



Australian Government

Commonwealth Environmental Water Office

Goulburn Water Allocation Sale

Market Information

August 2018

Southern Connected Basin Market Information

Commonwealth Holdings

The Goulburn catchment is located in inland north-central Victoria. It includes trading zones '1A Greater Goulburn', '1B Boort' and '3 Lower Goulburn'. It borders the Victorian Murray catchment in the north and the Loddon and Campaspe catchments in the south. The Commonwealth currently holds 22 per cent of the high and low security water shares in the Goulburn system, across these three trading zones. Table 1 provides a breakdown of entitlements held by the Commonwealth as a proportion of the entitlements on issue in the Goulburn system

Table 1: Breakdown of regulated entitlements in the Goulburn catchment

Security Level	Entitlements on Issue (GL)	Commonwealth Holdings (GL)	% held by the Commonwealth
High Security	1,052	285	27%
Low Security	469	42	9%
TOTAL	1,521	328	22%

The Goulburn catchment forms part of the southern-connected Murray-Darling Basin system. The Commonwealth currently holds 18 per cent of the regulated entitlements on issue in the southern-connected Basin. Table 2 provides a breakdown of entitlements held by the Commonwealth as a proportion of the high, general and low security entitlements on issue in the connected system.

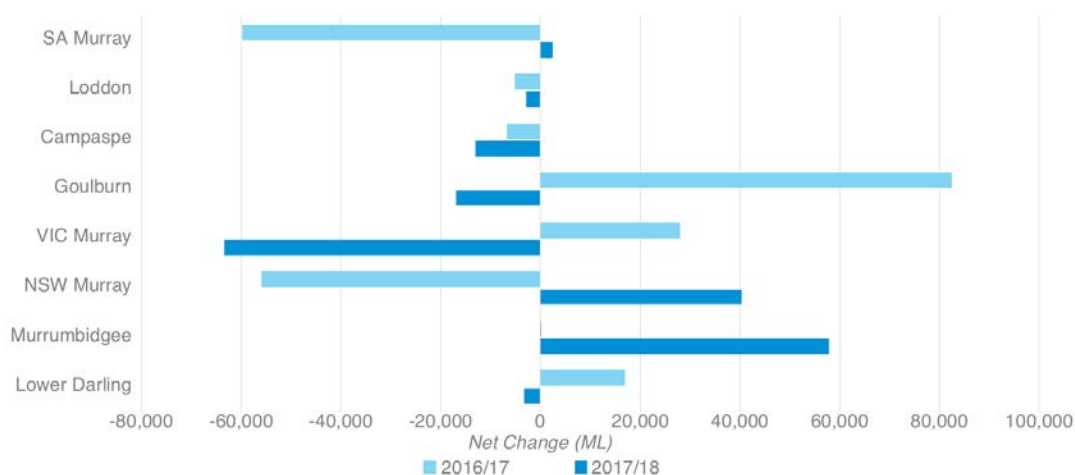
Table 2: Breakdown of regulated entitlements in the southern-connected Basin

Security Level	Entitlements on Issue (GL)	Commonwealth Holdings (GL)	% held by the Commonwealth
High Security/Reliability	4,204	840	20%
General Security/Low Reliability	4,459	739	17%
TOTAL	8,663	1,579	18%

Recent allocation market developments

During 2017-18, the Goulburn system became a net exporter of allocation into the southern-connected Basin (Figure 1). The capacity to trade allocation out of the Goulburn system into other southern-connected catchments is subject to an inter-valley trade (IVT) limit. As at 27 August 2018, the trade of allocation out of the Goulburn system was closed, due to a net IVT account balance of 236 GL. Allocation trade out of the system will open when the IVT account balance falls below 200 GL. The MDBA is currently calling on water from the Goulburn IVT account to meet demands downstream in the Murray system. Information regarding current opportunities for allocation trade is available at the Victorian water register website <http://waterregister.vic.gov.au/water-trading/allocation-trading>.

Figure 1: Net trading patterns in the southern-connected Basin, 2016-17 to 2017-18



During the last quarter of the 2017-18 season, the opening of the Goulburn IVT underpinned strong trading activity (refer Table 3). In the last quarter of the 2017-18 water year, forecast allocation outlooks for the 2018-19 season indicated a season with lower than average water availability. This expectation drove strong demand for carryover water. The start of 2018-19 has continued this upward trajectory in allocation prices, with a volume weighted average price (VWAP) in July of \$224 per ML and \$311.55 per ML (to date) in August.

Table 3: Allocation market activity in the Goulburn catchment – April to August 2018

	April 2018	May 2018	June 2018	July 2018	August 2018*
Trades	728	400	561	113	277
Volume (ML)	62,727	25,646	30,721	11,701	17,459
VWAP (\$/ML)	\$125.91	\$157.04	\$174.61	\$223.63	\$311.55
Value (\$)	\$7,898,120	\$4,027,389	\$5,364,292	\$2,616,736	\$5,439,293

* Up to and including 23 August 2018

In July and September, 29 GL of allocation water was traded in the Goulburn system for a total value of \$8.1 million. Figure 2 provides a summary of historical allocation trade volumes and prices for the Goulburn catchment from July 2013 to July 2018. Trade data indicates an upward trend in allocation prices since December 2017. Prices are expected to continue to be strong for the remainder of August and September, with spot prices in August as high as \$350-365 per ML.

Figure 2: Allocation Market Summary for the Goulburn Catchment, July 2013 to July 2018

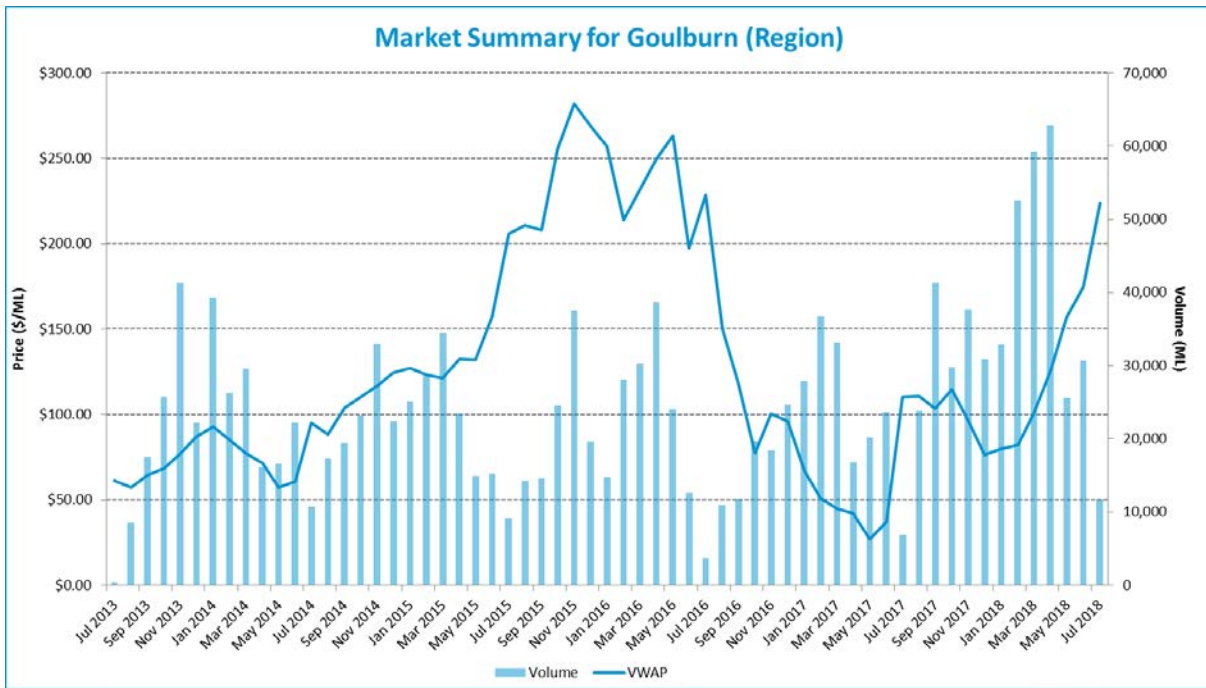
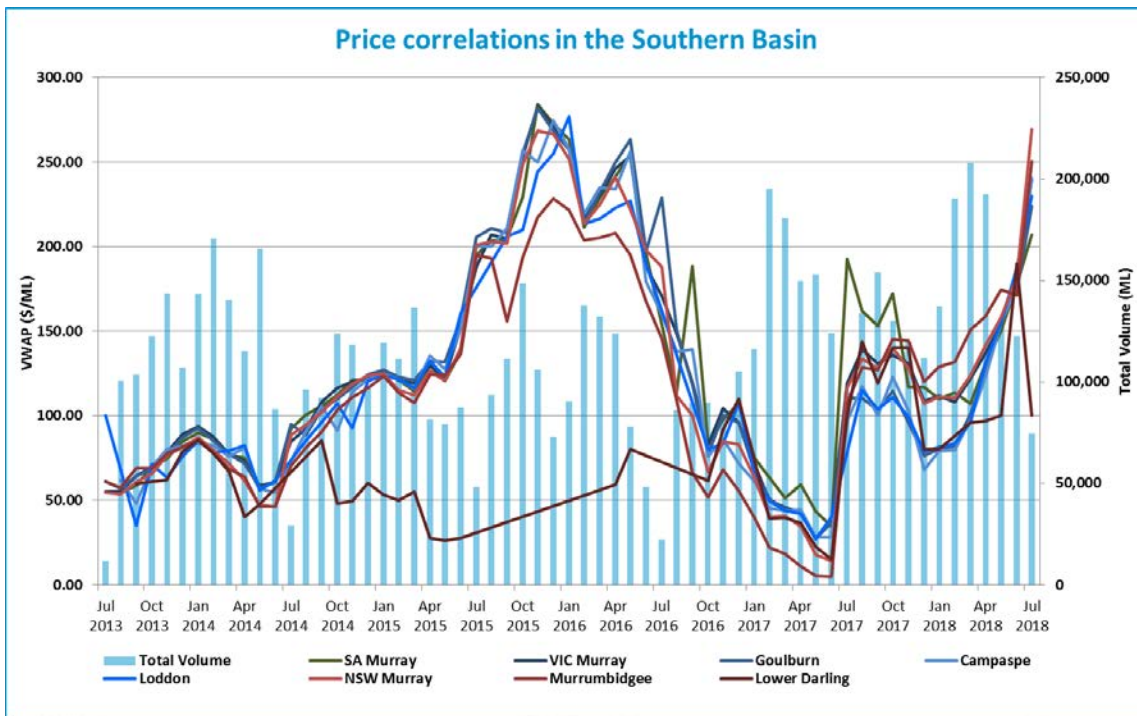


Figure 3 shows that water allocation prices across all southern-connected Basin catchments, excluding the Lower Darling, have trended upwards since December 2017. Allocation prices are currently above the long term average across the southern-connected Basin, reflecting forecast water availability and strong consumptive demands.

Figure 3: Price correlations in the Southern Basin, July 2013 to July 2018



Climate and catchment conditions

For Australia as a whole, rainfall in July was the driest since 2002, with below average rainfall recorded over all mainland Australia. Across the Basin, rainfall for Victoria and SA was below average to very much below average. NSW was mostly very much below average with patches of lowest on record rainfall across central and northern NSW Areas such as Parkes and Dubbo recorded their lowest July rainfall on record.

The Bureau of Meteorology reported the area-average rainfall for the Murray-Darling Basin in July was 68 per cent below the average, ranking July 2018 as the 12th driest out of 119 years of historical record.

As at 14 August, the Bureau of Meteorology was reporting a neutral El Niño–Southern Oscillation (ENSO) outlook. While the tropical Pacific Ocean has cooled in the past month, most international climate models forecast warming to resume in the coming weeks, with El Niño development possible in spring. Therefore, the Bureau's ENSO Outlook remains at El Niño WATCH, meaning there is approximately a 50 per cent chance of an El Niño forming in 2018 (double the normal probability).

Where a neutral ENSO phase has little impact on the Australian climate, an El Niño typically brings below average rainfall during winter and spring.

Dam storage levels

As at 31 July 2018, storage levels across the entire Murray-Darling Basin were at 11,467 GL, being an average of 51.2 per cent capacity. Southern Basin storages were at an average of 56.1 per cent capacity.

Dam storage levels for each catchment in the southern-connected Basin are presented in Table 4.

Table 4: Dam Storage levels (BOM), as at 31 July 2018

Southern MDB	
Region	Storage Level
Murrumbidgee	60%
Murray and Lower Darling	58%
Goulburn	52%
Campaspe	60%
Loddon	51%

Source: Bureau of Meteorology

Announced allocation

Table 5 summarises the seasonal allocations across the southern-connected Basin by water entitlement class, as at 27 August 2018.

Table 5: Seasonal allocations southern MDB, as at 27 August 2018

Region	High Security / High Reliability	General Security / Low Reliability
Lower Darling	100%	0%
Murrumbidgee	95%	6%
NSW Murray	97%	0%
VIC Murray	59%	0%
Goulburn	47%	0%
Campaspe	100%	0%
Loddon	47%	0%
Broken	1%	0%
SA Murray	100%	n/a

For further information

<http://waterregister.vic.gov.au/water-trading/allocation-trading>

<http://www.water.nsw.gov.au/water-licensing/registers>

<http://www.bom.gov.au/climate/enso/>