



# River Murray Weekly Report

For the week ending Wednesday, 17 June 2019

Trim Ref: D20/19580

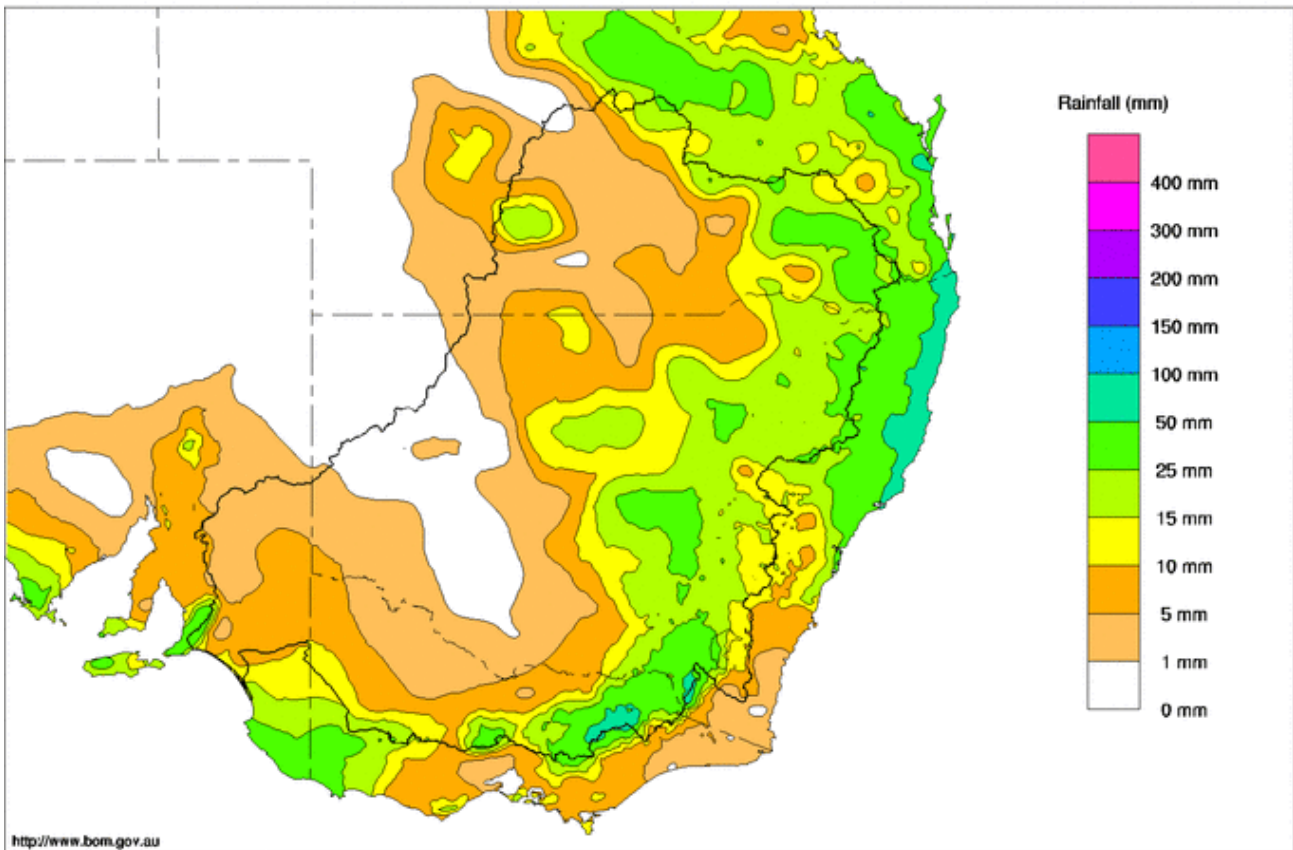
## Rainfall and inflows

Rainfall totals this week were highest across southern and eastern parts of the Murray-Darling Basin; however, for the west, only light rain was recorded, with some areas remaining dry (Map 1).

Precipitation across alpine areas in the south-east saw Falls Creek, Mount Buller and Thredbo record 67 mm, 100 mm and 56 mm respectively. Lower down, most catchments received between 15-50 mm. Inflows increased in response to this rain, most notably from the Ovens River. Looking ahead, a continuation of similar rainfall events in coming weeks is expected to provide sufficient flow to meet downstream demands with little if any additional storage releases required (above minimum rates) from either Hume or Dartmouth Dams.

The Bureau of Meteorology (BoM) is currently forecasting further rainfall over the southern Murray-Darling Basin in the [8-day rainfall outlook](#) that will either maintain, or potentially increase, inflows from their current rates.

Murray-Darling Rainfall Totals (mm) Week Ending 16th June 2020  
Australian Bureau of Meteorology



Map 1 - Murray-Darling Basin rainfall totals for week ending 17 June (Source: Bureau of Meteorology)

Specific information about flows at key locations can be found at the MDBA's [River Murray data](#) webpage. Up-to-date river data for sites in the upper Murray can also be found on BoM's [website](#) and in the Murray River Basin Daily River Report at the WaterNSW [website](#).



# River Murray Weekly Report

## River operations

- Minimum releases from Hume Dam continue as tributary inflows meet downstream requirements
- Elevated Goulburn system inflows persist following this week's rainfall
- Lake Victoria continues to rise as recent tributary inflows arrive and are stored.

## River operations and the COVID-19 virus

The MDBA is continuing to work with government partners and stakeholders during this challenging time. In response to the impact of COVID-19, the MDBA has enacted business continuity arrangements to ensure the continued operation of our business functions. River operations have been identified as a priority in this time as running the river is essential to supporting irrigation supply to [agricultural industries](#).

We hope all our community members remain safe at this time. We encourage all river users to evaluate plans against government advice, social distancing and travel, and to support actions to limit the spread of COVID-19.

## Water quality impacts

A number of amber alerts for **blue-green algae** remain current in the River Murray system. It is important that water users regularly keep up to date with algal alerts, notices and health warnings. This information is available through [Goulburn-Murray Water](#) and [WaterNSW](#).

## River operations

Over the past week, MDBA total active storage (Dartmouth, Hume and Lake Victoria) increased by 128 GL to 3,248 GL (39% capacity).

At **Dartmouth Reservoir**, the [storage](#) increased by 12 GL to 1,963 GL (51% capacity). The [release](#) from Dartmouth, measured at Colemans, has been targeting the minimum flow of 200 ML/day over the past week.

At **Hume Reservoir**, the [storage](#) increased by 69 GL to 963 GL (32% capacity). Downstream of Hume, tributary inflows have been sufficient to meet downstream flow requirements, which means that the release from Hume is continuing at the minimum release of 600 ML/day.



Photo 1 - A misty winter morning in the Basin near Canberra. (Image courtesy - MDBA)



# River Murray Weekly Report

At **Lake Mulwala**, the pool [level](#) is currently 124.83 m AHD, which is within the normal operating range between 124.6 and 124.9 m AHD. At **Yarrowonga Weir**, flows continued at 4,500 ML/day before increasing to 6,500 ML/day to manage the pool level ahead of forecast rainfall and possible tributary inflow upstream of the weir.

This week, flow through the **Edward River** remained around 850 ML/day, while flow through the **Gulpa Creek** offtake remained steady, averaging 160 ML/day. At Stevens Weir, the downstream flow averaged 870 ML/day and is expected to ease to around 780 ML/day. Flows into the Edward system (Photo 2) are currently fluctuating in response to Murray flow rates and are likely to increase following any rain and tributary inflows upstream.



Photo 2 - Edward River at Twin Rivers. (Image courtesy Digby Jacobs, MDBA)

Back on the River Murray, the flow at **Barmah** continued to recede from 4,000 ML/day to the current rate near 3,400 ML/day. Over the coming week, the flow is expected to begin rising again as higher releases arrive from Yarrowonga Weir. Inflows from the **Broken Creek**, measured at Rice's Weir, remained steady at around 50 ML/day.

On the **Goulburn River**, the flow measured at McCoys Bridge decreased from 7,300 to 3,500 ML/day. With the Waranga Basin now at its winter target level, all Goulburn tributary inflows to the river downstream of Eildon Reservoir will flow through to the Murray. Variations in flow will therefore reflect rainfall and streamflow responses in the Goulburn catchment, with an increase expected after further rain.

Delivery of Goulburn Valley IVT is not currently required to meet Murray system demands. Information regarding opportunities for allocation trade between the Goulburn and Murray Valleys is available at the Victorian water register [website](#).

[Diversions](#) to National Channel from the Torrumbarry Weir pool continued to remain steady this week, averaging around 350 ML/day. Whilst diversions for irrigation have now ceased, water is expected to continue to be diverted at about this rate over coming weeks to maintain baseflows in the Gunbower Creek. Having been lowered over the past few weeks, the **Torrumbarry Weir** [pool](#) has reached its target level of around 30 cm below the Full Supply Level (FSL) of 86.05 m AHD. The pool will now be varied between 20-30 cm below FSL over the coming months as part of the weir pool variability program. Varying pool levels assists with reducing the incidence of notching and can help



# River Murray Weekly Report

improve bank stability for riverbanks within the influence of the weir pool. The release from Torrumbarry Weir decreased over the week from around 11,200 ML/day to the current rate of 7,500 ML/day, influenced by receding flows from the Goulburn River. Flows are expected to begin rising again in the coming week.

Inflow from the **Murrumbidgee River**, measured at [Balranald](#), decreased from around 1,170 ML/day to near 900 ML/day. These elevated flows at Balranald have resulted from the drawing down of various weir pools in the Murrumbidgee system for winter maintenance purposes. It is expected that the flow will remain above the end of system target of 429 ML/day through June. The [Murrumbidgee IVT balance](#) is open for trade from the Murrumbidgee to the Murray (currently at 95GL), while trade from the Murray to the Murrumbidgee is closed.

At **Euston Weir**, the [weir pool level](#) is targeting around 30 cm below FSL and will vary within the range of 20-30 cm below FSL over the coming months as part of the weir pool variability program. The [downstream release](#) remains around 11,000 ML/day and is expected to increase towards 12,000 M/day over the coming week.

This week the **Menindee Lakes storage** increased by 3 GL to a volume of 480 GL (28% capacity). [WaterNSW](#) has been providing regular updates on the streamflow response in the Barwon-Darling system. Upstream on the Darling River, flows at Bourke have continued to recede slowly and are currently around 180 ML/day. Based on current upstream flow conditions, the Menindee Lakes are forecast to reach a peak of just over 480 GL during the coming week or two. WaterNSW has ceased the transfer of water from Lake Wetherell to Lake Pamamaroo (now storing around 319 GL) as the two lakes have reached parity in level. The downstream release, measured at Weir 32, averaged 250 ML/day over the past week. Despite the rainfall and streamflow responses during recent months, in many parts of NSW drought conditions persist with extensive [water restrictions](#) still in place. Links to drought services and assistance can be also accessed via the MDBA [drought webpage](#).

At **Wentworth Weir**, the weir pool level is being managed to a target level around FSL (30.80 m AHD) but is expected to vary 10 cm above and below this level as part of normal operations. River users are advised to adjust their activities, pumps and moorings to accommodate any changes in weir pool level. The downstream release decreased gradually this week, from around 11,000 to 9,700 ML/day and is expected to remain around this rate before increasing again over the coming week.

At **Lock 9**, the pool level remains surcharged to maximise the inflow of water into Lake Victoria. Around 8,400 ML/day is currently being diverted with all inlet gates to the lake fully open. At **Lake Victoria**, the storage volume increased by 46 GL to 516 GL (76% capacity). The storage will continue to rise during the remainder of June as the elevated river flows resulting from recent tributary inflows are captured and stored.

The [flow to South Australia](#) averaged around 3,300 ML/day this week, comprised of June Entitlement and small volumes of environmental water. For more information on South Australia's Entitlement flow, see the South Australian Department for Environment and Water's latest [River Murray flow report](#).

The **Lower Lakes** 5-day average water level is currently 0.63 m AHD. Releases have continued through fishways, with opportunistic releases through Tauwitchere barrage when tide and wind conditions permit. The variable barrage release strategy will continue to target the incoming high tide window in order to push fresh water along the Coorong. For information on barrage releases see the South Australian [Department for Environment and Water Weekly River Murray Flow Report](#).

**For media inquiries contact the Media Officer on 02 6279 0141**

ANDREW REYNOLDS  
Executive Director, River Management



Australian Government



# River Murray Weekly Report

## Water in Storage

Week ending Wednesday 17 Jun 2020

MDBA Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	Active Storage (GL)	Change in Total Storage for the Week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 856	451.12	1 963	51%	71	1 892	+12
Hume Reservoir	192.00	3 005	178.47	963	32%	23	940	+69
Lake Victoria	27.00	677	25.63	516	76%	100	416	+46
Menindee Lakes		1 731*		480	28%	(- -) #	0	+3
<b>Total</b>		<b>9 269</b>		<b>3 922</b>	<b>42%</b>	<b>- -</b>	<b>3 248</b>	<b>+130</b>
Total Active MDBA Storage							39% ^	

### Major State Storages

Burrinjuck Reservoir	1 026	429	42%	3	426	+3
Blowering Reservoir	1 631	832	51%	24	808	+6
Eildon Reservoir	3 334	1 536	46%	100	1 436	+33

\* Menindee surcharge capacity – 2050 GL

\*\* All Data is rounded to nearest GL \*\*

# NSW has sole access to water when the storage falls below 480 GL. MDBA regains access to water when the storage next reaches 640 GL.

^ % of total active MDBA storage

### Snowy Mountains Scheme

Snowy diversions for week ending 16 Jun 2020

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2020
Lake Eucumbene - Total	922	n/a	Snowy-Murray	+40	223
Snowy-Murray Component	436	n/a	Tooma-Tumut	+5	49
Target Storage	1 240		Net Diversion	35	173
			Murray 1 Release	+38	270

### Major Diversions from Murray and Lower Darling (GL) \*

New South Wales	This Week	From 1 July 2019	Victoria	This Week	From 1 July 2019
Murray Irrig. Ltd (Net)	-0.1	131	Yarrowonga Main Channel (net)	0	127
Wakool Sys Allowance	1.7	56	Torrumbarry System + Nyah (net)	0	289
Western Murray Irrigation	N/A	N/A	Sunraysia Pumped Districts	0.5	109
Licensed Pumps	0.8	133	Licensed pumps - GMW (Nyah+u/s)	2.1	31
Lower Darling	0.0	1	Licensed pumps - LMW	1.3	388
<b>TOTAL</b>	<b>2.4</b>	<b>321</b>	<b>TOTAL</b>	<b>3.9</b>	<b>944</b>

\* Figures are derived from actual and estimates where data is unavailable. Please note that not all data may have been available at the time of creating this report. \*\* All data above is rounded to nearest 100 ML for weekly data and nearest GL for cumulative data

### Flow to South Australia (GL)

\* Flow to SA will be greater than normal entitlement for this month due to environmental flows.

Entitlement this month	90.0 *	
Flow this week	22.7	(3 200 ML/day)
Flow so far this month	58.3	
Flow last month	123.7	

### Salinity (EC) (microSiemens/cm at 25° C)

	Current	Average over the last week	Average since 1 August 2019
Swan Hill	110	90	70
Euston	-	-	-
Red Cliffs	100	100	50
Merbein	100	100	100
Burtundy (Darling)	360	360	640
Lock 9	90	100	100
Lake Victoria	140	130	120
Berri	200	210	160
Waikerie	280	300	220
Morgan	310	300	220
Mannum	260	260	260
Murray Bridge	310	290	290
Milang (Lake Alex.)	1 020	1 000	900
Poltalloch (Lake Alex.)	700	650	800
Meningie (Lake Alb.)	1 760	1 810	1 770
Goolwa Barrages	5 640	5 000	2 990





## River Levels and Flows

Week ending Wednesday 17 Jun 2020

	Minor Flood Stage (m)	Gauge	Height	Flow (ML/day)	Trend	Average Flow this Week (ML/day)	Average Flow last Week (ML/day)
		local (m)	(m AHD)				
<b>River Murray</b>							
Khancoban	-	-	-	4 930	F	6 470	7 230
Jingellic	4.0	2.14	208.66	8 400	F	9 180	9 260
Tallandoon ( Mitta Mitta River )	4.2	1.67	218.56	1 190	F	900	790
Heywoods	5.5	1.48	155.11	600	S	600	600
Doctors Point	5.5	1.79	150.26	2 400	R	2 010	2 020
Albury	4.3	0.90	148.34	-	-	-	-
Corowa	4.6	0.65	126.67	1 840	F	1 930	2 050
Yarrowonga Weir (d/s)	6.4	1.11	116.15	6 490	R	4 960	4 820
Tocumwal	6.4	1.39	105.23	4 620	R	4 350	4 670
Torrumbarry Weir (d/s)	7.3	2.50	81.05	7 370	F	9 120	7 330
Swan Hill	4.5	1.77	64.69	9 900	F	9 780	6 960
Wakool Junction	8.8	3.83	52.95	12 000	S	10 590	10 200
Euston Weir (d/s)	9.1	2.14	43.98	12 420	R	11 180	11 630
Mildura Weir (d/s)	-	-	-	10 430	F	10 650	11 740
Wentworth Weir (d/s)	7.3	3.16	27.92	9 900	S	10 060	11 400
Rufus Junction	-	2.76	19.69	2 660	F	2 770	3 040
Blanchetown (Lock 1 d/s)	-	0.58	-	2 790	F	2 720	2 860
<b>Tributaries</b>							
Kiewa at Bandiana	2.8	2.13	155.36	2 230	R	1 590	1 520
Ovens at Wangaratta	11.9	9.53	147.21	5 140	R	3 140	3 110
Goulburn at McCoys Bridge	9.0	2.78	94.20	3 410	F	4 110	5 170
Edward at Stevens Weir (d/s)	5.5	0.85	80.62	550	F	840	860
Edward at Liewah	-	1.71	57.09	1 030	F	1 210	1 890
Wakool at Stoney Crossing	-	1.53	55.02	730	F	820	970
Murrumbidgee at Balranald	5.0	1.41	57.37	990	R	1 030	1 010
Barwon at Mungindi	6.1	3.23	-	150	R	110	90
Darling at Bourke	9.0	4.02	-	160	F	200	350
Darling at Burtundy Rocks	-	0.73	-	170	S	170	160

Natural Inflow to Hume	7 110	4 700
------------------------	-------	-------

(i.e. Pre Dartmouth &amp; Snowy Mountains scheme)

## Weirs and Locks Pool levels above or below Full Supply Level (FSL)

Murray	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-0.10	-	No. 7 Rufus River	22.10	-0.36	+0.46
No. 26 Torrumbarry	86.05	-0.28	-	No. 6 Murtho	19.25	+0.01	+0.02
No. 15 Euston	47.60	-0.24	-	No. 5 Renmark	16.30	+0.06	+0.21
No. 11 Mildura	34.40	-0.02	+0.29	No. 4 Bookpurnong	13.20	+0.15	+0.40
No. 10 Wentworth	30.80	+0.00	+0.52	No. 3 Overland Corner	9.80	+0.17	+0.26
No. 9 Kulnine	27.40	+0.11	-0.90	No. 2 Waikerie	6.10	+0.16	+0.20
No. 8 Wangumma	24.60	-0.90	-0.32	No. 1 Blanchetown	3.20	+0.14	-0.17

## Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.63
--	------

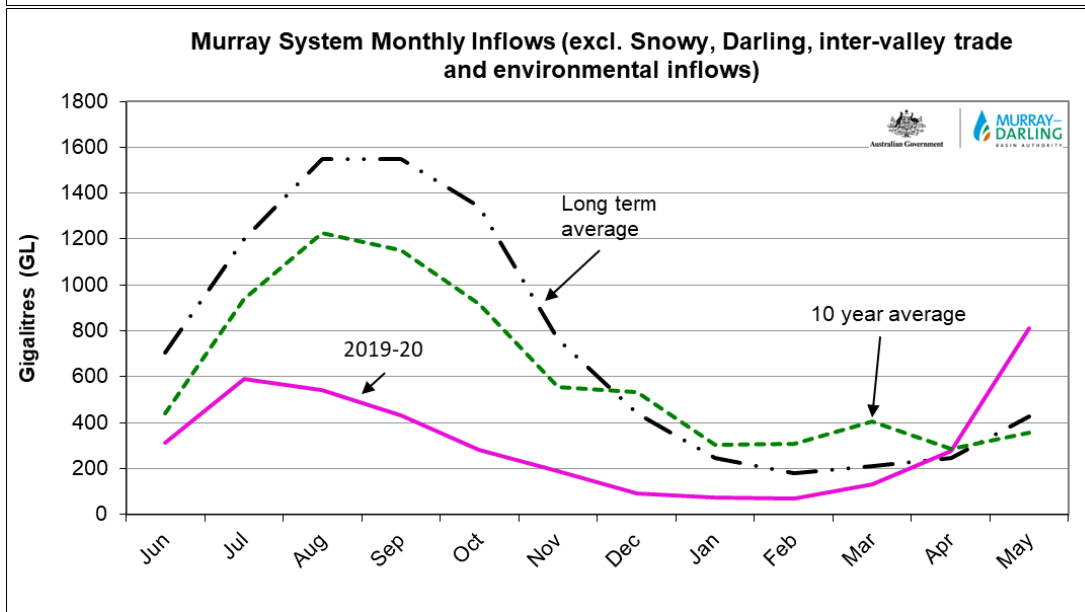
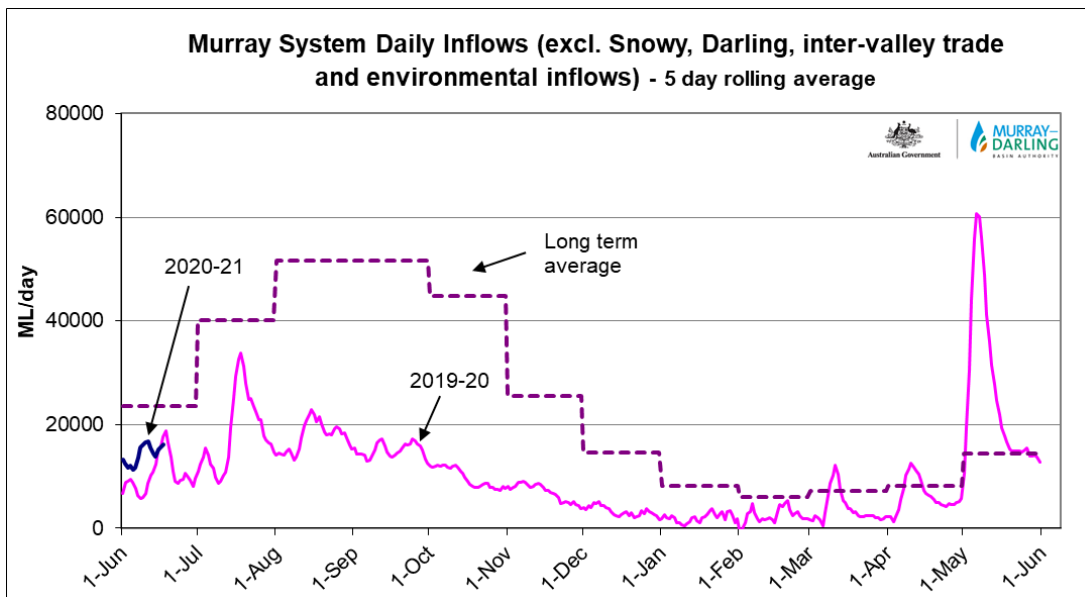
## Barrages

## Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.68	All closed	-	Closed	Open	-
Mundoo	26 openings	0.64	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	All closed	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwichee	322 gates	0.66	2	Open	Open	Open	-

AHD = Level relative to Australian Height Datum, i.e. height above sea level





State Allocations (as at 17 Jun 2020)

NSW - Murray Valley

High security	97%
General security	3%

Victorian - Murray Valley

High reliability	66%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	11%

Victorian - Goulburn Valley

High reliability	80%
Low reliability	0%

NSW - Lower Darling

High security	100%
General security	30%

South Australia - Murray Valley

High security	100%
---------------	------

NSW : <https://www.industry.nsw.gov.au/water/allocations-availability/allocations/summary>

VIC : <http://nvrn.net.au/seasonal-determinations/current>

SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

