



River Murray Weekly Report

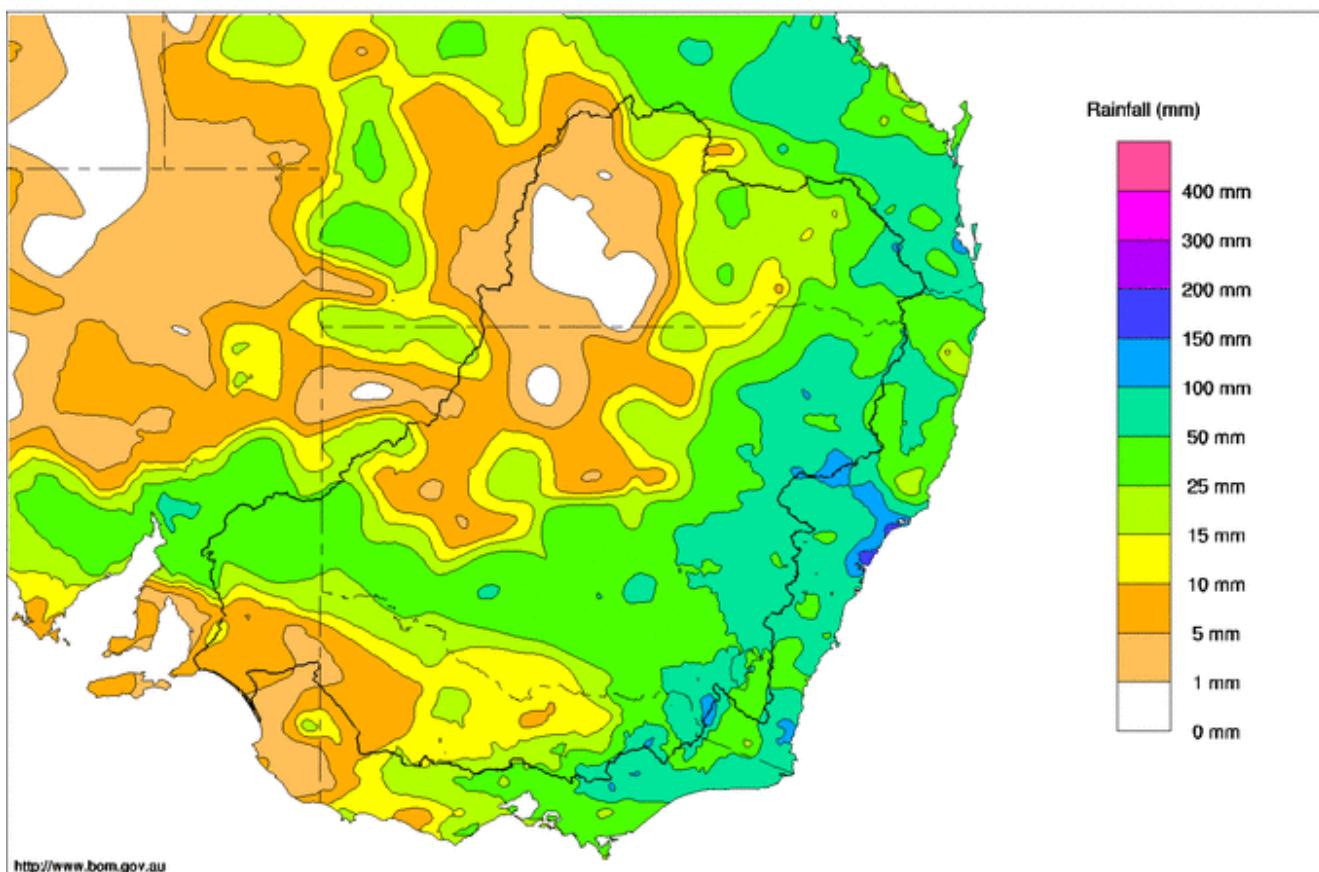
For the week ending Wednesday, 28 October 2020

Trim Ref: D20/44441

Rainfall and inflows

Rainfall was widespread across most of the Murray-Darling Basin this week, with highest totals recorded across the Great Dividing Range (Map 1). In New South Wales, Tumbarumba recorded 89 mm in the upper Murray catchment and in the Riverina, Coleambally recorded 42 mm. In Victoria, Lake Buffalo recorded 47 mm in the Ovens catchment and further west in the lower Murray River, Mildura recorded 23 mm.

Murray-Darling Rainfall Totals (mm) Week Ending 28th October 2020
Australian Bureau of Meteorology



© Commonwealth of Australia 2020, Bureau of Meteorology

Issued: 28/10/2020

Map 1 - Murray-Darling Basin rainfall totals for week ending 28 October 2020 (Source: Bureau of Meteorology)

This week's rainfall produced a good stream flow response in the upper Murray River upstream of Hume Dam, where Jingellic reached a peak flow of 25,500 ML/day. In the upper Mitta Mitta, Kiewa and Ovens Rivers the stream flow responses were much less than the previous week. On the Kiewa River, the flow at Bandiana peaked at around 4,000 ML/day with the river remaining above the Minor Flood level until the end of this week. On the Ovens River, rainfall was sufficient to hold the flow at Peechelba around 10,000 ML/day before receding. Further 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](#).

The Bureau of Meteorology's (BoM) current [8 day](#) rainfall forecast shows moderate rainfall continuing in the coming week.



River Murray Weekly Report

River operations

- Hume dam releases increased to meet Yarrawonga environmental target flow
- Water for the environment supporting Murray Cod outcomes in the Murray and Lower Darling
- Lake Victoria storage forecast to increase as tributary inflows downstream of Hume are re-regulated

Water quality impacts

Amber alerts for **blue-green algae** remain current in the River Murray system for the Gulpa Creek at Mathoura, the Edward River at Old Morago, River Murray at Tooleybuc, Buronga and Lock 8. An Amber alert is now also in place at Picnic Point, Barham and Murray Downs on the Murray. 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](#).

Following the Bureau of Metrology's [declaration of La Niña](#) and continued [wet rainfall outlook](#) across south eastern Australia, Murray Darling Basin communities should be aware there is a significant risk of hypoxic blackwater events occurring particularly in New South Wales. After three hot and dry years, floodplains have a high load of leaf litter and other organic material. La Niña conditions in spring increase the risk of heavy rain and flooding, which can wash organic matter into waterways and lead to hypoxic blackwater events. More information is provided in a [MDBA and WaterNSW joint media release](#).

River operations

Over the past week, MDBA total active storage increased by 140 GL to 5,123 GL (61% capacity).

At **Dartmouth Reservoir**, the [storage](#) level increased by 32 GL to 2,307 GL (60% capacity). The release, measured at Colemans, continued to target the minimum flow rate of 200 ML/day.

At **Hume Reservoir** the [storage](#) level increased by 119 GL to 2,367 GL (80% capacity). Releases from Hume reduced throughout the week to 600 ML/day (minimum release) with forecast heavy rainfall. With a limited tributary response observed after rainfall, the Hume release has increased again to the current rate of 6,000 ML/day. Currently, the Hume release above 600 ML/day is [water](#) for the environment, released to help meet a target flow rate downstream at Yarrawonga Weir. The release is expected to increase further in coming days depending on further rainfall forecast.

At **Lake Mulwala**, the pool [level](#) is 124.73 m AHD and within the normal operating range of between 124.6 and 124.9 m AHD. Diversion at the major irrigation off-takes reduced this week in response to rainfall and have increased again. Diversion to Mulwala Canal is currently 1,200 ML/day and on the Victorian side, about 600 ML/day is being diverted into Yarrawonga Main Channel. Without significant rainfall forecast, diversions are expected to continue at or above these rates.

The **Yarrawonga Weir release** has continued this week at 15,000 ML/day. The release has been met by a combination of tributary inflows from the **Ovens River** (Wangaratta peaked at 14,000 ML/day) and **Kiewa River** (Bandiana peaked at 4,900 ML/day), and **environmental water** released from Hume [on behalf of environmental water holders](#). The target release of 15,000 ML/day will continue over coming weeks to provide water levels that support the Murray Cod nesting season, while also increasing lateral connectivity between the River Murray and the **Barmah—Millewa Forest**. This greater connectivity has been enabled by the opening of selected regulators in the forest. This helps promote increased productivity in the river and supports plants and animals in the forest. All actions associated with water for the environment are tracked and water usage debited from environmental water holder accounts.

Should rainfall produce significant stream flows in the Ovens and Kiewa Rivers, the flow downstream of Yarrawonga may return above 15,000 ML/day. BoM produce 7-day stream flow forecasts for a number of tributaries including the Ovens and Kiewa Rivers and these are available on their [website](#).



River Murray Weekly Report

This week flow through the **Edward River Offtake** averaged around 1,550 ML/day, while flow through the **Gulpa Creek Offtake** was increased to around 700 ML/day to help fill wetlands adjacent to the creek. As additional water moves through Millewa forest and into the Edward River the release from Stevens Weir increased from 1,800 to 2,400 ML/day and is expected to remain around this rate, depending on upstream irrigation demands.

On the **Goulburn River**, the flow measured at [McCoys Bridge](#) gradually reduced this week from 6,000 ML/day and is currently near 3,250 ML/day. The majority of this flow is comprised of water for the environment while the remainder is from recent rainfall and will be used to meet downstream demands along the Murray or be re-regulated in Lake Victoria. 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 reduced to 650 ML/day with rainfall and is expected to increase this week towards 1,200 ML/day. A portion of this flow is being used to maintain baseflows in the Gunbower Creek with the aim of providing increased habitat for native fish and other aquatic animals over the spring period. Flow in Gunbower Creek returns to the River Murray via Koondrook Spillway, downstream of Torrumbarry Weir near Barham. This week the [release downstream](#) of Torrumbarry Weir averaged around 12,000 ML/day.

Inflow from the **Murrumbidgee River**, measured at [Balranald](#), averaged around 1,200 ML/day. Flows are expected to increase gradually over the coming weeks with higher tributary flows in the lower Murrumbidgee River from recent rainfall. The [Murrumbidgee IVT balance](#) is open for trade from the Murray to the Murrumbidgee (102 GL) but remains closed for trade from the Murrumbidgee to the Murray.



Photo 1 – Murrumbidgee River at Gundagai (photo courtesy: Aaron Thomson)

At **Euston Weir**, the [weir pool level](#) is at FSL. The [downstream release](#) increased to 14,800 ML/day and expected to average around this rate in the coming week.



River Murray Weekly Report

Menindee Lakes storage eased this week to around 451 GL (26% capacity). The downstream release, measured at Weir 32, remains near 400 ML/day, with small releases of water for the environment continuing to help boost the rate above the normal minimum target. These flows aim to improve the condition of the lower Darling and help Murray Cod breed this spring. For more information refer to the [Commonwealth Environmental Water Office](#) and [NSW Department of Planning, Industry and Environment](#). Some [water restrictions](#) remain current in NSW. Links to drought services and assistance can be accessed via the MDBA [drought webpage](#).

At **Wentworth Weir**, the weir pool level is being managed at around FSL. The downstream flow increased this week from 10,800 ML/day to the current rate near 14,200 ML/day and is expected to remain around this rate for the coming week.

Downstream at **Lock 9, Lock 8 and Lock 7** weir pools continue to vary near FSL, within their normal operating range.

The [storage](#) level at **Lake Victoria** fell this week by 8 GL to 620 GL (92% capacity) as releases were made to deliver the required flow to South Australia. The volume stored in Lake Victoria is forecast to start to rise again over the coming week as recent inflows from tributaries downstream of Hume arrive and are captured, contributing to improved water availability for all water entitlement holders.

As reported in last week's River Murray weekly report, updated forecasts continue to indicate that all flows arriving at Lake Victoria in excess of South Australian requirements can be captured and re-regulated into Lake Victoria. The MDBA continues to monitor system flows and demand conditions closely and will keep readers up to date on the impact of any future rain and the potential for renewed unregulated flows. We encourage irrigators to stay in touch with their water resource manager for any updates on the potential availability of access to supplementary water licences. For a description on the current flow conditions within the River Murray System, please listen to this [recent interview](#) on the MDBA's twitter.

The [flow](#) to **South Australia** averaged around 11,900 ML/day and includes the October South Australian monthly Entitlement plus water for the environment and traded volumes. Over the coming days the flow is expected to reduce to around 10,000 ML/day.

The **Lower Lakes** 5-day average water level is 0.84 m AHD. Increased barrage releases will continue to be made when conditions allow to push fresh water into the Coorong. For information on barrage releases and South Australia's Entitlement flow, 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 28 Oct 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	458.62	2 307	60%	71	2 236	+32
Hume Reservoir	192.00	3 005	188.73	2 390	80%	23	2 367	+119
Lake Victoria	27.00	677	26.53	620	92%	100	520	-3
Menindee Lakes		1 731*		451	26%	(- -) #	0	-8
Total		9 269		5 768	62%	- -	5 123	+140
Total Active MDBA Storage							61% ^	

Major State Storages

Burrinjuck Reservoir	1 026	844	82%	3	841	+29
Blowering Reservoir	1 631	1 372	84%	24	1 348	+27
Eildon Reservoir	3 334	2 272	68%	100	2 172	+74

* 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 27 Oct 2020

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2020
Lake Eucumbene - Total	1 364	n/a	Snowy-Murray	+12	450
Snowy-Murray Component	644	n/a	Tooma-Tumut	+11	182
Target Storage	1 400		Net Diversion	1	268
			Murray 1 Release	+22	663

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2020	Victoria	This Week	From 1 July 2020
Murray Irrig. Ltd (Net)	10.0	187	Yarrowonga Main Channel (net)	2.6	38
Wakool Sys Allowance	1.4	32	Torrumbarry System + Nyah (net)	2.7	73
Western Murray Irrigation	0.1	3	Sunraysia Pumped Districts	0.5	14
Licensed Pumps	2.5	55	Licensed pumps - GMW (Nyah+u/s)	0.3	4
Lower Darling	0.0	0	Licensed pumps - LMW	5	62
TOTAL	14.0	277	TOTAL	11.1	191

* 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	170.0 *	
Flow this week	83.4	(11 900 ML/day)
Flow so far this month	284.0	
Flow last month	274.0	

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

	Current	Average over the last week	Average since 1 August 2020
Swan Hill	120	110	120
Euston	-	-	-
Red Cliffs	120	130	140
Merbein	130	150	170
Burtundy (Darling)	370	380	320
Lock 9	170	160	140
Lake Victoria	160	140	120
Berri	180	180	160
Waikerie	220	220	200
Morgan	250	230	210
Mannum	220	220	220
Murray Bridge	220	220	240
Milang (Lake Alex.)	730	770	840
Poltalloch (Lake Alex.)	560	540	480
Meningie (Lake Alb.)	1 520	1 590	1 660
Goolwa Barrages	960	900	1 350

**River Levels and Flows****Week ending Wednesday 28 Oct 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)				
River Murray							
Khancoban	-	-	-	5 760	F	5 440	6 180
Jingellic	4.0	2.80	209.32	14 980	F	16 390	13 290
Tallandoon (Mitta Mitta River)	4.2	1.79	218.68	1 530	F	1 670	1 620
Heywoods	5.5	2.34	155.97	6 010	R	2 680	3 400
Doctors Point	5.5	2.53	151.00	9 580	R	6 670	7 500
Albury	4.3	1.53	148.97	-	-	-	-
Corowa	4.6	1.83	127.85	7 340	R	6 210	6 170
Yarrowonga Weir (d/s)	6.4	2.26	117.30	15 090	S	15 120	14 840
Tocumwal	6.4	2.86	106.70	15 190	S	15 110	14 110
Torrumbarry Weir (d/s)	7.3	3.71	82.25	12 170	F	12 090	12 650
Swan Hill	4.5	2.24	65.16	12 890	R	12 800	12 350
Wakool Junction	8.8	4.13	53.25	13 600	S	13 870	11 920
Euston Weir (d/s)	9.1	2.43	44.27	14 510	F	14 390	11 160
Mildura Weir (d/s)	-	-	-	14 600	F	13 270	8 510
Wentworth Weir (d/s)	7.3	3.35	28.11	14 160	R	12 870	7 900
Rufus Junction	-	4.10	21.03	10 580	F	10 930	7 920
Blanchetown (Lock 1 d/s)	-	-	-	11 200	R	9 850	6 560
Tributaries							
Kiewa at Bandiana	2.8	2.47	155.70	2 870	F	3 590	3 840
Ovens at Wangaratta	11.9	10.10	147.78	7 170	F	8 640	10 510
Goulburn at McCoys Bridge	9.0	2.70	94.12	3 250	F	4 650	6 870
Edward at Stevens Weir (d/s)	5.5	2.31	82.09	2 490	F	2 190	1 420
Edward at Liewah	-	2.09	57.47	1 380	R	1 080	1 060
Wakool at Stoney Crossing	-	1.46	54.95	570	F	540	460
Murrumbidgee at Balranald	5.0	1.56	57.52	1 140	R	1 200	1 350
Barwon at Mungindi	6.1	3.12	-	0	F	20	70
Darling at Bourke	9.0	4.00	-	60	F	140	240
Darling at Burtundy Rocks	-	0.78	-	280	R	260	240

Natural Inflow to Hume	23 710	20 500
------------------------	--------	--------

(i.e. Pre Dartmouth & 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	-0.17	-	No. 7 Rufus River	22.10	+0.12	+1.79
No. 26 Torrumbarry	86.05	-0.00	-	No. 6 Murtho	19.25	+0.09	-25.30
No. 15 Euston	47.60	-0.02	-	No. 5 Renmark	16.30	+0.25	-22.20
No. 11 Mildura	34.40	+0.04	+0.56	No. 4 Bookpurnong	13.20	-22.20	-18.80
No. 10 Wentworth	30.80	-39.80	+0.71	No. 3 Overland Corner	9.80	-18.80	-15.10
No. 9 Kulnine	27.40	+0.03	+0.32	No. 2 Waikerie	6.10	+0.20	-12.20
No. 8 Wangumma	24.60	+0.09	+0.52	No. 1 Blanchetown	3.20	+0.15	-9.75

Lower Lakes FSL = 0.75 m AHD

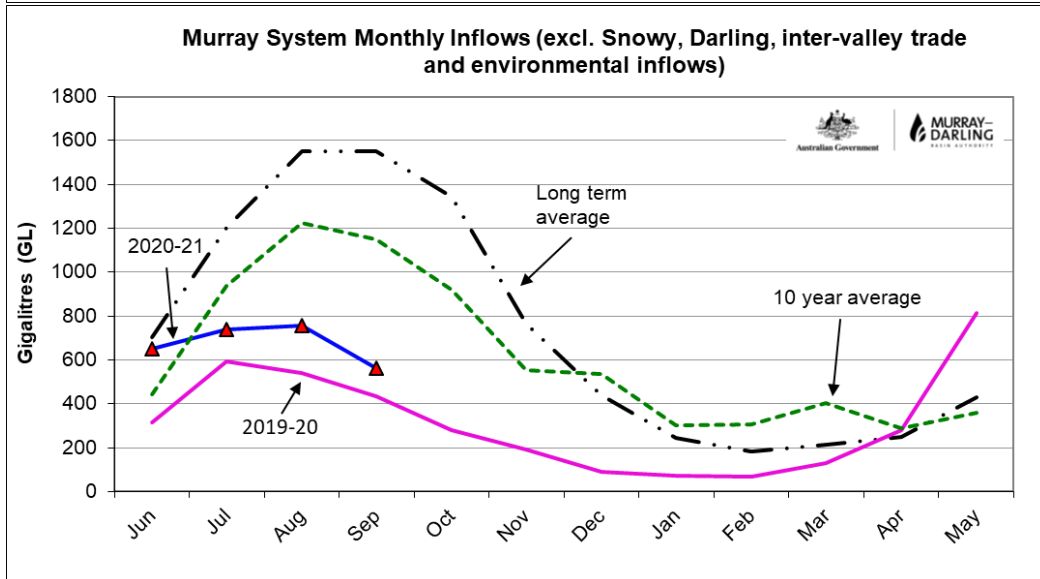
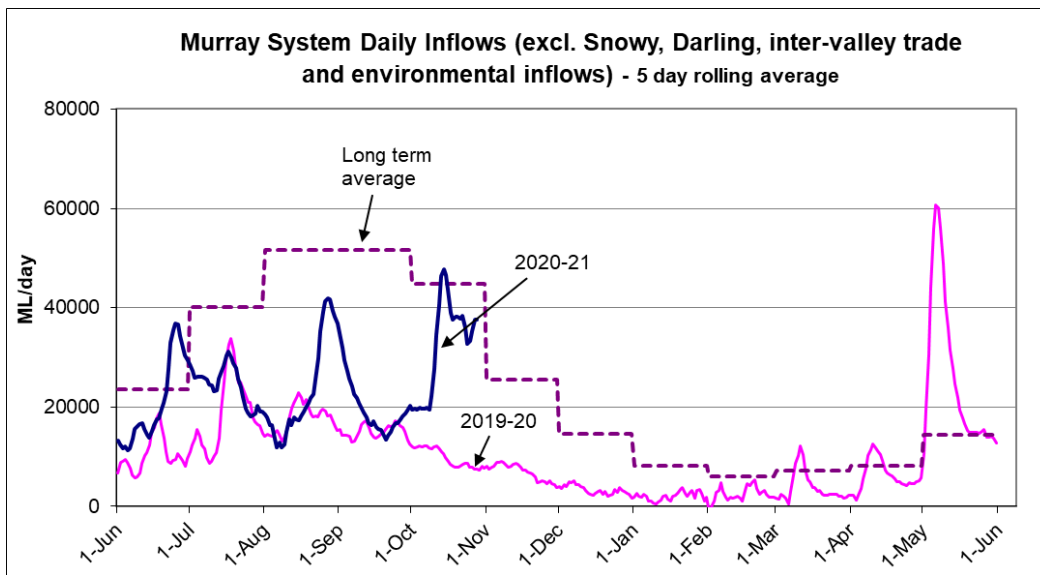
Lake Alexandrina average level for the past 5 days (m AHD)	0.84
--	------

Barrages**Fishways at Barrages**

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.83	3	-	Open	Open	-
Mundoo	26 openings	0.81	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	1	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwichee	322 gates	0.82	10	Open	Closed	Open	-

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





State Allocations (as at 28 Oct 2020)

NSW - Murray Valley

High security	97%
General security	26%

Victorian - Murray Valley

High reliability	55%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	54%

Victorian - Goulburn Valley

High reliability	77%
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 : <https://www.environment.sa.gov.au/topics/river-murray/water-allocations-and-announcements>

