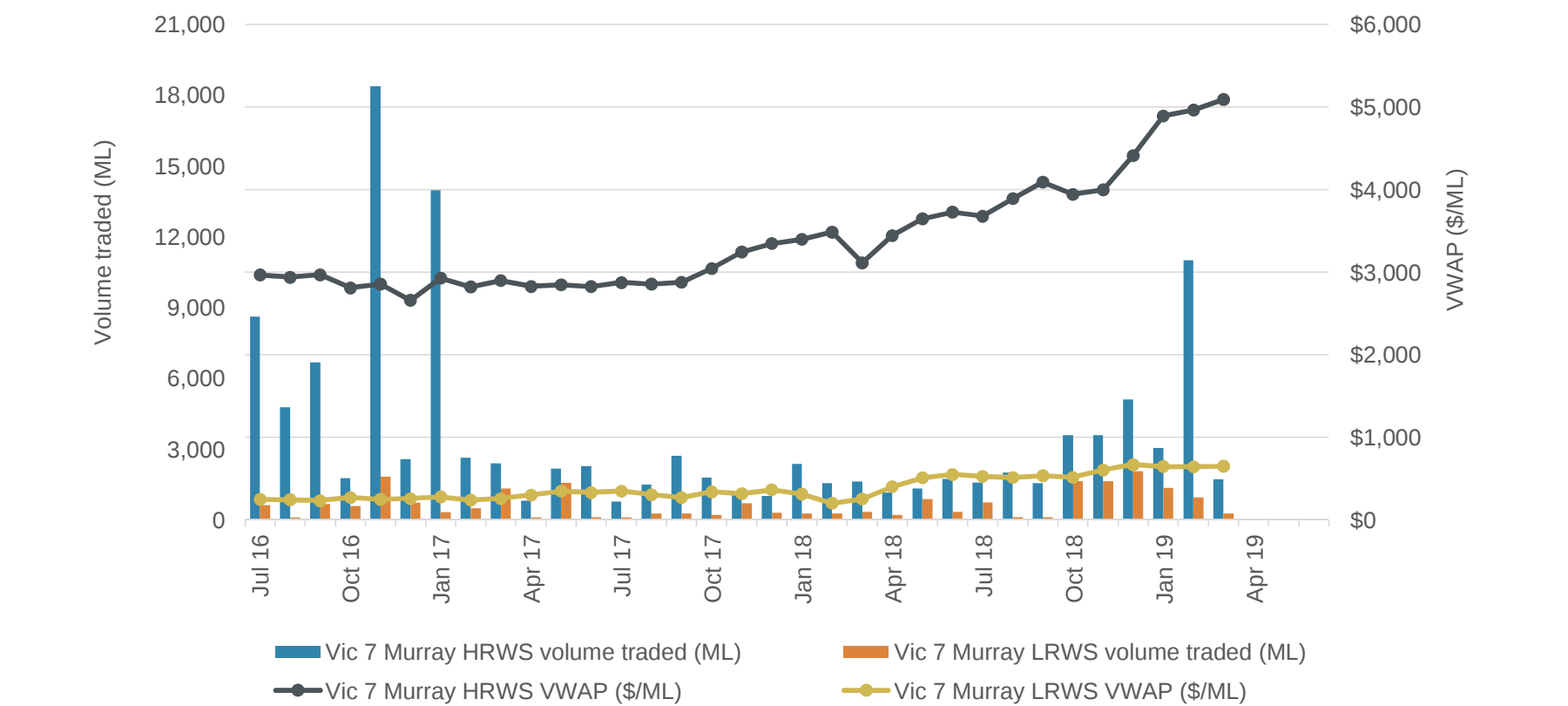
Vic 7 Murray

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 7 Murray HRWS	\$5,091	\$6,280	73	1,707	23	\$5,100 - \$5,600
Vic 7 Murray LRWS	\$649	\$700	8	258	32	\$500 - \$650

Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

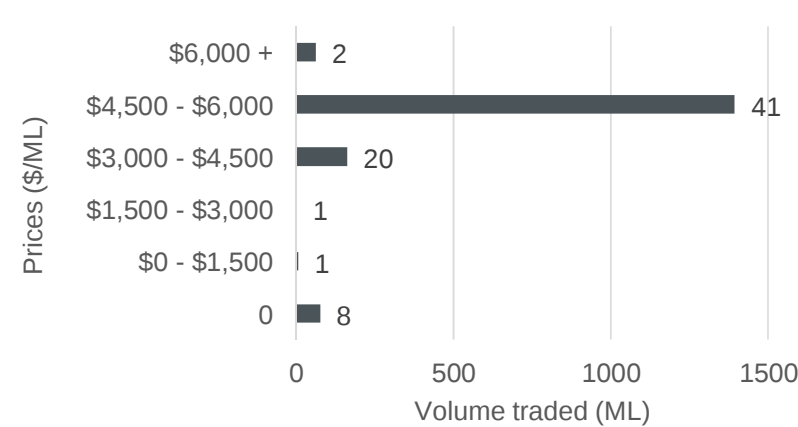
Market prices and volumes, July 2016 to June 2019



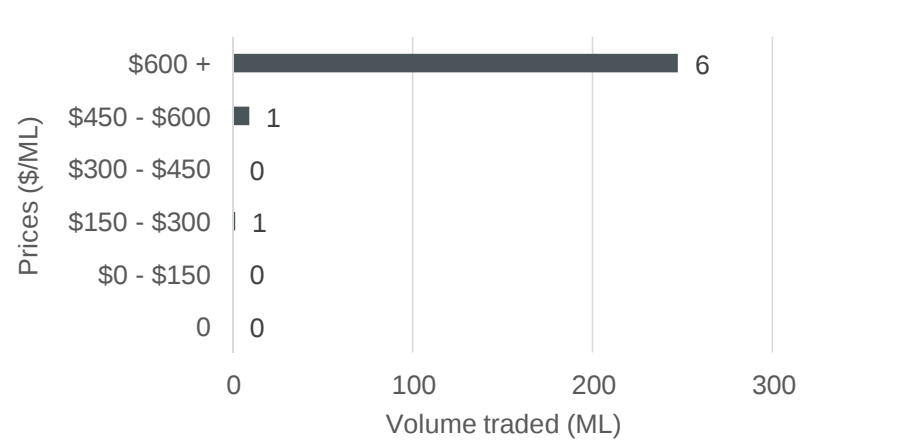
Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019

Vic 7 Murray HRWS



Vic 7 Murray LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

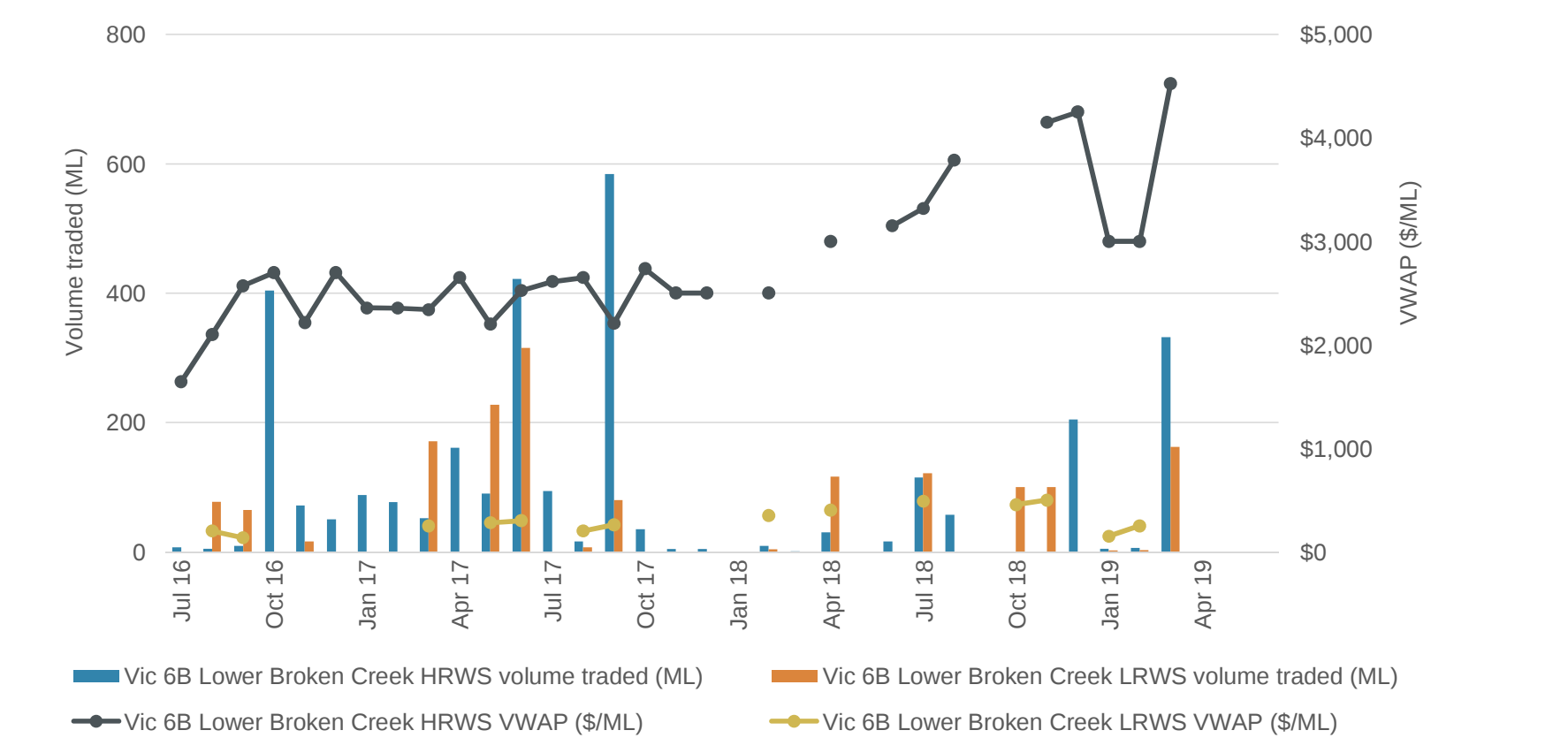
Vic 6B Lower Broken Creek

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 6B Lower Broken Creek HRWS	\$4,524	\$5,000	4	332	83	-
Vic 6B Lower Broken Creek LRWS	-	-	2	162	81	-

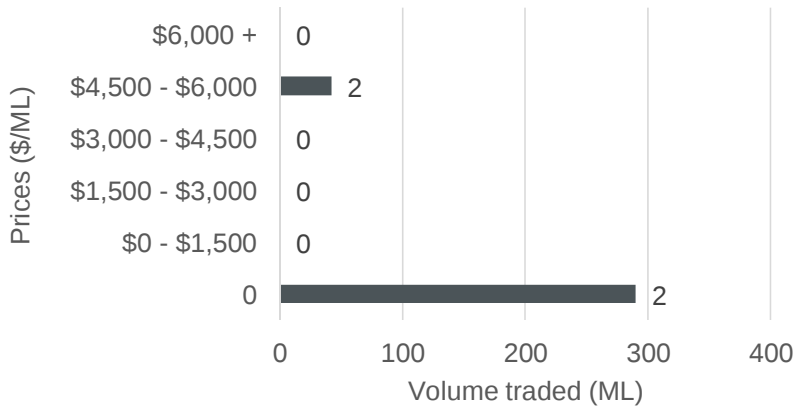
Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019

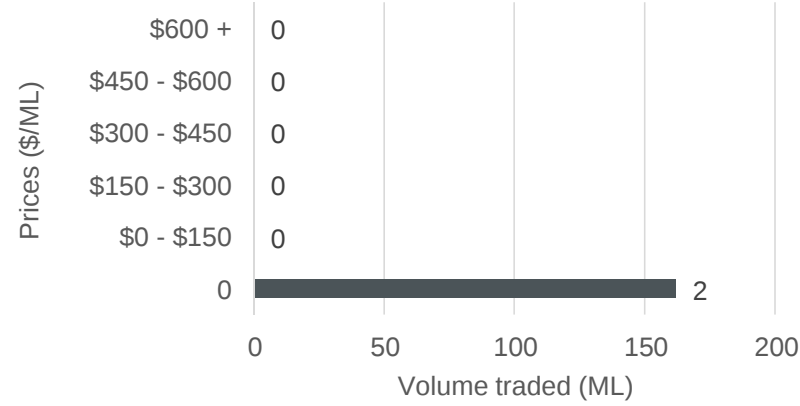


Source: Aither, 2019. Based on the VIC Water Registers.

Market price range, March 2019 Vic 6B Lower Broken Creek HRWS



Vic 6B Lower Broken Creek LRWS



Source: Aither, 2019. Based on the VIC Water Registers.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

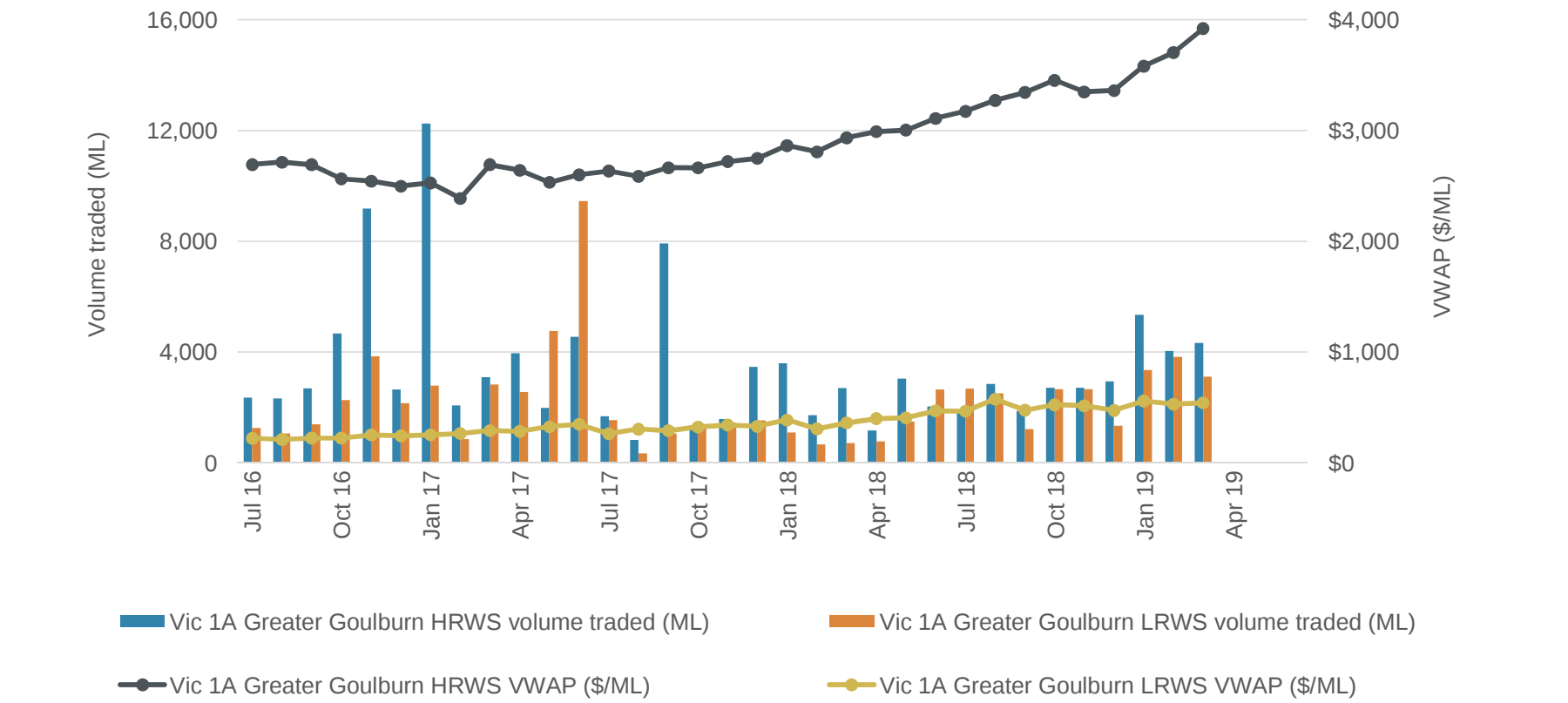
Vic 1A Greater Goulburn

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 1A Greater Goulburn HRWS	\$3,922	\$4,500	89	4,332	49	\$3,900 - \$4,150
Vic 1A Greater Goulburn LRWS	\$541	\$560	26	3,109	120	\$400 - 500

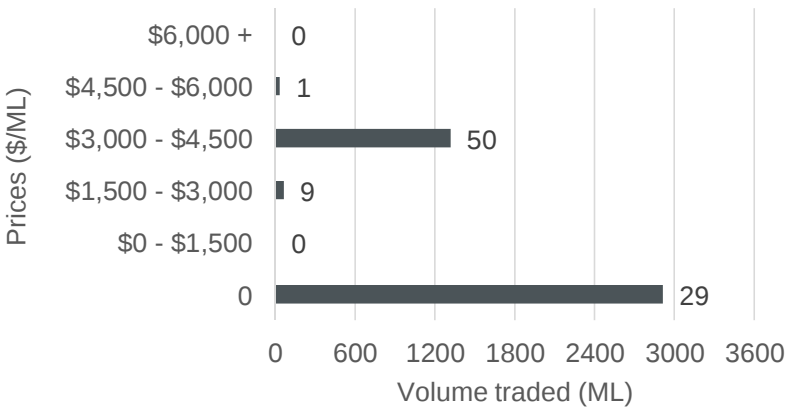
Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019

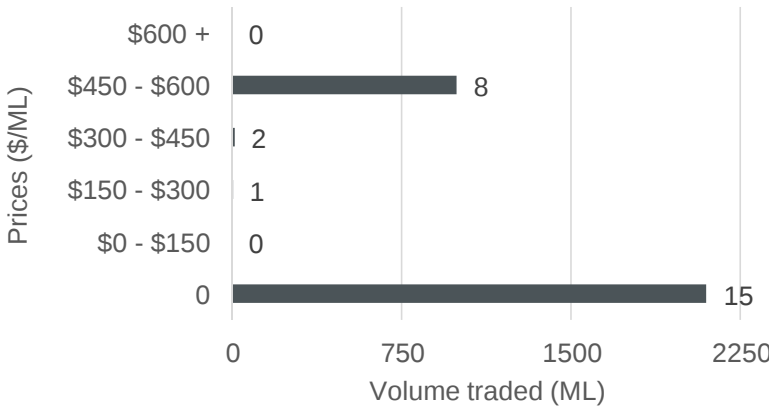


Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019 Vic 1A Greater Goulburn HRWS



Vic 1A Greater Goulburn LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

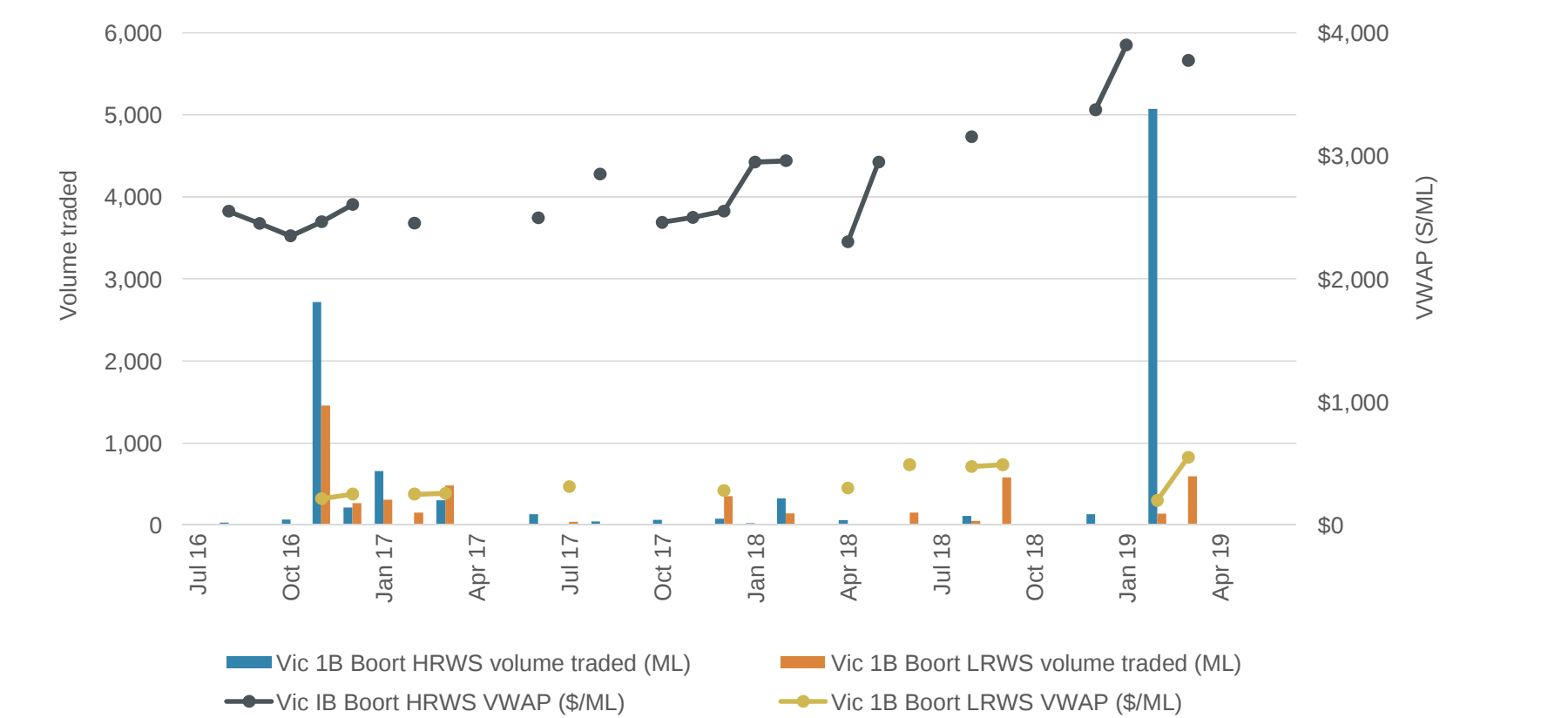
Vic 1B Boort

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 1B Boort HRWS	\$3,775	\$3,900	4	15	4	\$3,925
Vic 1B Boort LRWS	\$550	\$550	2	593	296	\$550

Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

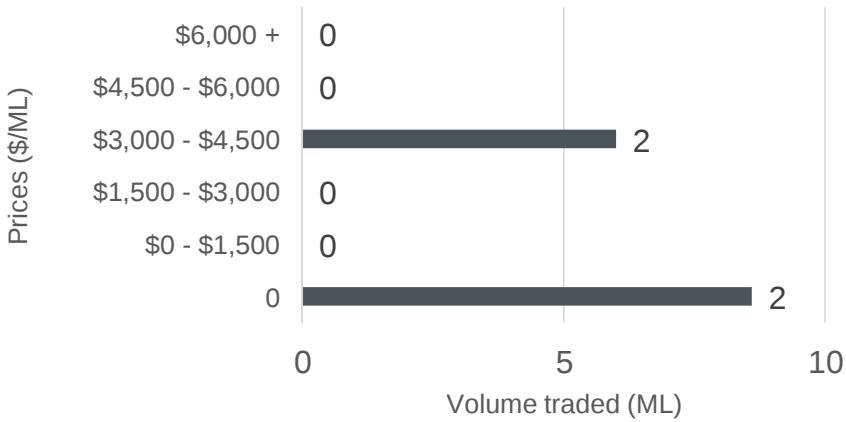
Market prices and volumes, July 2016 to June 2019



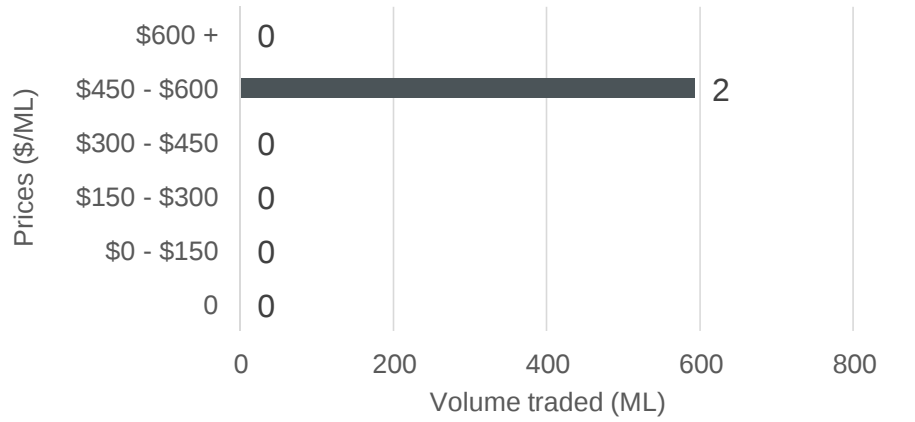
Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019

Vic 1B Boort HRWS



Vic 1B Boort LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

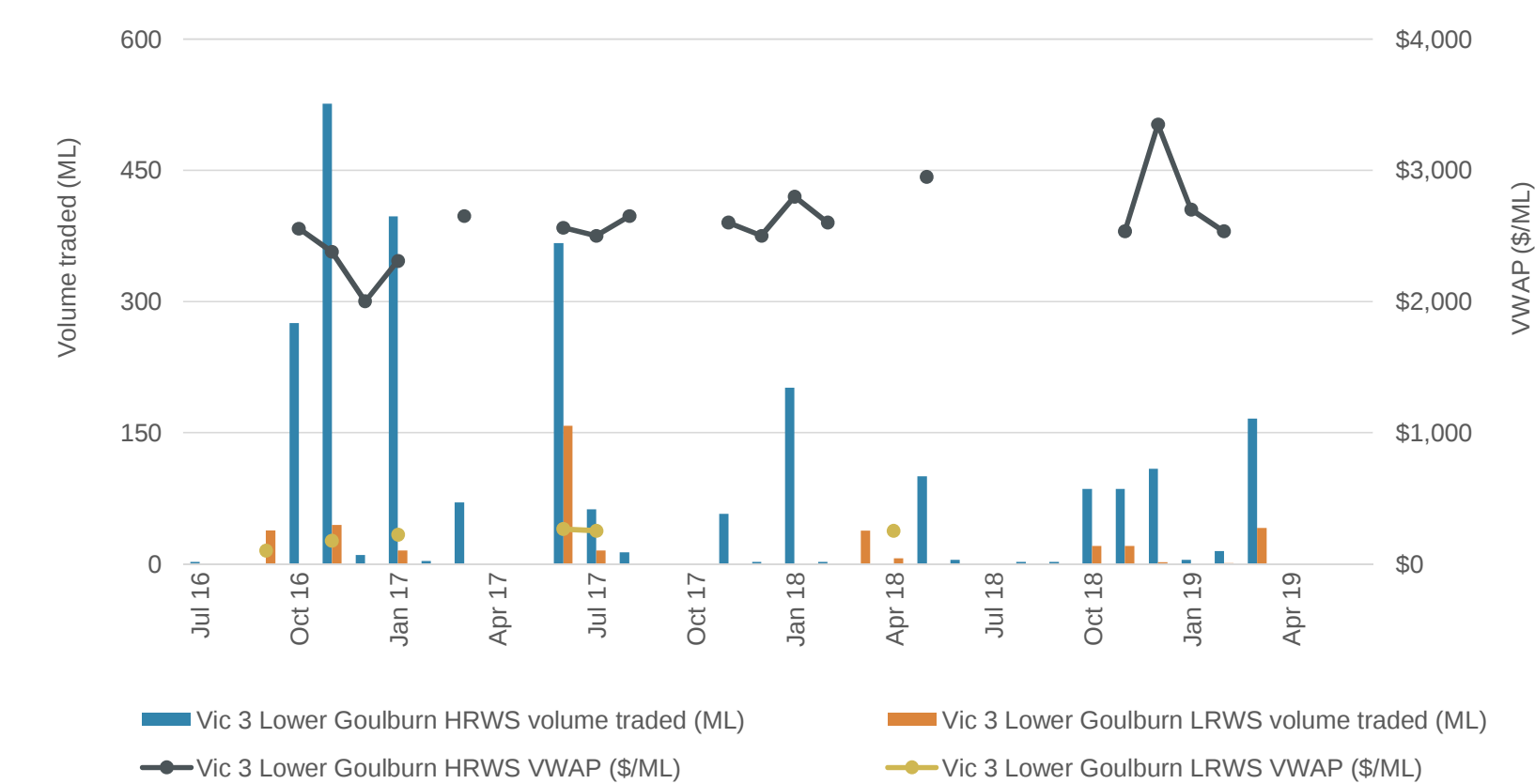
Vic 3 Lower Goulburn

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 3 Lower Goulburn HRWS	-	-	1	166	166	\$3,000 - \$3,900
Vic 3 Lower Goulburn LRWS	-	-	1	41	41	-

Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

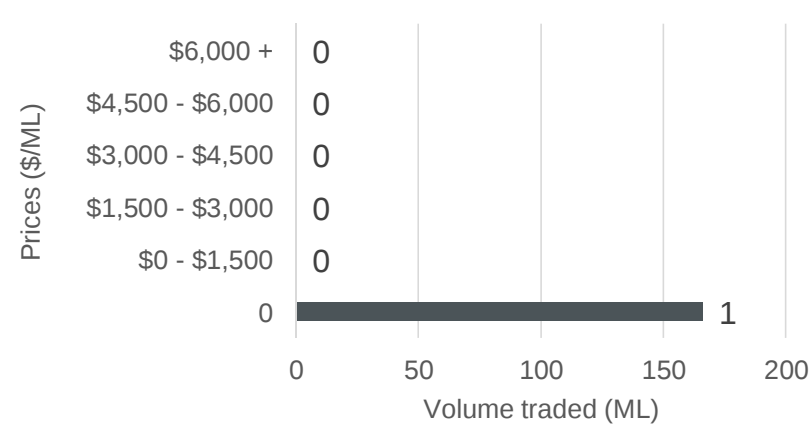
Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019

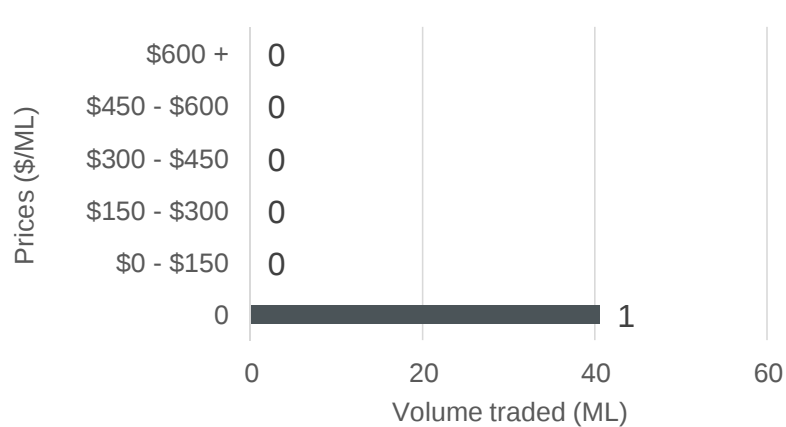
Vic 3 Lower Goulburn HRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

Vic 3 Lower Goulburn LRWS



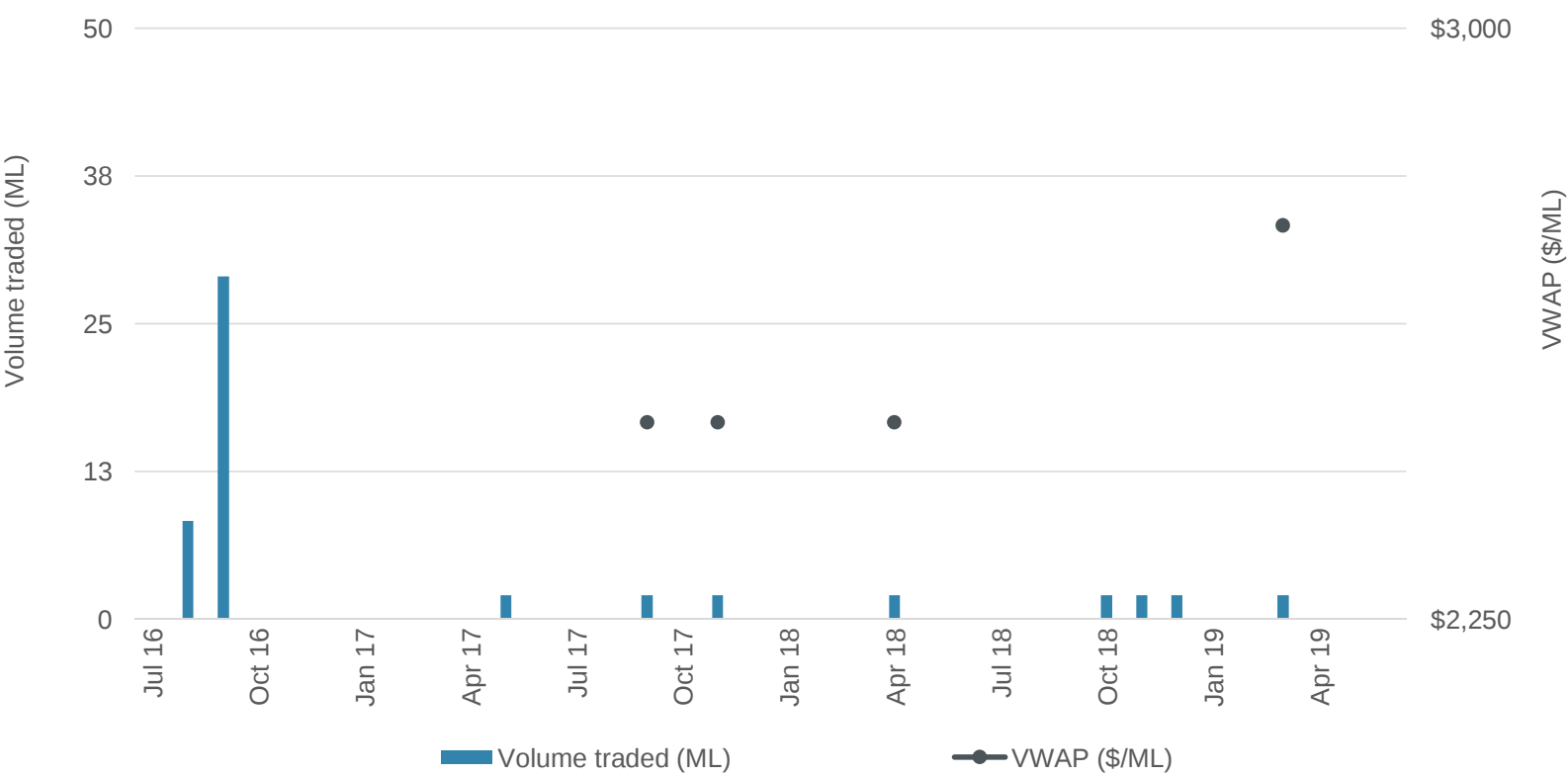
Vic 4C Lower Campaspe

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 4C Lower Campaspe HRWS	\$2,750	\$2,750	1	2	2.00	-

Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

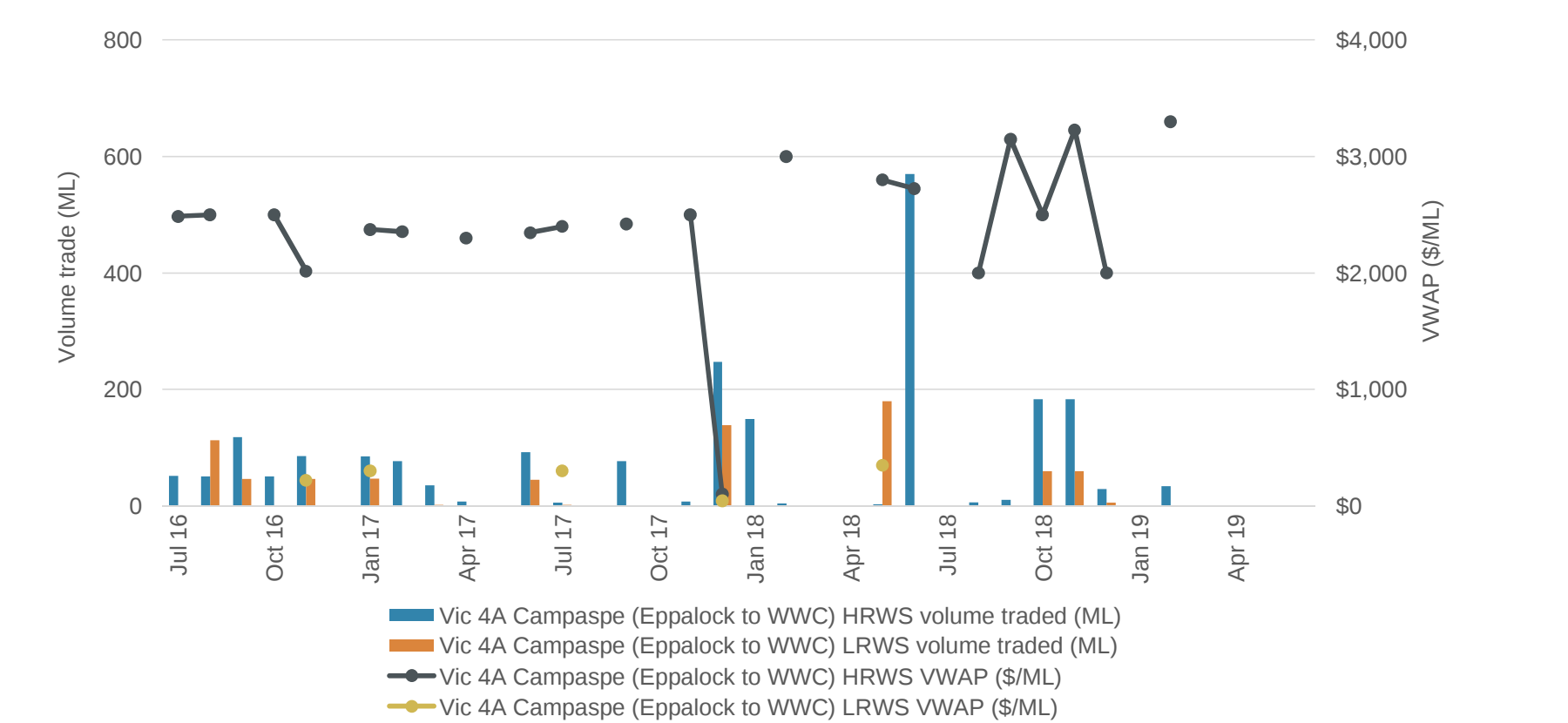
Vic 4A Campaspe (Eppalock to WWC)

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 4A Campaspe (Eppalock to WWC) HRWS	-	-	-	-	-	-
Vic 4A Campaspe (Eppalock to WWC) LRWS	-	-	-	-	-	-

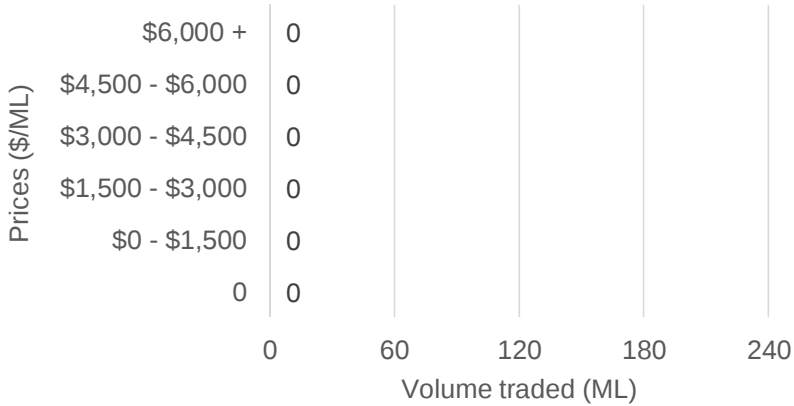
Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019

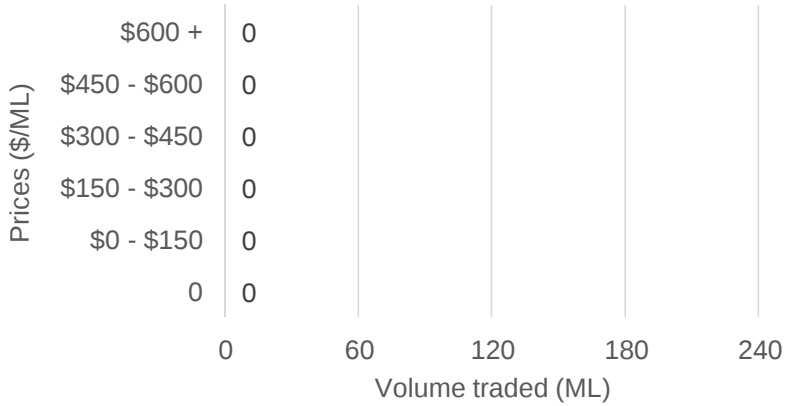


Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019 Vic 4A Campaspe (Eppalock to WWC) HRWS



Vic 4A Campaspe (Eppalock to WWC) LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

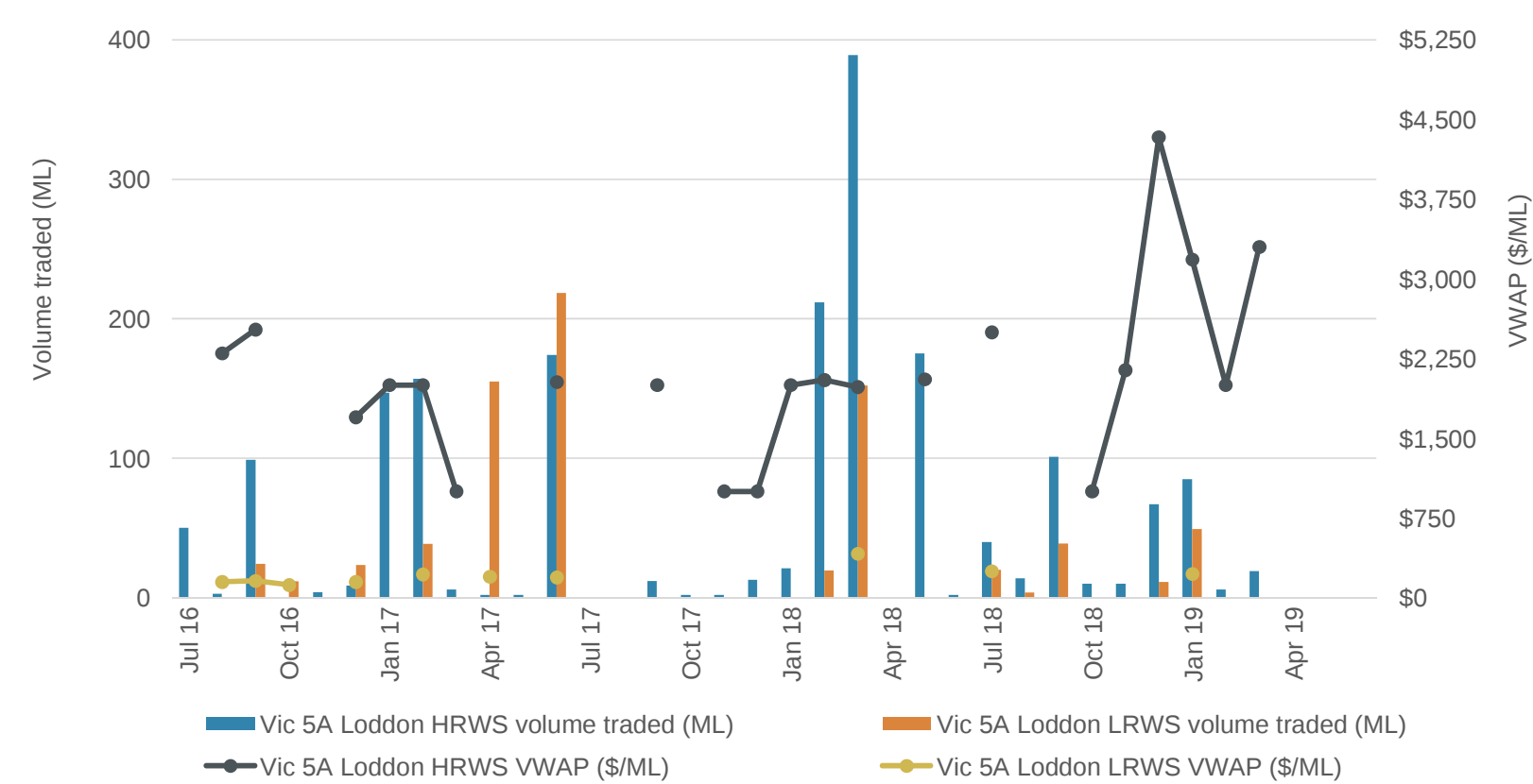
Vic 5A Loddon

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 5A Loddon HRWS	\$3,300	\$3,600	5	19	4	-
Vic 5A Loddon LRWS	-	-	-	-	-	-

Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

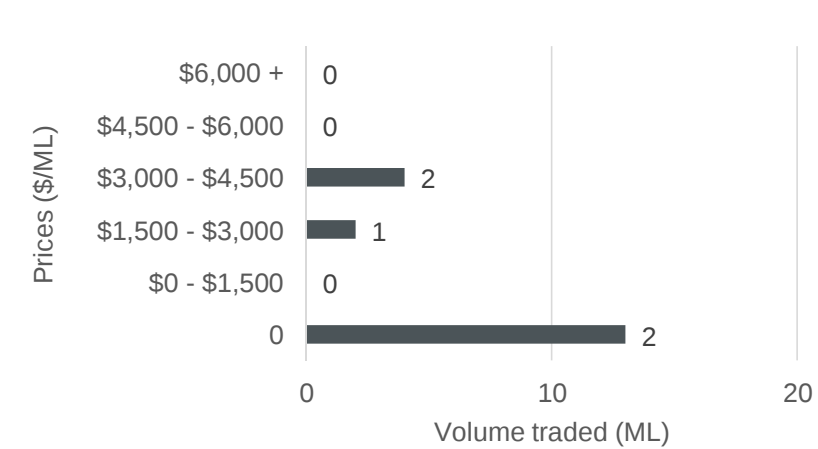
Market prices and volumes, July 2016 to June 2019



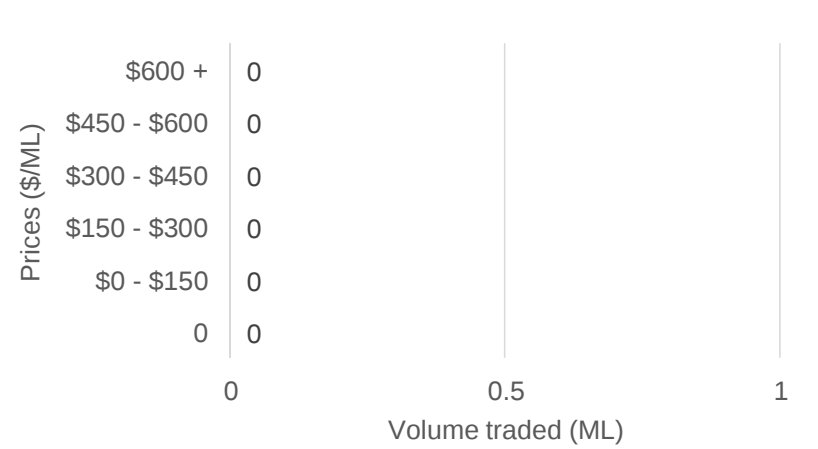
Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019

Vic 5A Loddon HRWS



Vic 5A Loddon LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

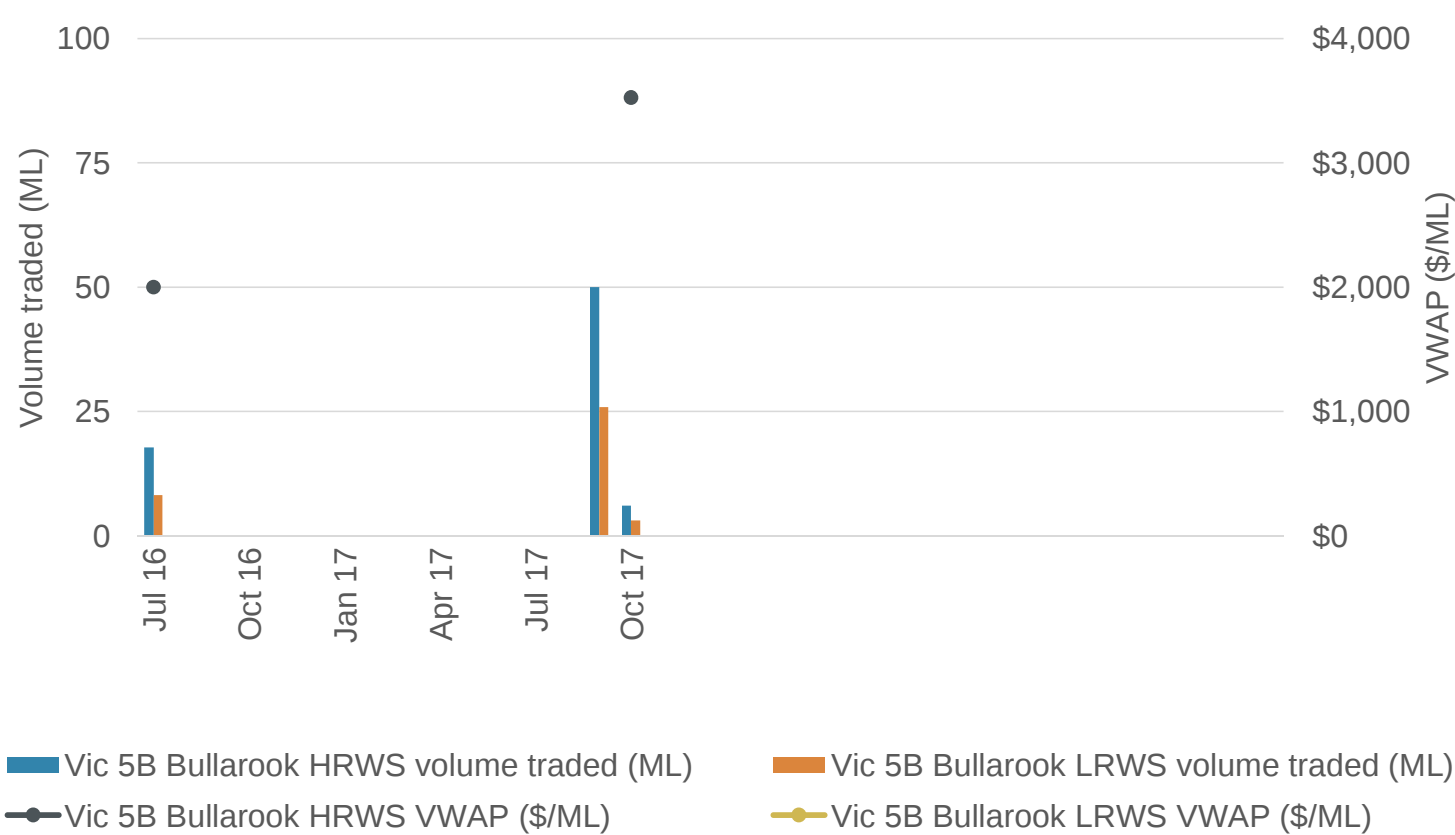
Vic 5B Bullarook

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
Vic 5B Bullarook HRWS	-	-	-	-	-	-
Vic 5B Bullarook LRWS	-	-	-	-	-	-

Source: Aither, 2019. Based on the VIC Water Register and quotes sourced from water brokers.

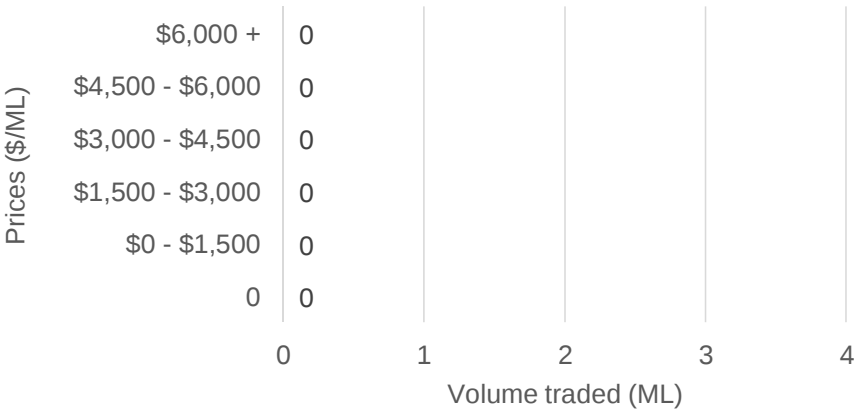
Market prices and volumes, July 2016 to June 2019



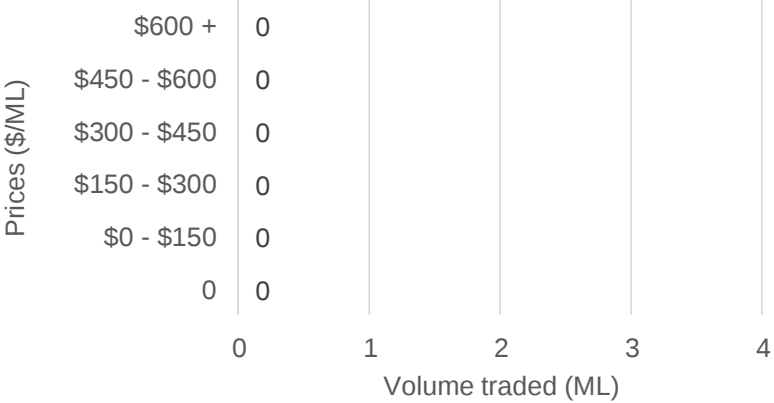
Source: Aither, 2019. Based on the VIC Water Register.

Market price range, March 2019

Vic 5B Bullarook HRWS



Vic 5B Bullarook LRWS



Source: Aither, 2019. Based on the VIC Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

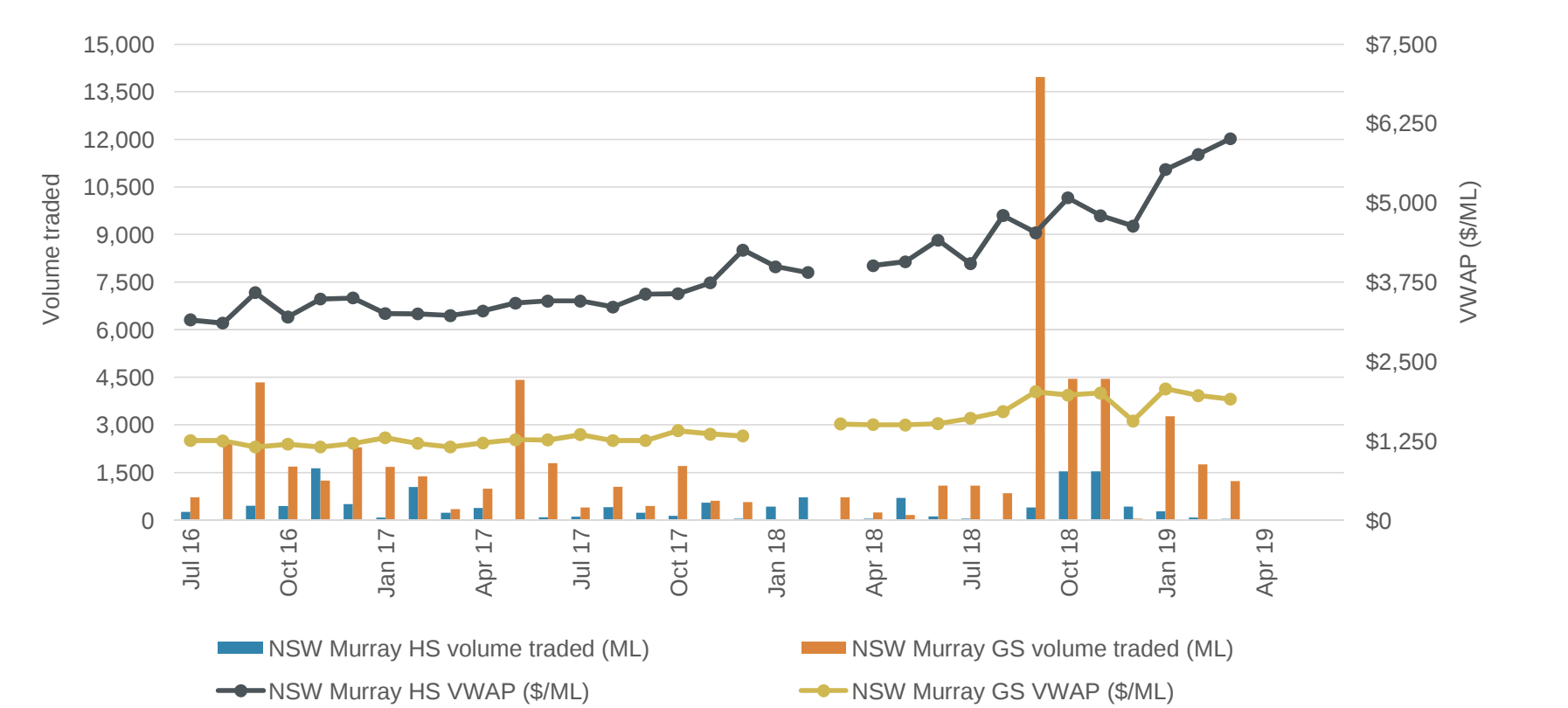
NSW Murray

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Murray HS	\$6,013	\$6,400	2	38	19	\$6,000 - \$6,600
NSW Murray GS	\$1,904	\$1,950	5	1,234	247	\$1,500 - \$1,700

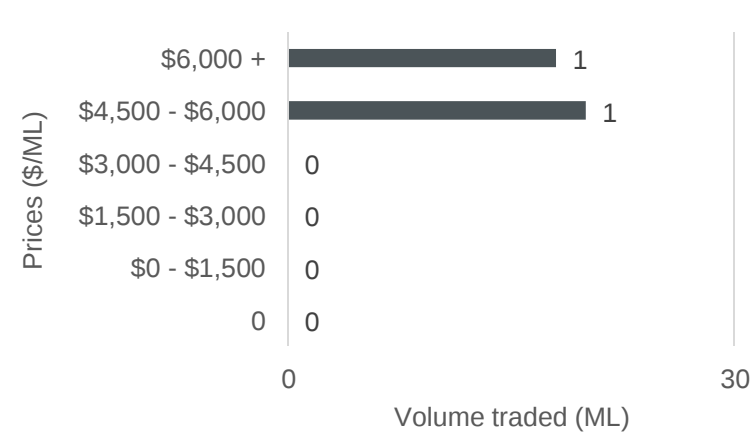
Source: Aither, 2019. Based on the NSW Water Register, and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019

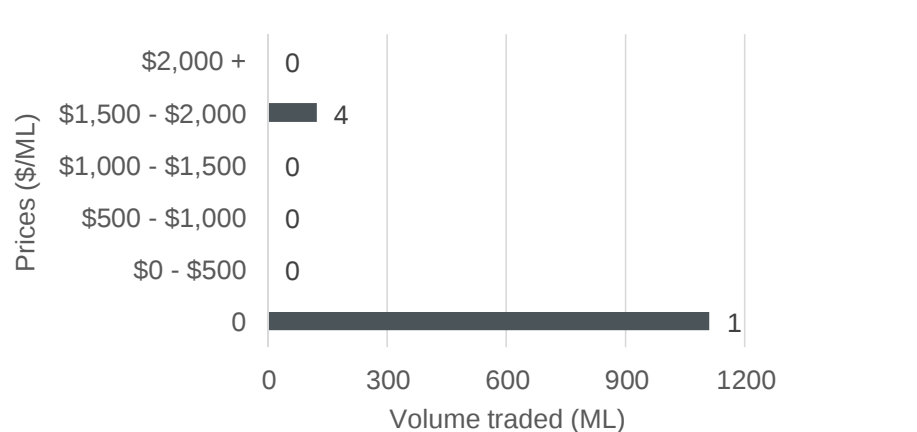


Source: Aither, 2019. Based on the NSW Water Registers.

Market price range, March 2019 NSW Murray HS



NSW Murray GS



Source: Aither, 2019. Based on the NSW Water Registers.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

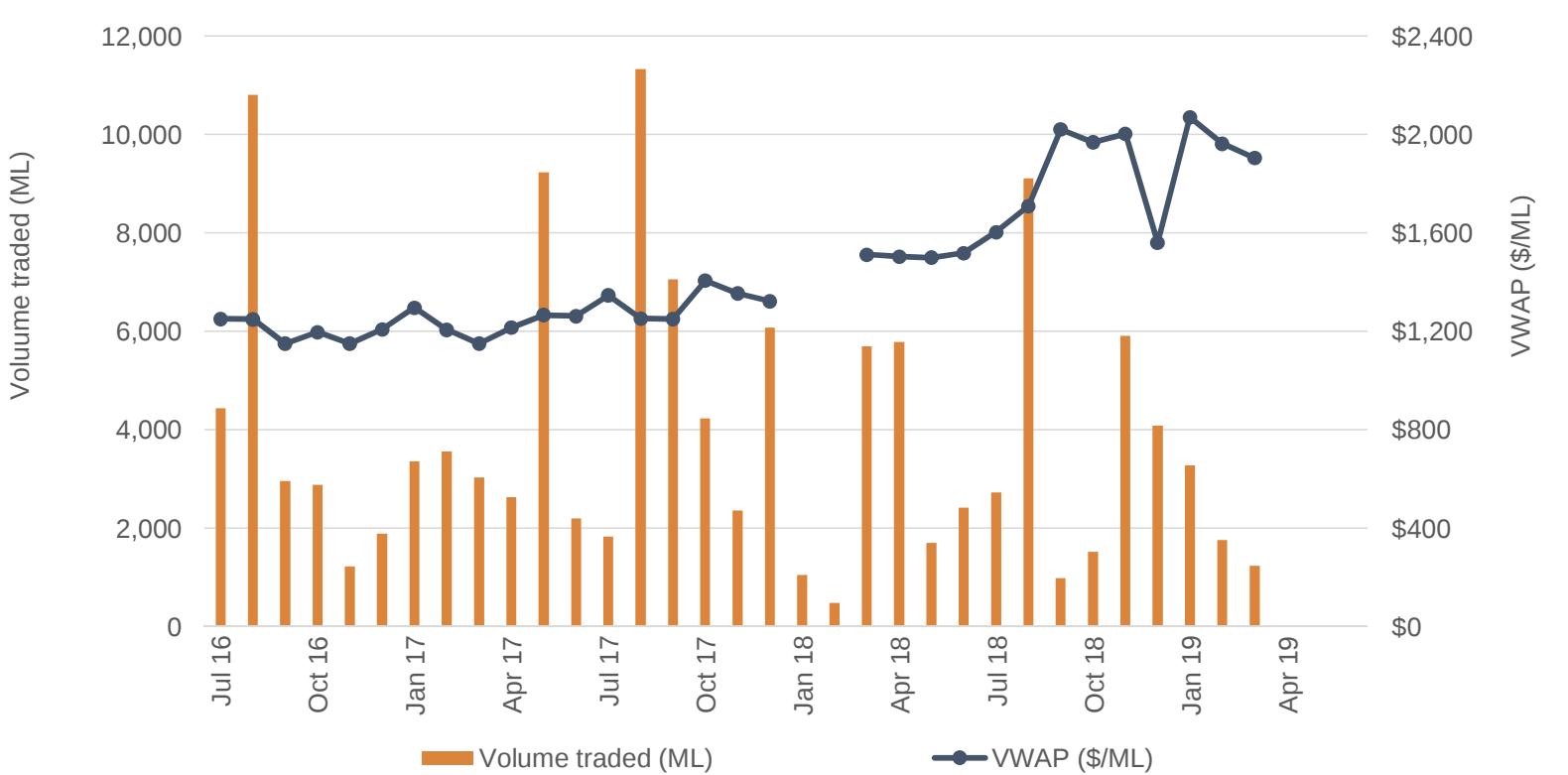
NSW Murray Irrigation Limited

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018- 19	Average parcel size (ML) Mar 2018- 19	Broker Spread (Buy/Sell) (\$/ML)
NSW Murray Irrigation Limited GS	\$1,904	\$1,950	31	10,761	347	-

Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.
Note: As trade prices within NSW Murray Irrigation GS are not reported Aither has presented NSW Murray GS on river prices instead given the common characteristics that these entitlements share.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the NSW Water Register.

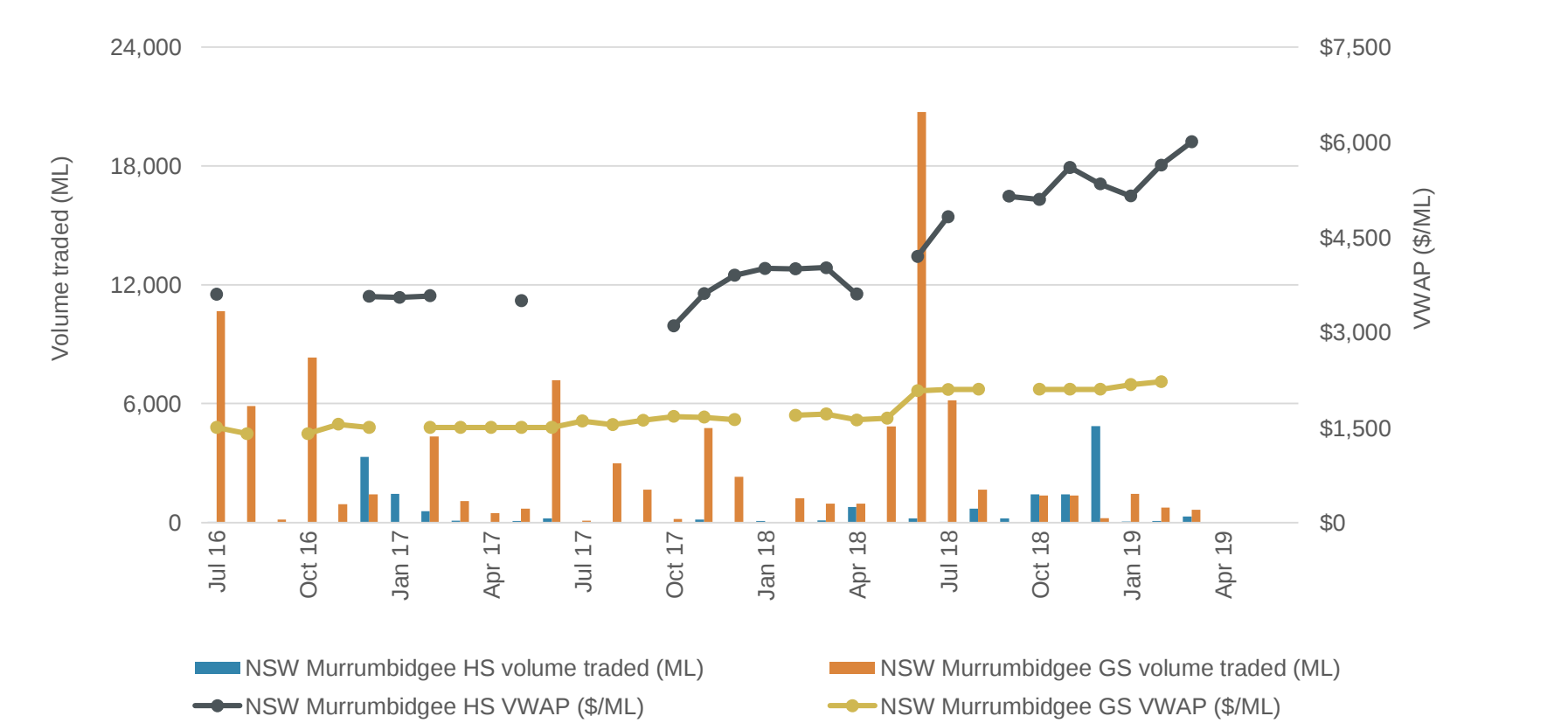
NSW Murrumbidgee

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Murrumbidgee HS	\$6,004	\$6,025	2	302	151	\$6,000 - \$7,000
NSW Murrumbidgee GS	-	-	1	652	652	\$1,600 - \$2,100

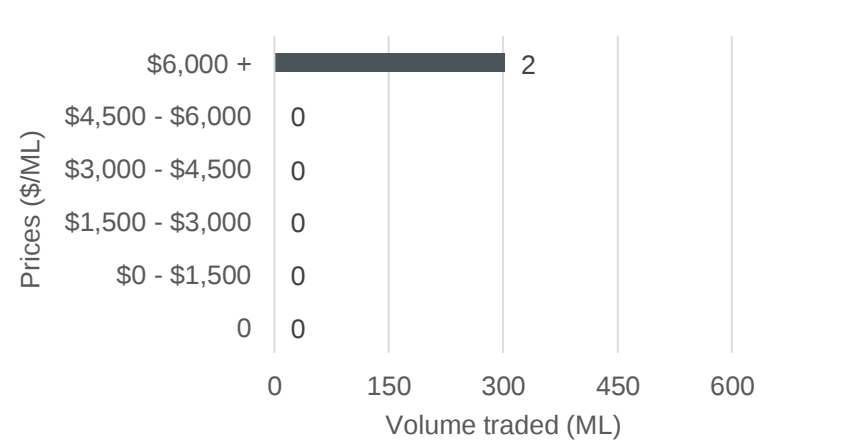
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019

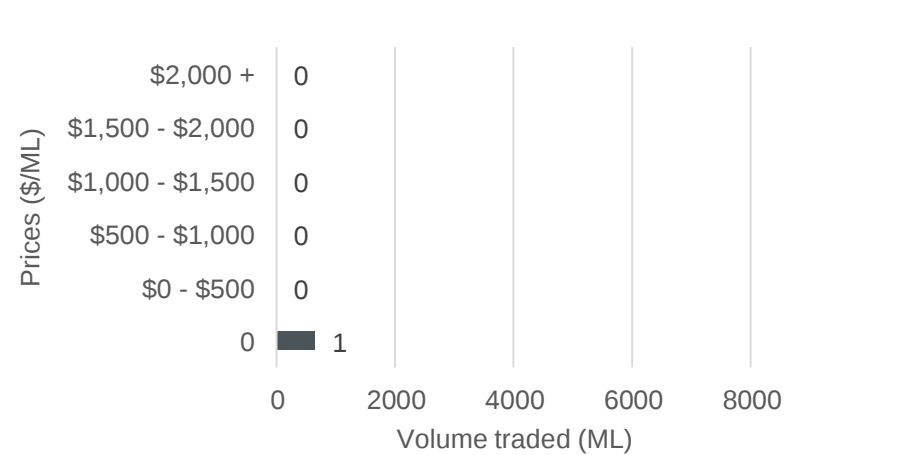


Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019 NSW Murrumbidgee HS



NSW Murrumbidgee GS



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

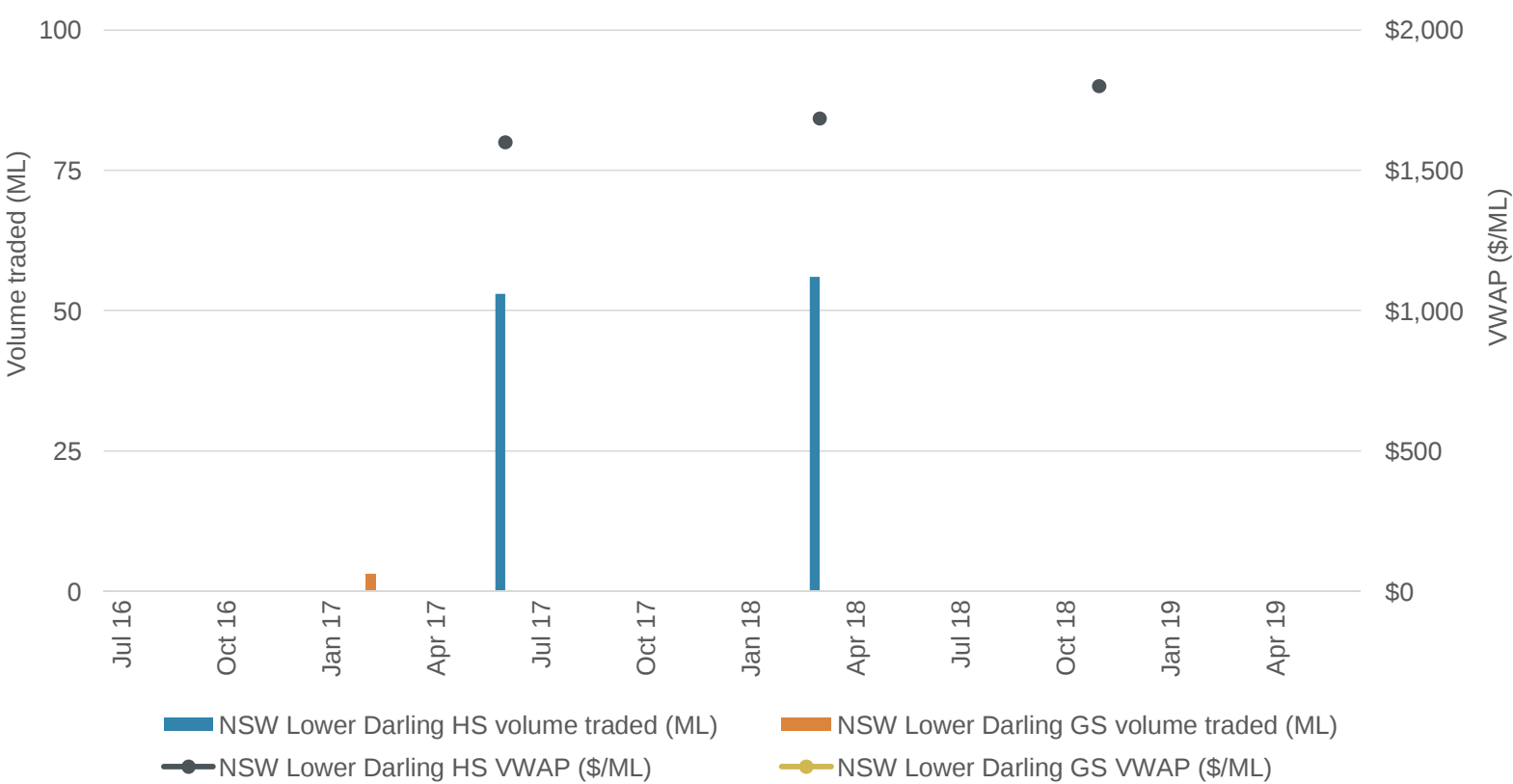
NSW Lower Darling

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Lower Darling HS	-	-	-	-	-	-
NSW Lower Darling GS	-	-	-	-	-	-

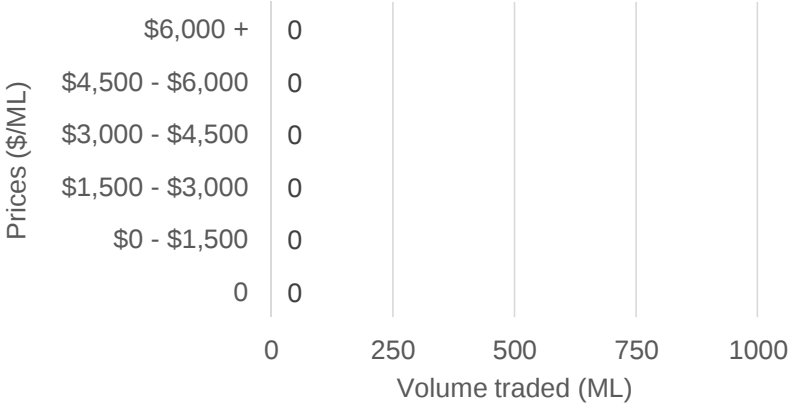
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019

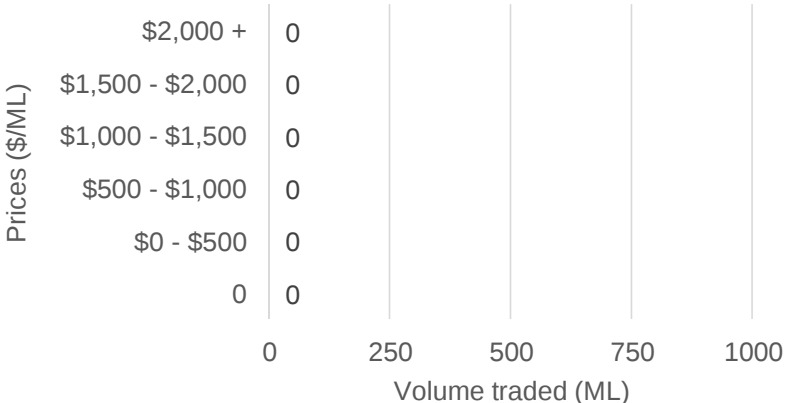


Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019 NSW Lower Darling HS



NSW Lower Darling GS



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

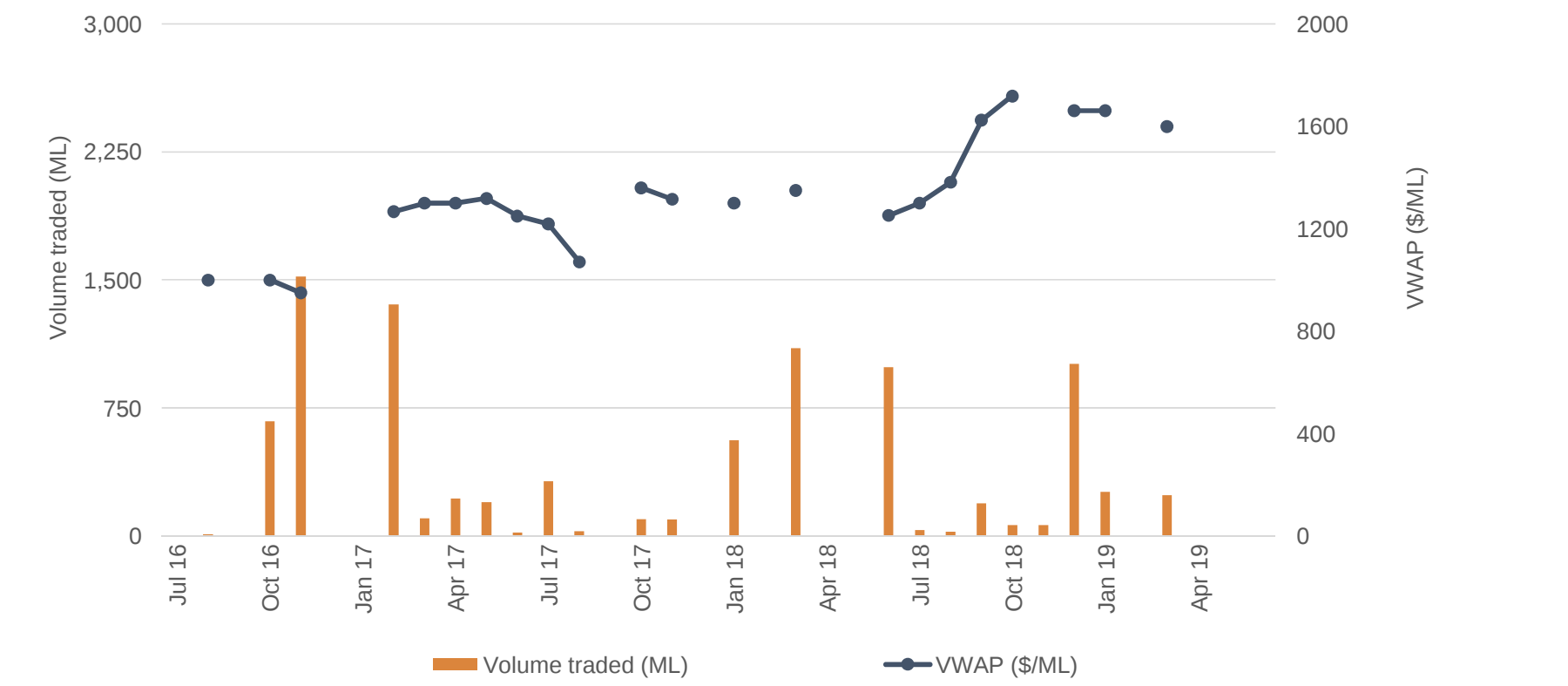
NSW Macquarie

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Macquarie GS	\$1,600	\$1,600	1	240	240	-

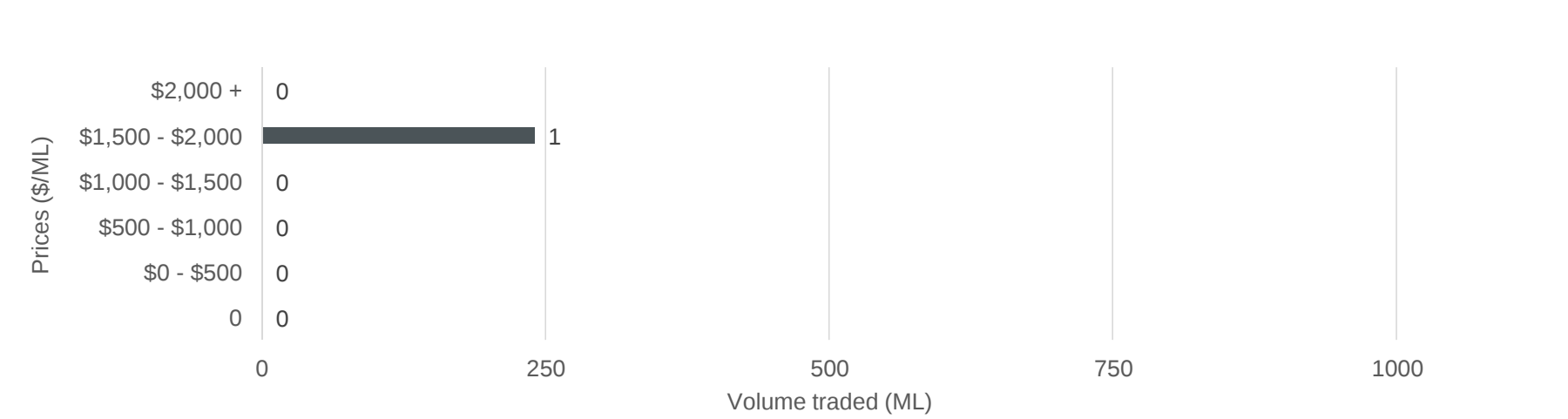
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

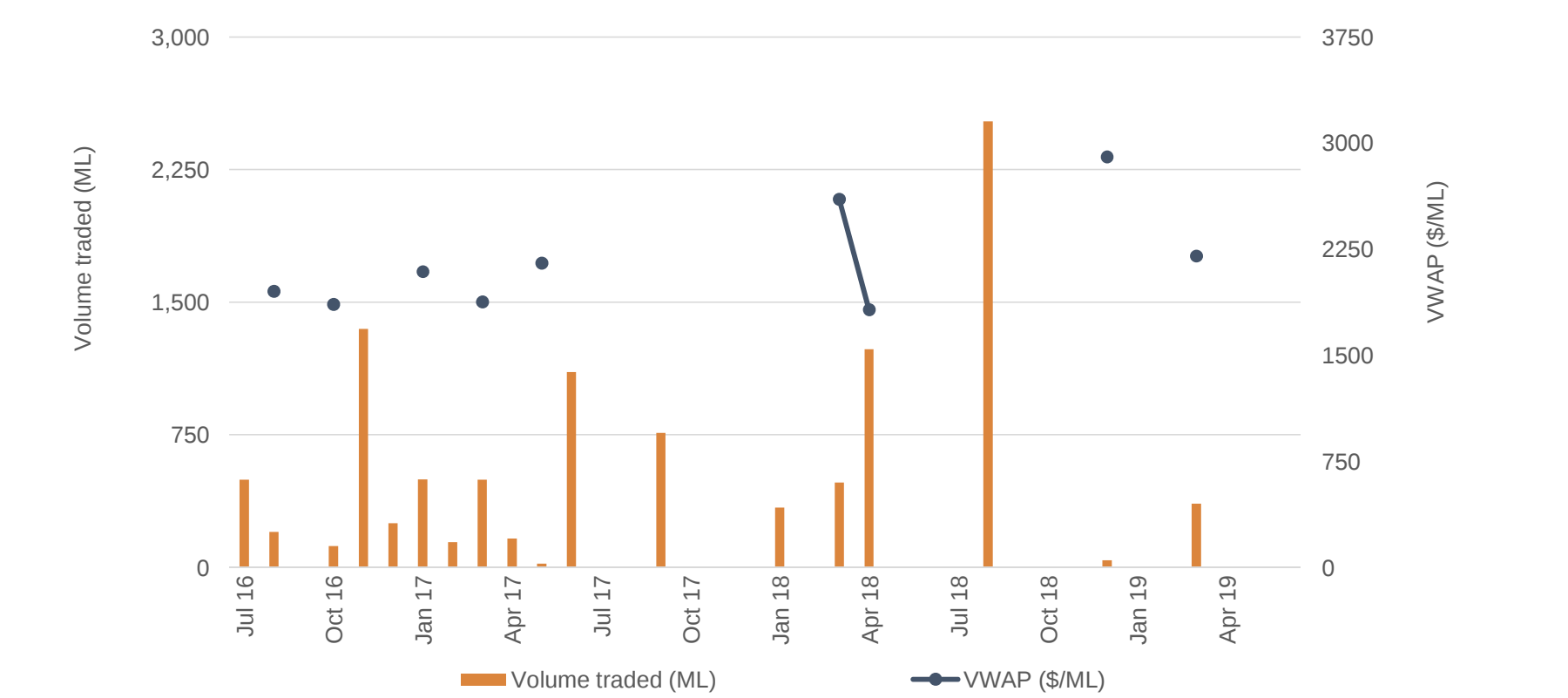
NSW Lower Namoi

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Lower Namoi GS	\$2,200	\$2,200	1	360	360.00	-

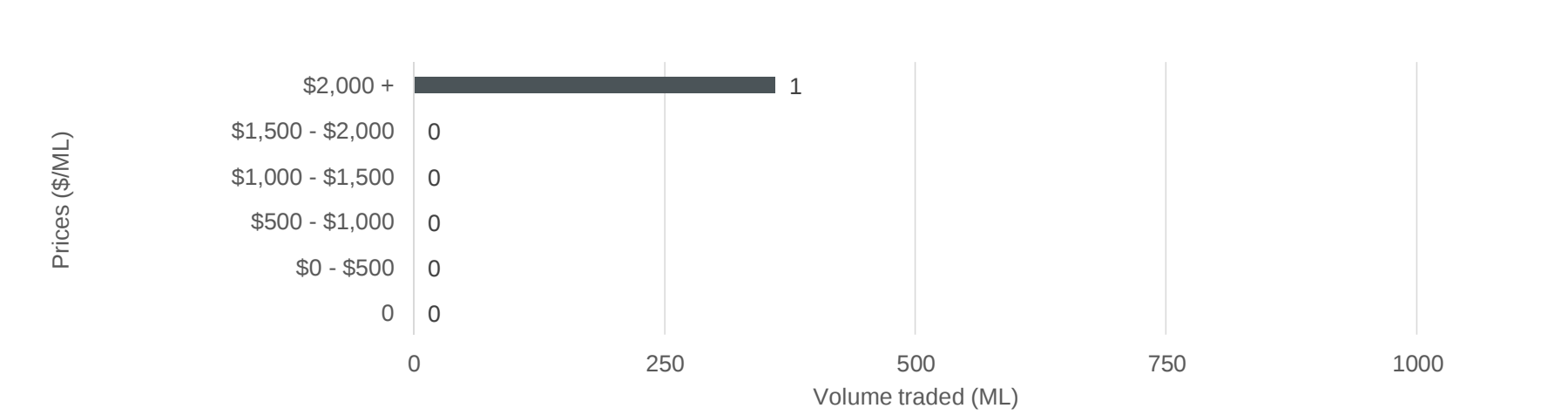
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the NSW Water Registers.

Market price range, March 2019



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

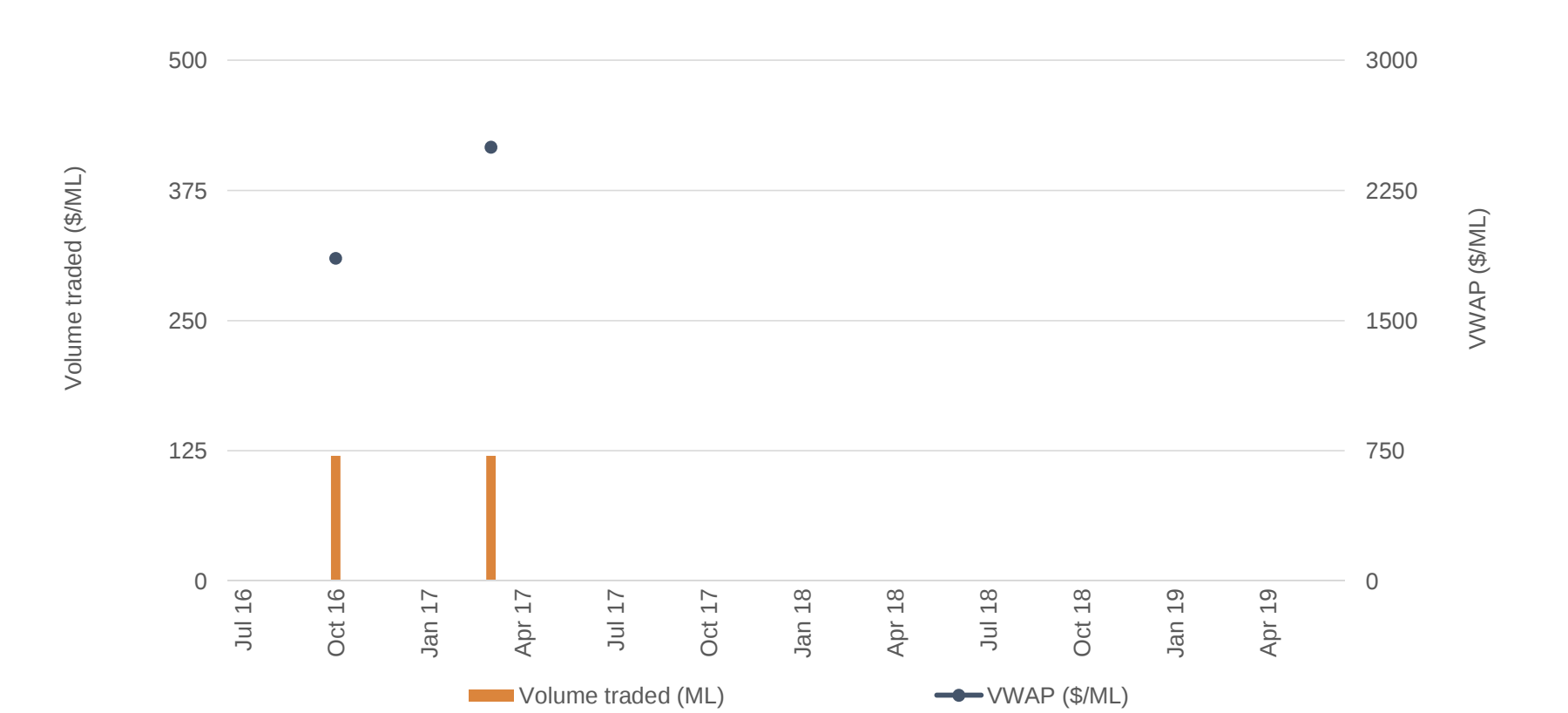
NSW Upper Namoi

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Upper Namoi GS	-	-	-	-	-	-

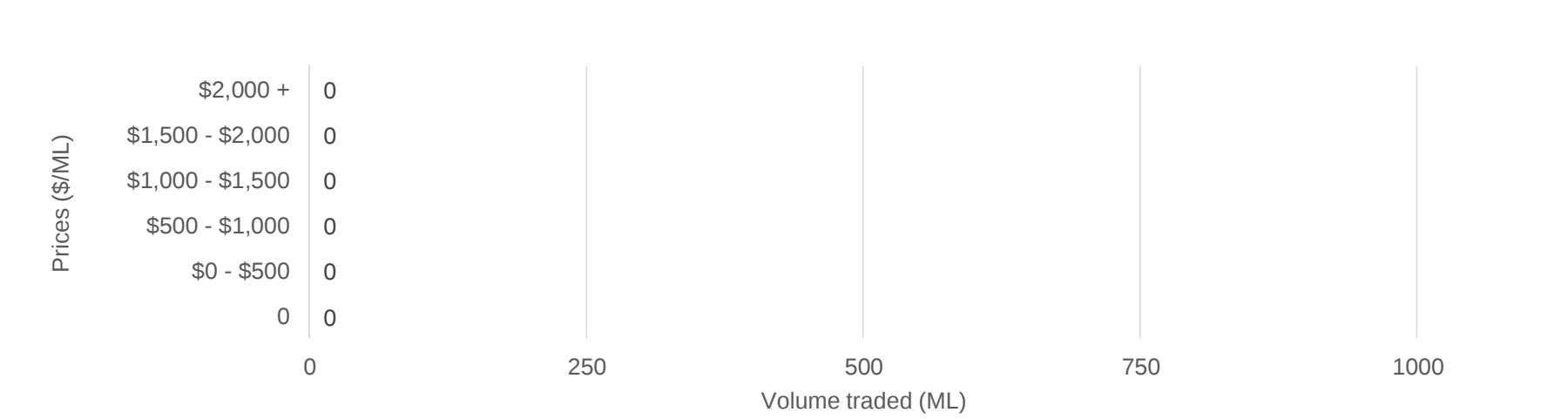
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

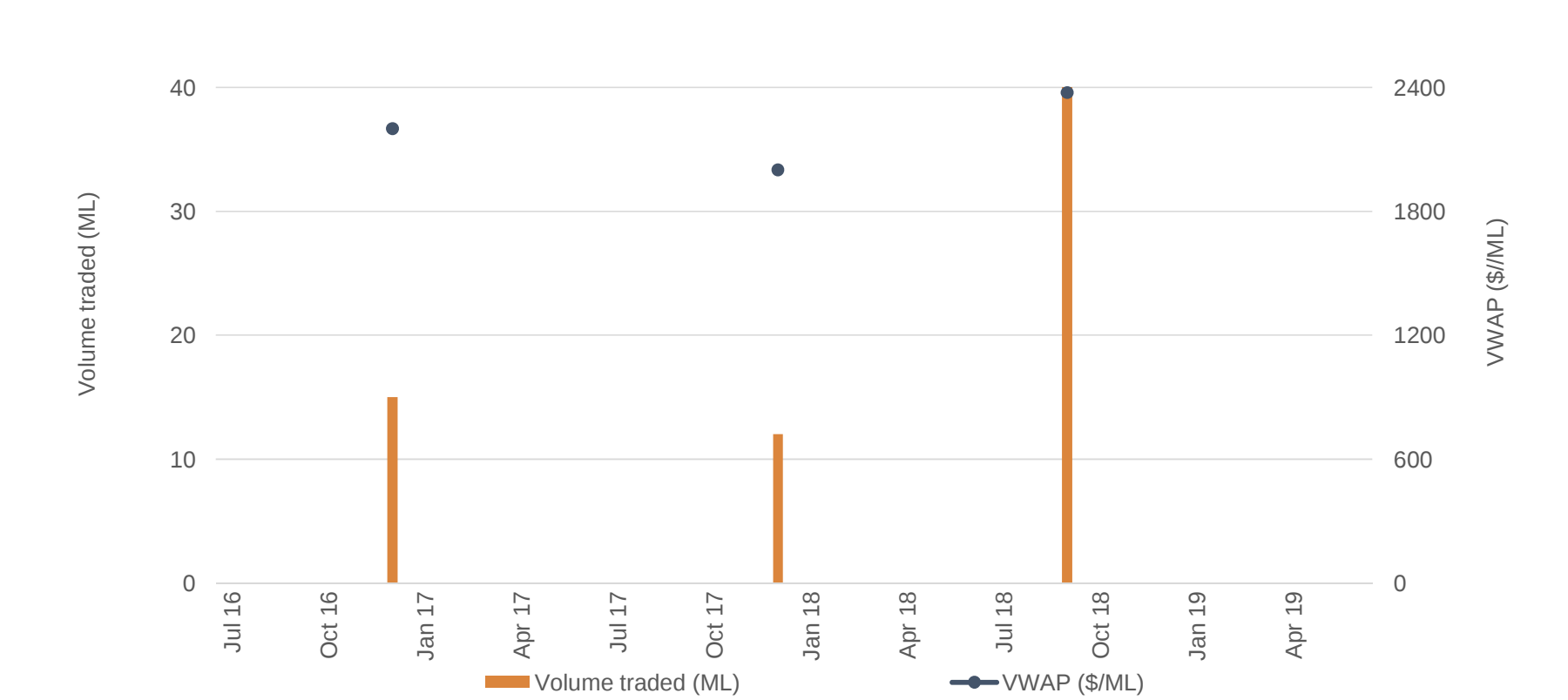
NSW Gwydir

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Gwydir GS	-	-	-	-	-	-

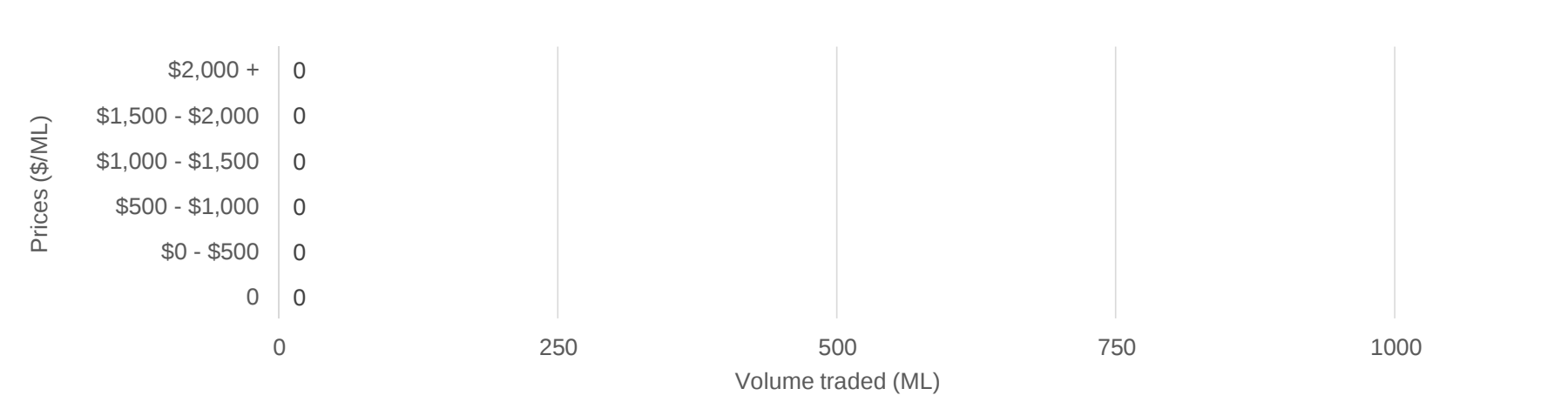
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

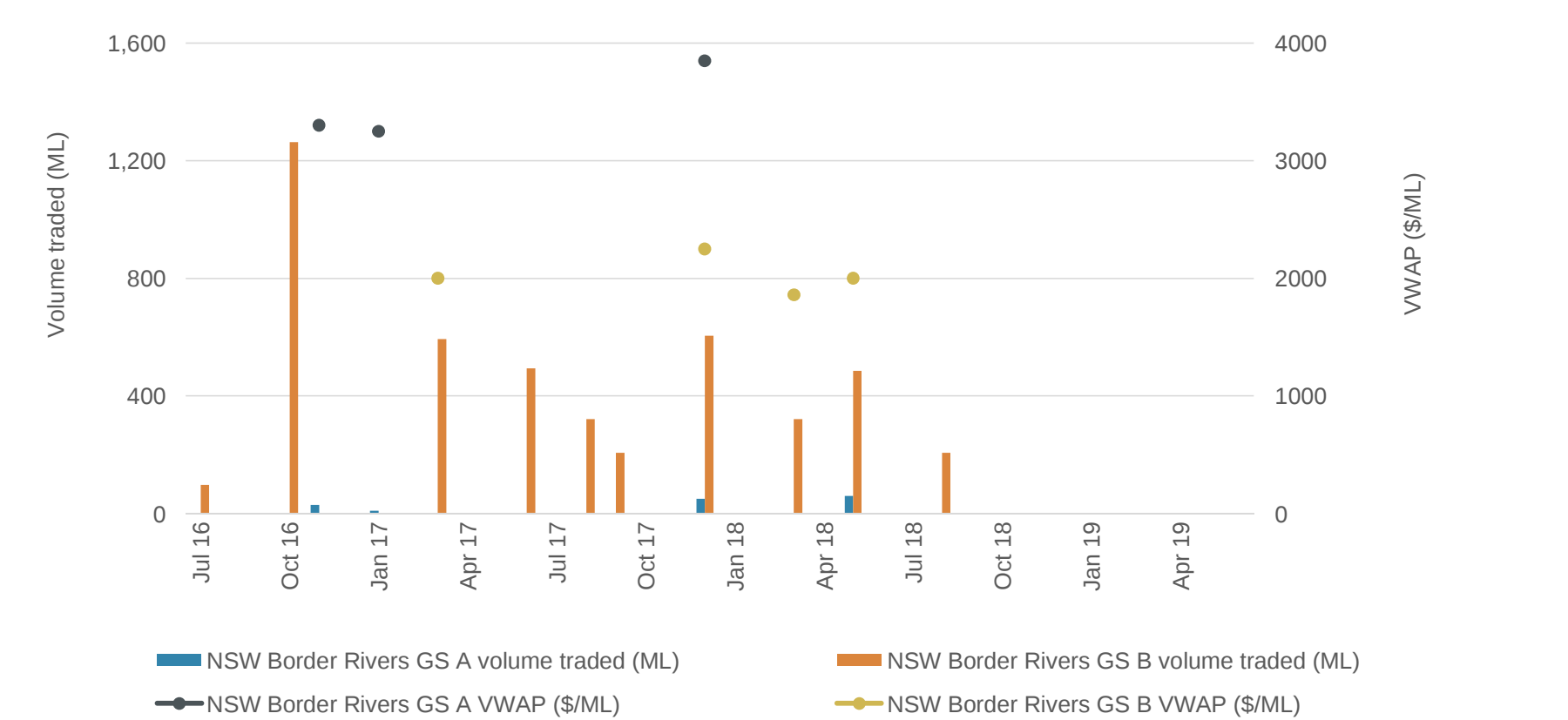
NSW Border Rivers

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Border Rivers GS A	-	-	-	-	-	-
NSW Border Rivers GS B	-	-	-	-	-	-

Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

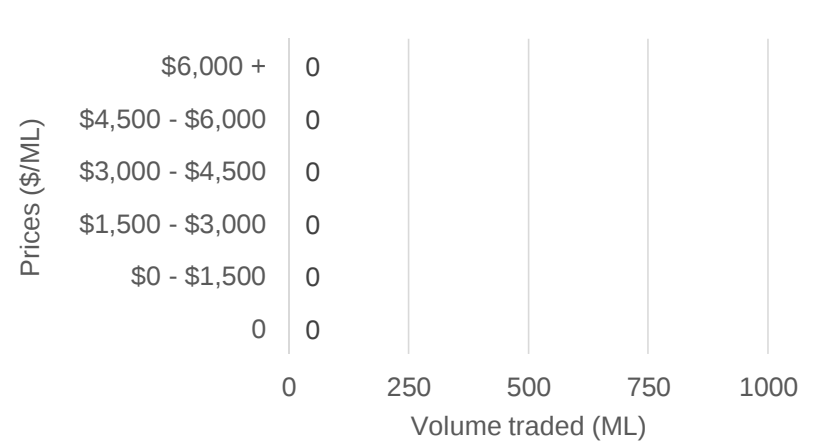
Market prices and volumes, July 2016 to June 2019



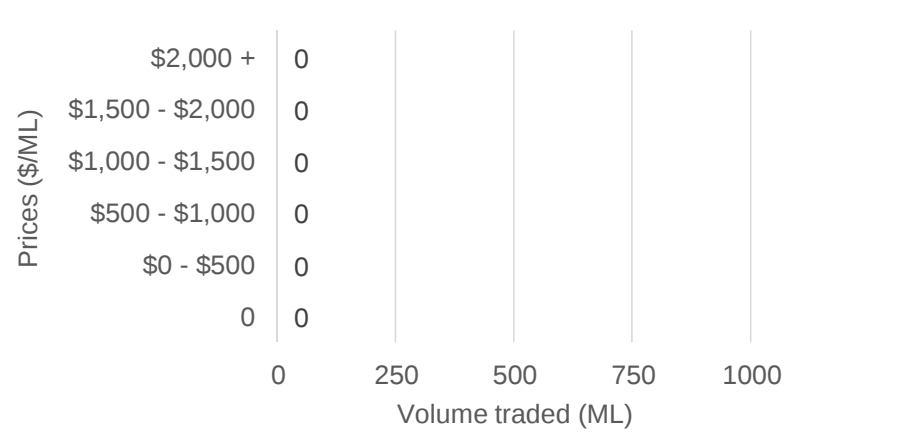
Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019

NSW Border Rivers GS A



NSW Border Rivers GS B



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

NSW Barwon-Darling Unregulated

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Barwon-Darling Unregulated A	-	-	-	-	-	-
NSW Barwon-Darling Unregulated B	-	-	-	-	-	-
NSW Barwon-Darling Unregulated C	-	-	-	-	-	-

Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

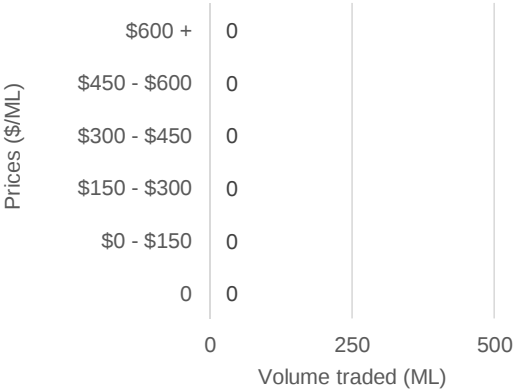
Market prices and volumes, July 2016 to June 2019



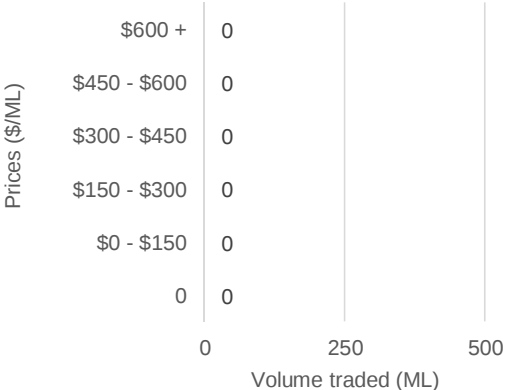
Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019

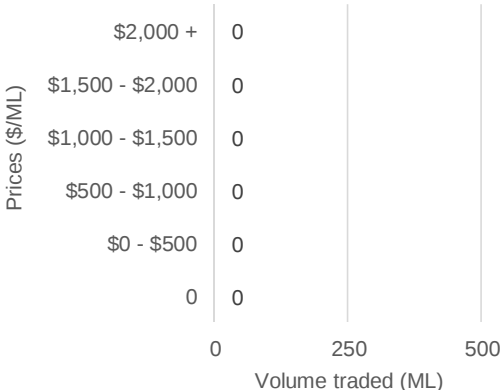
NSW Barwon-Darling Unregulated A



NSW Barwon-Darling Unregulated B



NSW Barwon-Darling Unregulated C



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

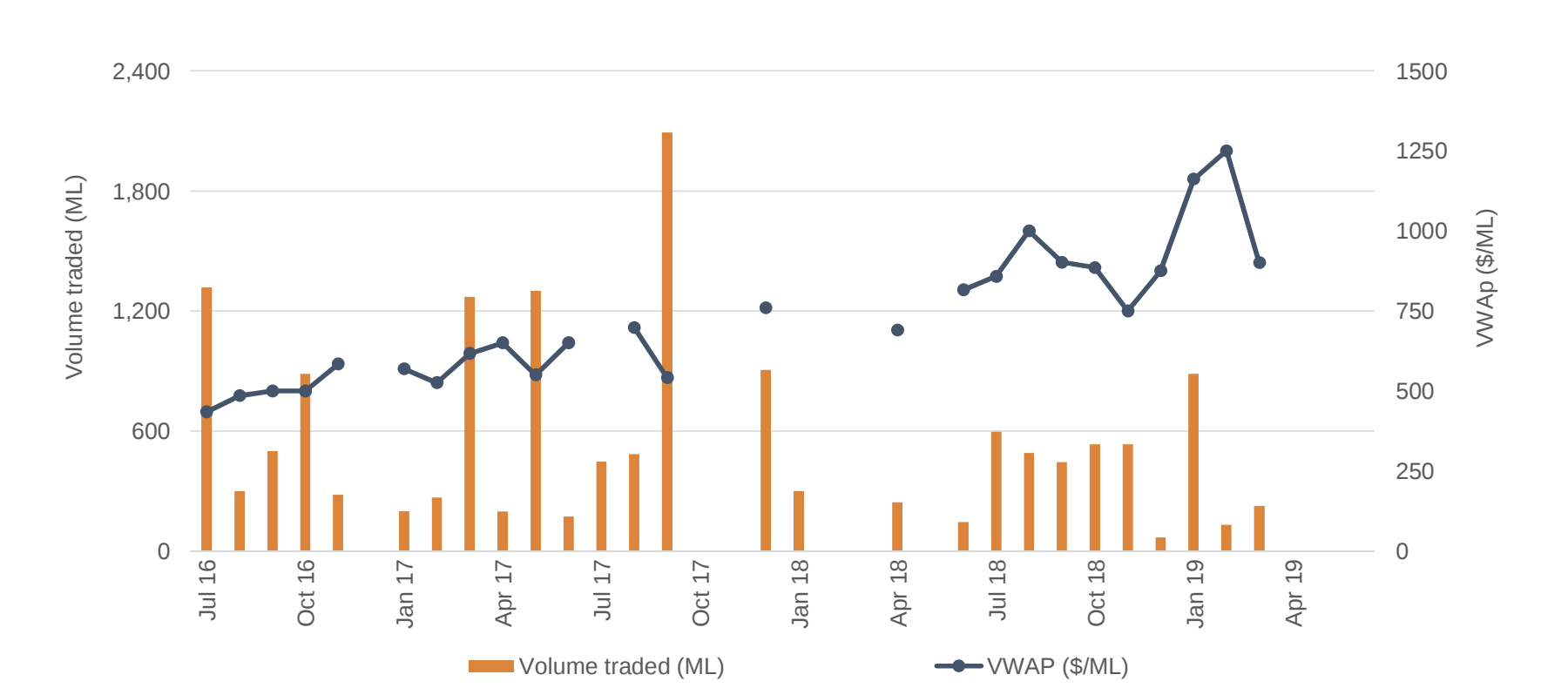
NSW Lachlan

Entitlement market overview, March 2019

Entitlement type	VWAP (\$/ML) Mar 2018-19	Max Price (\$/ML) Mar 2018-19	notrades (unfiltered) Mar 2018-19	Volume of trade (unfiltered) (ML) Mar 2018-19	Average parcel size (ML) Mar 2018-19	Broker Spread (Buy/Sell) (\$/ML)
NSW Lachlan GS	\$900	\$900	2	225	113	\$1,100 - \$1,250

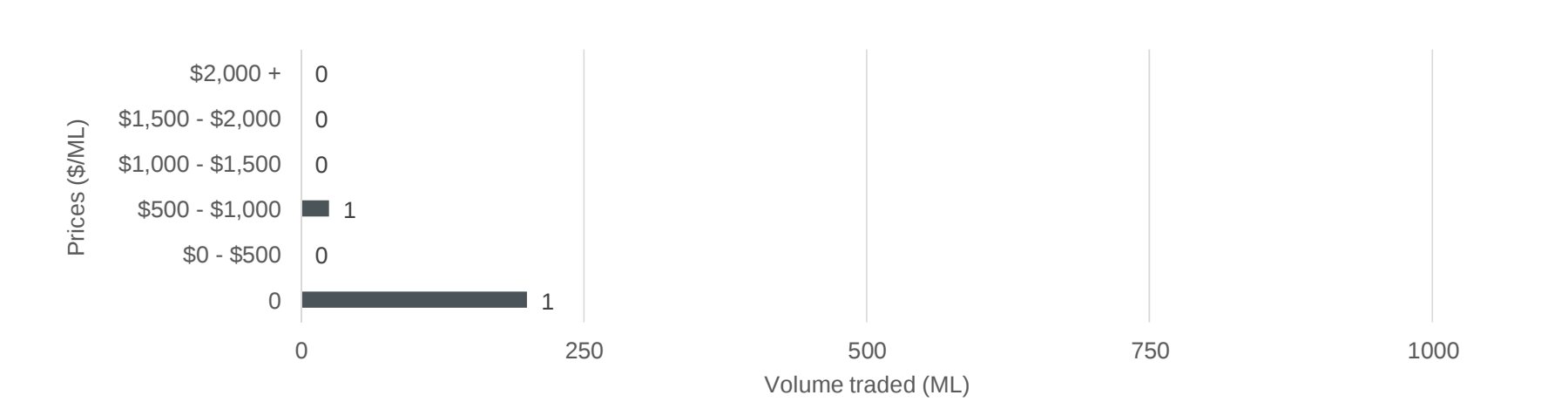
Source: Aither, 2019. Based on the NSW Water Register and quotes sourced from water brokers.

Market prices and volumes, July 2016 to June 2019



Source: Aither, 2019. Based on the NSW Water Register.

Market price range, March 2019



Source: Aither, 2019. Based on the NSW Water Register.

Note: Data labels are indicative of number of trades in each price bracket. Price bracket intervals do not include the upper bound price of the interval.

Queensland Entitlements

Entitlement Market Overview, February 2019

Entitlement	February 2019 VWAP (\$/ML)	February 2019 Number of Trades	February 2019 Volume of trade (ML)	February 2019 Average Parcel Size (ML)
QLD Condamine-Balonne (St George) Supplemented Condamine-Balonne	-	-	-	-
QLD Condamine-Balonne (Lower Balonne) Unsupplemented	-	-	-	-
QLD Condamine-Balonne (Upper Condamine) Unsupplemented	-	-	-	-
QLD Central Condamine Alluvium Groundwater (1, 2, 3 and 4)	-	-	-	-
QLD Upper Condamine Alluvium Groundwater (Dalrymple Creek) Groundwater	-	-	-	-
QLD Upper Condamine Alluvium Groundwater (Oakey Creek) Groundwater	-	-	-	-
QLD Border Rivers Supplemented (Macintyre Brook)	\$2,500	2	143	71
QLD Border Rivers Unsupplemented	-	-	-	-
QLD Condamine-Balonne Lower Balonne Overland flow	-	-	-	-

Notes: Disaggregated entitlement trade data in QLD is not publicly available therefore Aither has been unable to provide data in the same format as SA, Vic and NSW entitlement types. QLD water trade data relates to trade in February 2019 as more recent trade data was unavailable at the time of publication. In instances where there has been more than one trade for a given month it has not been possible to determine a maximum price due to the nature of the data made available.

Source: Aither, 2019. Based on the QLD Water Register.

Notes

VWAPs are based on estimates of commercial trades as outlined in Aither's methodology excluding \$0 values. Aither's methodology is available on request.

Only trades reported in March 2019 are included in the monthly Volume Weighted Average Price (VWAP) and Maximum Monthly Price (\$/ML) reported in the entitlement summary tables.

The 'Number of Transfers and 'Volume of Transfers' (ML) are calculated based on all trades from state water market registers, including \$0 value trades. This is in line with Aither's calculation methodology which is available on request.

The average parcel size reported in the entitlement summary tables has been determined by taking the total monthly volume of transfers and dividing by the total number of transfers of the given entitlement during the month in question.

As trade prices for NSW Murray GS within Murray Irrigation are not reported, Aither has used NSW Murray GS on river prices as a substitute given the common characteristics that these entitlements share.

Aither's analysis was conducted on 4 April 2019 and only includes trade data available as of this date.

Document history

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