## WATER ENTITLEMENT MARKET PRICES

#### **Murray-Darling Basin**

#### Introduction

Psi Delta provides market price data on water entitlements in the Murray-Darling Basin for the Department of the Environment. This data is collected from two independent sources.

#### **Water registers**

The data used in this report is collected from state government and other publicly available registers that report approved water transfers. Prices reported on registers may lag the exchange of contracts or the water sale agreement by several months. This report shows the volume weighted average price (VWAP) for approved permanent water transfers in the Murray-Darling Basin for the September 2014 month, September 2014 quarter, and the 2014-15 water year to date.

#### Water trading exchanges

More up-to-date information on water entitlement prices in the southern-connected Murray-Darling Basin has been sourced from data obtained from water trading exchanges. Information from water trading exchanges was collected in the first week of October 2014.

#### **CONTENTS**

1	MURRUMBIDGEE HIGH SECURITY	2
2	MURRUMBIDGEE GENERAL SECURITY	3
3	NSW MURRAY HIGH SECURITY	4
4	NSW MURRAY GENERAL SECURITY	5
5	NSW MURRAY IRRIGATION LIMITED	6
6	MACQUARIE GENERAL SECURITY	7
7	GWYDIR GENERAL SECURITY	8
8	NAMOI GENERAL SECURITY	9
9	LACHLAN GENERAL SECURITY	10
10	GOULBURN HIGH RELIABILITY	11
11	GOULBURN LOW RELIABILITY	12
12	VICTORIAN MURRAY BELOW BARMAH CHOKE – HIGH RELIABILITY	13
13	VICTORIAN MURRAY BELOW BARMAH CHOKE – LOW RELIABILITY	14
14	VICTORIAN MURRAY ABOVE BARMAH CHOKE – HIGH RELIABILITY	15
15	VICTORIAN MURRAY ABOVE BARMAH CHOKE – LOW RELIABILITY	16
16	CAMPASPE – HIGH RELIABILITY	17
17	SOUTH AUSTRALIA MURRAY CLASS 3A	18
18	QUEENSLAND MDB	19
19	OTHER SYSTEMS	20
20	ARRANGEMENT FOR REPORTING SALES DATA BY STATE	21

Data in this report is collected from publicly available sources such as water registers and through consultation with water brokers. The data is indicative only and may be incomplete. While Psi Delta has conducted this work diligently, no responsibility is accepted for its accuracy or for any use of the data.

## MURRUMBIDGEE HIGH SECURITY

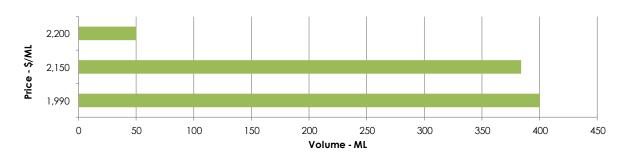
#### Water register prices

Volume weighted average price			September quarter		September	September
September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	2014 range (Insufficient data for quartiles) \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
2,156	2,076	2,076	1,990	2,200	834	4

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



NOTE: A dotted line is shown for quarters where no trade was reported.

NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. The quarterly VWAP of 71M transfers was \$1,790/ML with two relevant transfers for the September quarter 2014.

To avoid reporting unrepresentative prices, Murrumbidgee High Security VWAP calculations exclude transfers under \$500/ML or over \$5,000/ML.

**SOURCE:** NSW Water Register, 3<sup>rd</sup> October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	2,150 - 2,200
Water exchanges September 2014 seller offer price (\$/ML)	2,250

Note: Water exchange prices include allocation

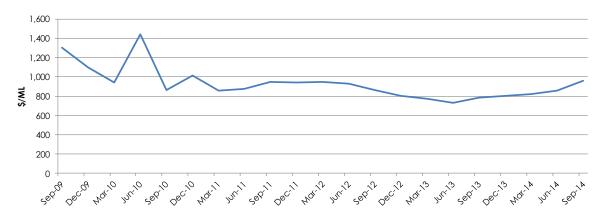
**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from <a href="http://www.wilkswater.com.au/">http://www.wilkswater.com.au/</a> and <a href="http://www.ruralcowater.com.au/">http://www.ruralcowater.com.au/</a>

## MURRUMBIDGEE GENERAL SECURITY

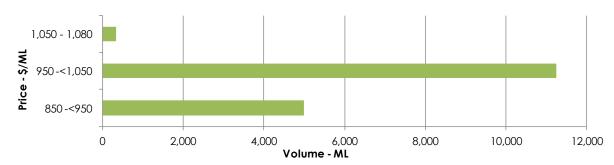
#### Water register prices

Volume we	September		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
953	957	957	863	1,000	16,562	19

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. The quarterly VWAP of 71M transfers was \$1,028/ML with two relevant transfers for the September quarter 2014.

To avoid reporting unrepresentative prices, General Security VWAPs (in the southern connected system) exclude transfers at under \$100/ML or over \$2,500/ML.

**SOURCE:** NSW Water Register, 3<sup>rd</sup> October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	950 – 1,000
Water exchanges September 2014 seller offer price (\$/ML)	1,000 - 1,050

Note: Water exchange prices include allocation

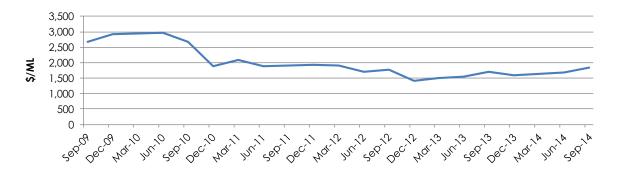
**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from <a href="http://www.wilkswater.com.au">http://www.wilkswater.com.au</a> and <a href="http://www.ruralcowater.com.au">http://www.ruralcowater.com.au</a>/

### NSW MURRAY HIGH SECURITY

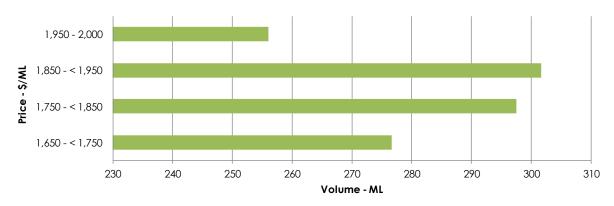
#### Water register prices

Volume we	Septe		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
1,946	1,839	1,839	1,700	1,825	1,132	12

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. The quarterly VWAP of 71M transfers was \$1,798/ML with three relevant transfers for the September quarter 2014.

To avoid reporting unrepresentative prices, NSW Murray High Security VWAP calculations exclude transfers under \$500/ML or over \$5,000/ML. The NSW register does not differentiate between Murray River transfers above and below the Barmah Choke but most entitlements are below the Choke.

SOURCE: NSW Water Register, 3rd October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp.selecte

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	1,950
Water exchanges September 2014 seller offer price (\$/ML)	2,000

Note: Water exchange prices include allocation

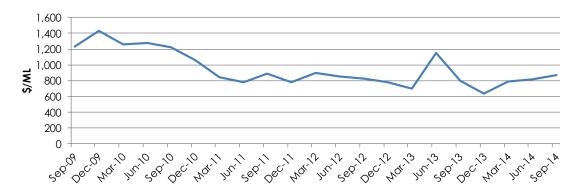
**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> October from <a href="http://www.ruralcowater.com.au/">http://www.ruralcowater.com.au/</a>

## NSW MURRAY GENERAL SECURITY

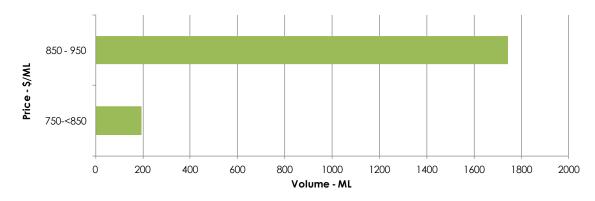
#### Water register prices

Volume we	Septe		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	25th ar	er 2014 nd 75th rile \$/ML	quarter 2014 sample volume ML	quarter 2014 sample number of transfers
878	873	873	850	900	1,938	11

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**Note:** NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. VWAP of 71M data was \$876/ML based on six relevant trades. To avoid reporting unrepresentative prices, General Security VWAPs (in the southern connected system) exclude transfers under \$100/ML or over \$2,500/ML. The NSW register does not differentiate between Murray River transfers above and below the Barmah Choke.

**SOURCE:** NSW Water Register, 3<sup>rd</sup> October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	875 – 980
Water exchanges September 2014 seller offer price (\$/ML)	1,000

Note: Water exchange prices include allocation

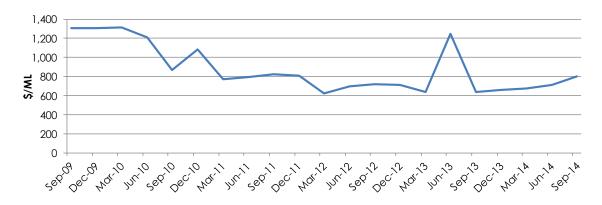
**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from <a href="http://www.wilkswater.com.au">http://www.wilkswater.com.au</a> and <a href="http://www.ruralcowater.com.au">http://www.ruralcowater.com.au</a>/

# NSW MURRAY IRRIGATION LIMITED (MIL)

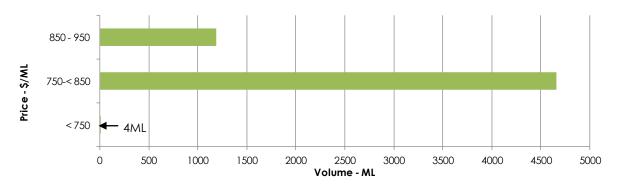
#### Water register prices

Volume weighted average price			September		September	September
September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
819	800	800	786	835	5,849	24

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** A very small 4ML trade at \$500/ML was recorded for the September quarter 2014. MIL water transfers including delivery share have been excluded from the data to ensure consistency in water transfer prices. To avoid reporting unrepresentative prices, MIL General Security VWAPs exclude transfers at under \$250/ML or over \$2,500/ML.

SOURCE: MIL Water Register, 3<sup>rd</sup> October 2014 at:

http://www.murrayirrigation.com.au/water/water-trade/permanent-trade-history

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	700 – 850
Water exchanges September 2014 seller offer price (\$/ML)	800

Note: Water exchange prices include delivery share

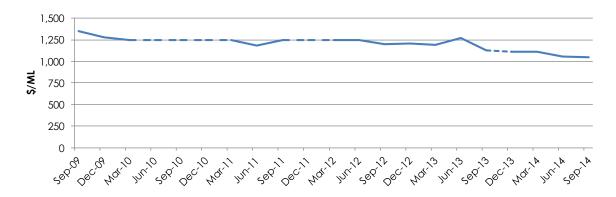
**SOURCE**: Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from <a href="https://www.murrayirrigation.com.au">www.murrayirrigation.com.au</a>

## MACQUARIE GENERAL SECURITY

#### Water register prices

Volume we September month 2014 \$/ML	eighted average p September quarter 2014 \$/ML	2014-15 \$/ML	September quarter 2014 price (Insufficient data for quartiles) \$/ML	September quarter 2014 sample volume ML	September quarter 2014 sample number of transfers
No trade	1,050	1,050	1,050	583	2

#### Quarterly volume weighted average price (2009-2014)



**NOTE:** A dotted line is shown for quarters where no trade was reported. NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. One 71M trade was reported for the September quarter 2014 a price of \$1,250/ML for 5ML.

To avoid reporting unrepresentative prices, General Security VWAPs (in the NSW central and northern basins) exclude transfers at under \$100/ML or over \$5,000/ML.

**SOURCE:** NSW Water Register, 3<sup>rd</sup> October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

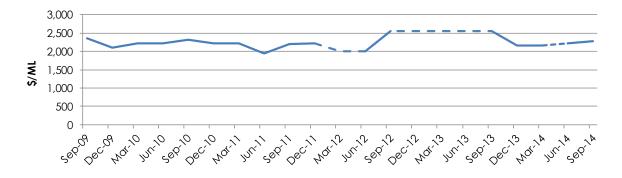
#### Water trading exchange prices

## GWYDIR GENERAL SECURITY

#### Water register prices

Volume we	eighted average p	orice	September quarter	September	September	
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	2014 price (Insufficient data for quartiles) \$/ML	quarter 2014 sample volume ML	quarter 2014 sample number of transfers	
No trade	2,280	2,280	2,280	224	1	

#### Quarterly volume weighted average price (2009-2014)



**NOTE:** A dotted line is shown for quarters where no trade was reported. NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. The quarterly VWAP of 71M transfers was \$1,843/ML with three relevant transfers for the September quarter 2014. To avoid reporting unrepresentative prices, General Security VWAPs (in the NSW central and northern basins) exclude transfers at under \$100/ML or over \$5,000/ML.

SOURCE: NSW Water Register, 3rd October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

#### Water trading exchange prices

## NAMOI GENERAL SECURITY

#### Water register prices

Volume weighted average price		September quarter	September	September	
September month 2014 \$/ML	September quarter 2014 \$/ML	2013-14 \$/ML	2014 range \$/ML	quarter 2014 sample volume ML	quarter 2014 sample number of transfers
No trade	No trade	No trade	No trade	No trade	No trade

#### Quarterly volume weighted average price (2009-2014)



NOTE: A dotted line is shown for quarters where no trade was reported.

NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. The quarterly VWAP of 71M transfers was \$756/ML with three relevant transfers for the September quarter 2014.

To avoid reporting unrepresentative prices, General Security VWAPs (in the NSW central and northern basins) exclude transfers at under \$100/ML or over \$5,000/ML.

**SOURCE:** NSW Water Register, 3<sup>rd</sup> October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

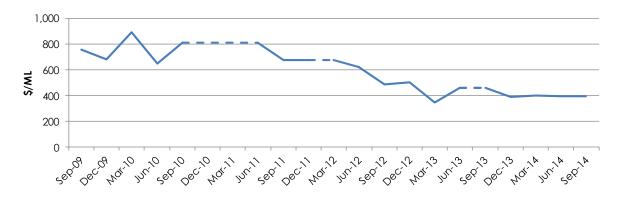
#### Water trading exchange prices

### LACHLAN GENERAL SECURITY

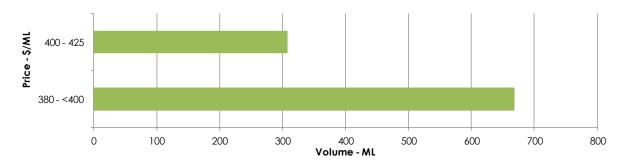
#### Water register prices

Volume we September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	2014 (Insufficie quo	per quarter range ent data for artiles)	September quarter 2014 sample volume ML	September quarter 2014 sample number of transfers
390	399	399	380	425	976	4

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** A dotted line is shown for quarters where no trade was reported.

NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to extreme variability of data. No 71M trades were reported with price data in the September Quarter 2014.

To avoid reporting unrepresentative prices, General Security VWAPs (in the central and northern basins) exclude transfers at under \$100/ML or over \$5,000/ML.

**SOURCE:** NSW Water Register, 3<sup>rd</sup> October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShareIntraWSLocSearch.jsp.selecte

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	350 - 380
Water exchanges September 2014 seller offer price (\$/ML)	450 – 518

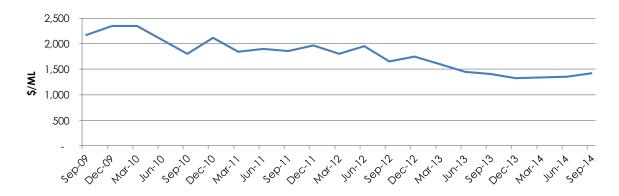
**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from <a href="http://www.wilkswater.com.au">http://www.wilkswater.com.au</a> and <a href="http://www.ruralcowater.com.au">http://www.ruralcowater.com.au</a>/

## GOULBURN HIGH RELIABILITY

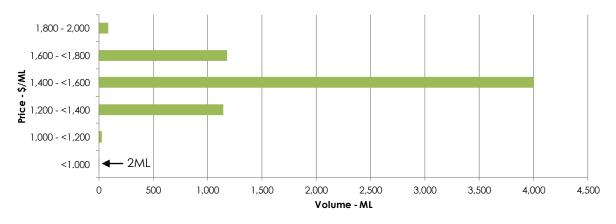
#### Water register prices

Volume we	Volume weighted average price			mber	September	September
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
1,431	1,468	1,468	1,300	1,473	6,445	171

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** One transfer of 2ML at \$750/ML was traded for the September quarter 2014. To avoid reporting unrepresentative prices, High Reliability VWAP calculations exclude transfers at under \$500/ML or

**SOURCE:** Victorian Water Register, 3<sup>rd</sup> October 2014 at: http://waterregister.vic.gov.au/water-trading/water-share-trading

#### Water trading exchange prices

over \$5,000/ML.

Water exchanges September 2014 buyer bid price (\$/ML)	1,600
Water exchanges September 2014 seller offer price (\$/ML)	1,700 – 1,750

Note: Water exchange prices include allocation

**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from <a href="http://www.watertradingaustralia.com.au/permanent-water.php">http://www.watertradingaustralia.com.au/permanent-water.php</a> and <a href="http://www.ruralcowater.com.au/">http://www.ruralcowater.com.au/</a>

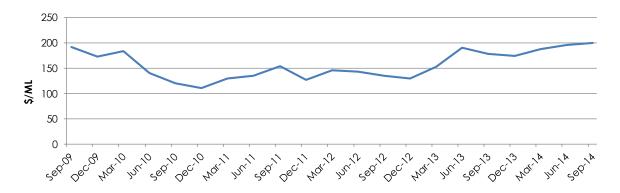
## GOULBURN LOW RELIABILITY

11

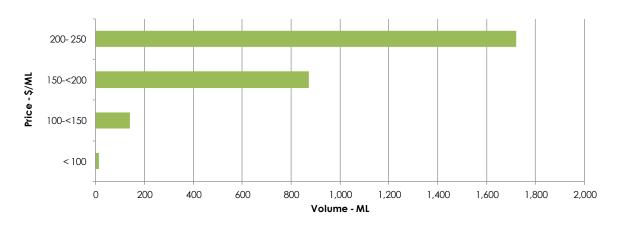
#### Water register prices

Volume we	Volume weighted average price September		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2013-14 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
196	199	199	150	210	2,749	49

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** While most sales were at values exceeding \$200/ML, two lower value transfers of 12ML and 1ML at \$68/ML and \$50/ML respectively were recorded for the September quarter 2014.

To avoid reporting unrepresentative prices, Low Reliability VWAP calculations exclude transfers at under \$10/ML or over \$1,000/ML.

**SOURCE:** Victorian Water Register, 3<sup>rd</sup> October 2014 at:

http://waterregister.vic.gov.au/water-trading/water-share-trading

#### Water trading exchange prices

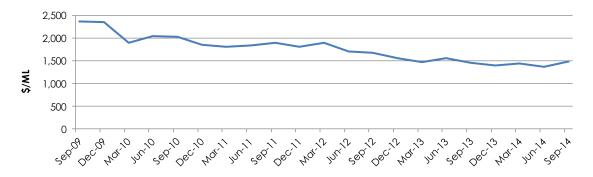
Water exchanges September 2014 buyer bid price (\$/ML)	220
Water exchanges September 2014 seller offer price (\$/ML)	250

# VICTORIAN MURRAY BELOW BARMAH CHOKE HIGH RELIABILITY

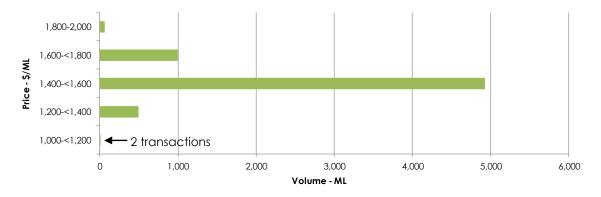
#### Water register prices

Volume	Volume weighted average price September			September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
1,512	1,492	1,492	1,400	1,520	6,502	202

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** To avoid reporting unrepresentative prices, High Reliability VWAP calculations exclude transfers at under \$1,000/ML or over \$5,000/ML.

**SOURCE:** Victorian Water Register, 3rd October 2014 at:

http://waterregister.vic.gov.au/water-trading/water-share-trading

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	1,750
Water exchanges September 2014 seller offer price (\$/ML)	1,800

Note: Water exchange prices include allocation

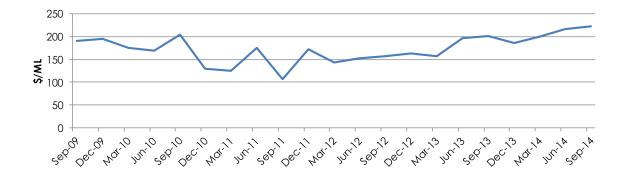
SOURCE: Water exchange data were sourced on 3rd of October 2014 from http://www.ruralcowater.com.au/

# VICTORIAN MURRAY BELOW BARMAH CHOKE LOW RELIABILITY

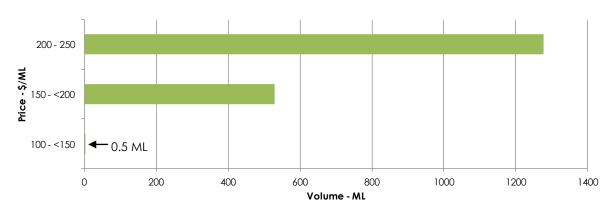
#### Water register prices

Volume we	eighted average p	September		September	September	
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
237	223	223	198	250	1,808	27

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** While most sales were at values exceeding \$200/ML, one lower value trade of 0.5ML at \$100/ML was recorded for the September quarter 2014.

To avoid reporting unrepresentative prices, the Vic Murray BC low reliability VWAP calculations exclude transfers under \$50/ML or over \$1,000/ML.

**SOURCE:** Victorian Water Register, 3<sup>rd</sup> October 2014 at:

http://waterregister.vic.gov.au/water-trading/water-share-trading

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	230
Water exchanges September 2014 seller offer price (\$/ML)	250

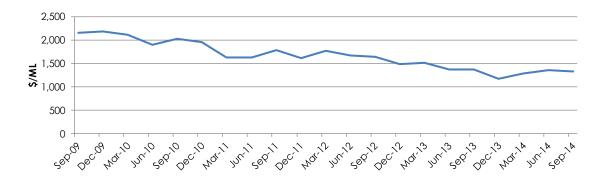
**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October from <a href="http://www.ruralcowater.com.au/">http://www.ruralcowater.com.au/</a>

### VICTORIAN MURRAY OVE BARMAI IOKE HIGH RELIABILITY

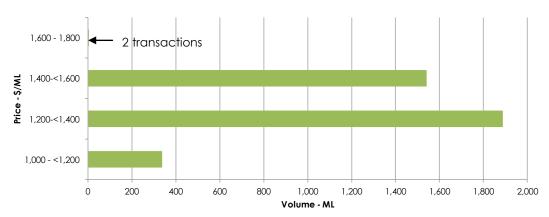
#### Water register prices

Volume we	eighted average p	orice	September quarter 2014 25th and 75th percentile \$/ML		September	September
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML			quarter 2014 sample volume ML	quarter 2014 sample number of transfers
1,335	1,324	1,324	1,275	1,441	3,771	47

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



NOTE While most sales occurring at between \$1,400/ML and \$1,600/ML, two trades of 2ML each at \$1,800/ML were reported for the September quarter 2014.To avoid reporting unrepresentative prices, High Reliability VWAP calculations exclude transfers at under \$500/ML or over \$5,000/ML.

SOURCE: Victorian Water Register, 3rd October 2014 at:

http://waterregister.vic.gov.au/water-trading/water-share-trading

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	1,250 - 1,300
Water exchanges September 2014 seller offer price (\$/ML)	1,450

Note: Water exchange prices include allocation

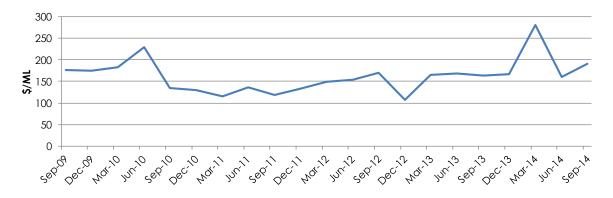
**SOURCE**: Water exchange data were sourced on the 3<sup>rd</sup> of October 2014 from

# VICTORIAN MURRAY ABOVE BARMAH CHOKE LOW RELIABILITY

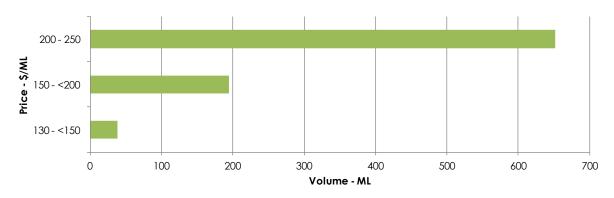
#### Water register prices

Volume we	September		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
202	191	191	166	215	886	14

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** To avoid reporting unrepresentative prices, Low Reliability VWAP calculations exclude transfers under \$10/ML or over \$1,000/ML.

**SOURCE:** Victorian Water Register, 3<sup>rd</sup> October 2014 at:

http://waterregister.vic.gov.au/water-trading/water-share-trading

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	190
Water exchanges September 2014 seller offer price (\$/ML)	200

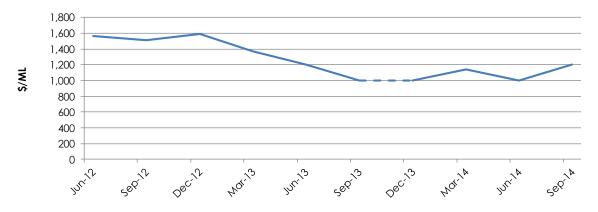
**SOURCE:** Water exchange data were sourced on the 3rd of October from http://www.ruralcowater.com.au/

## CAMPASPE HIGH RELIABILITY

#### Water register prices

Volume we	eighted average p September	orice 2014 -15	September quarter 2014 price	September quarter 2014	September quarter 2014
month 2014 \$/ML	quarter 2014 \$/ML	\$/ML	(Insufficient data for quartiles) \$/ML	sample volume ML	sample number of transfers
No trade	1,200	1,200	1,200	4	2

#### Quarterly volume weighted average price (2009-2014)



**NOTE:** A dotted line is shown for quarters where no trade was reported. Data for Campaspe High Reliability was only collected for the first time in June 2012. To avoid reporting unrepresentative prices, High Reliability VWAP calculations exclude transfers at under \$500/ML or over \$5,000/ML. **SOURCE:** Victorian Water Register, 3<sup>rd</sup> October: http://waterregister.vic.gov.au/water-trading/water-share-trading

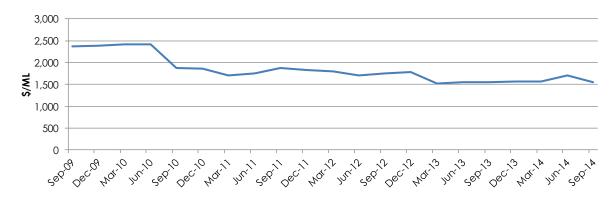
#### Water trading exchange prices

### SOUTH AUSTRALIAN MURRAY CLASS 3A

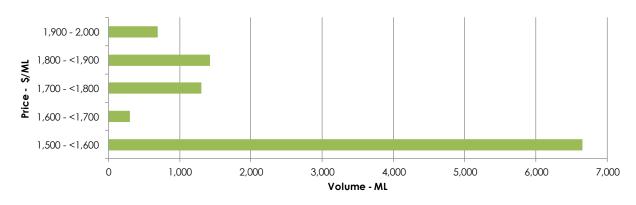
#### Water register prices

Volume we	September		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	quarter 2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
1,591	1,628	1,628	1,500	1,700	10,371	118

#### Quarterly volume weighted average price (2009-2014)



#### Water entitlement transfers – volume by price (September quarter 2014)



**NOTE:** To avoid reporting unrepresentative prices, High Reliability/Security VWAP calculations exclude transfers at under \$500/ML or over \$5,000/ML.

**SOURCE:** South Australian Water Register, 3<sup>rd</sup> October 2014 at:

https://www.waterconnect.sa.gov.au/Systems/WTR/Pages/default.aspx

#### Water trading exchange prices

Water exchanges September 2014 buyer bid price (\$/ML)	1,850
Water exchanges September 2014 seller offer price (\$/ML)	1,900

Note: Water exchange prices include allocation

**SOURCE:** Water exchange data were sourced on the 3<sup>rd</sup> of October from http://www.ruralcowater.com.au/

#### Water register prices

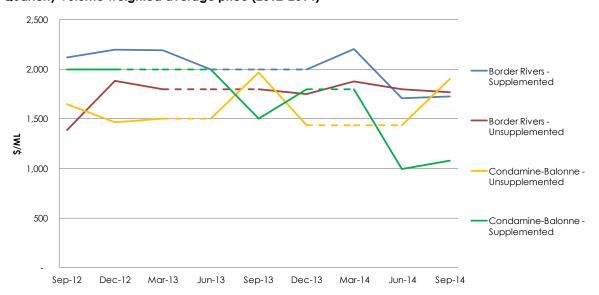
Water product	Volume v	veighted averag	ge price	quarter 2014 25th quarter 2014 quarter and 75th sample sam percentile \$/ML^ volume ML numb		September	
	Septembe r month 2014 \$/ML	September quarter 2014 \$/ML	2014-15 \$/ML			sample	quarter 2014 sample number of transfers
Border Rivers Supplemented	2,116	1,727	1,727	1,362	1,669	1,233	6
Border Rivers Unsupplemented^	1,750	1,770	1,770	1,750	1,800	1,486	2
Condamine- Balonne Supplemented^	No trade	1,042	1,042	1,041	2,000	2,518	3
Condamine- Balonne Unsupplemented^	No trade	1,901	1,901	1,450	2,000	1,079	3
Moonie Supplemented	No trade	No trade	No trade	No ti	rade	No trade	No trade
WPBN* Unsupplemented	No trade	No trade	No trade	No ti	rade	No trade	No trade

**NOTE:** DNRM report VWAPs for the Condamine Balonne and Border Rivers systems at the end of each month. Prices reported for financial year to date 2014-2015 are provided for supplemented and unsupplemented entitlements.

^: For systems where there are fewer than or equal to four transactions, the price range is reported instead of price quartiles.

\*: WPBN includes Bulloo, Nebine, Paroo, Upper Warrego (WE), Lower Warrego (WA & WB)

#### Quarterly volume weighted average price (2012-2014)



**NOTE:** A dotted line is shown for quarters where no trade was reported. Monthly data is available from July 2012 – September 2014. To avoid reporting unrepresentative prices, VWAP calculations exclude transfers at under \$500/ML or over \$5,000/ML. Monthly VWAPs for Condamine-Balonne Supplemented and Unsupplemented in Sep-13 Quarter and Jun-14 Quarter have been changed in accordance with a recent update of data supplied by DNRM. Previous data from DNRM for Condamine-Balonne Supplemented indicated a significant drop in price in the June 2014 Quarter that was based on a miscalculation of the weighted average.

**SOURCE:** Queensland Business and industry portal, 11th November 2014 at

http://www.business.qld.gov.au/industry/water/managing-accessing/accessing-water/national-water-compliance-framework

#### Water trading exchange prices

### OTHER MDB SYSTEMS

19

#### Other water markets

Water trading occurs in other irrigation areas in the Murray Darling Basin but not in sufficient volumes to be included in this report. Also, unregulated water sources have not been included in this report because of the complexity of these markets and the low volume of transfers that are independent of property sales.

#### Victoria

Water is traded in a number of other Victorian irrigation areas within the Victorian Murray Darling Basin including the Loddon and Broken rivers. These markets are not reported to the same level of detail due to the low number of transfers in these systems. No trades were reported for the Broken River for the September quarter 2014.

#### **Loddon High Reliability**

Volume we	September quarter		September	September		
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	2014 25th and 75th percentile \$/ML		quarter 2014 sample volume ML	quarter 2014 sample number of transfers
1,315	1,285	1,285	1,200	1,350	386	5

**SOURCE:** Victorian Water Register, 3<sup>rd</sup> October 2014 at http://waterregister.vic.gov.au/water-trading/water-share-trading/

#### NSW

Water is traded in a number of other NSW irrigation areas within the NSW Murray Darling Basin including the Lower Darling HS, the Warrego and Border Rivers. These systems are not included in the same detail in this report because the number of transfer of water entitlements recorded in these systems has been few. No share assignment transfers (71Q) and licence transfers (71M) were reported for the Border Rivers and Warrego systems for the September quarter 2014.

#### **Lower Darling High Security**

Volume we	eighted average (	price	September quarter	September	September
September month 2014 \$/ML	September quarter 2014 \$/ML	2014 -15 \$/ML	2014 range (Insufficient data for quartiles)	quarter 2014 sample volume ML	quarter 2014 sample number of transfers
No trade	1,544	1,544	1,544	1,056	4

**Note:** NSW 71Q register data only includes share assignment transfers (71Q). Data on licence transfers (71M) have been excluded due to high variability of data. VWAP of 71M data was \$1,600/ML based on two relevant trades. To avoid reporting unrepresentative prices, Lower Darling High Security VWAP calculations exclude transfers under \$500/ML or over \$5,000/ML.

**SOURCE:** NSW Water Register, 3rd October 2014 at:

http://registers.water.nsw.gov.au/wma/WaterShareIntraWSLocSearch.jsp?selectedRegister=WaterShare

# ARRANGEMENT FOR REPORTING SALES DATA BY STATE

#### NSW

- There are three agencies involved in water dealings:
  - NSW Office of Water
  - Land and Property Information (LPI)
  - State Water Corporation
- Water allocation assignment (or temporary trade) dealings under the Water Management Act 2000 in regulated and major inland groundwater systems must be lodged with State Water
- Water access licences are maintained on the Water Access Licence Register by LPI and trade applications lodged with LPI
- LPI data is automatically sent to the NSW Office of Water. The Office of Water does not verify
  the price recorded for each trade

#### **VICTORIA**

- In Victoria the Water Registrar is responsible for recording certain information about water share transactions, including transfers, mortgages, limited term transfers and discharges of mortgage, on the Water Register, and ensuring accuracy, reliability and accessibility of that information
- When an application to trade water allocation is made in Victoria an application form is
  required and must include the details of the water being traded (volume and total trade
  value), this information is then recorded on the Water Register with information available to the
  public in accordance with privacy laws

#### SOUTH AUSTRALIA

 Water Connect (Government of SA, Department of Environment, Water and Natural Resources) lists every approved water trade in the current water year. The information is updated on a daily basis

#### QUEENSLAND

- Trades must be reported to be issued with a trading certificate. This data is registered on the Water Allocations Register and managed in a separate part of the Department (ATS)
- The main gaps in data are due to incomplete reporting of price information by sellers. Trades reported at \$0/ML are excluded from calculations, however so-called 'love and affection' trades, sold for very low prices (e.g. \$1/ML), and other outlying data must be included in the final VWAP recorded in the Queensland register because the information has been provided. This may distort the final values shown but these extreme values are now excluded from the present report
- Water sold with land, where the value of water is not separated from the value of land, is not
  included in the final VWAP on the Queensland register
- Data has been reported monthly since July 2012