



RIVER MURRAY WEEKLY REPORT

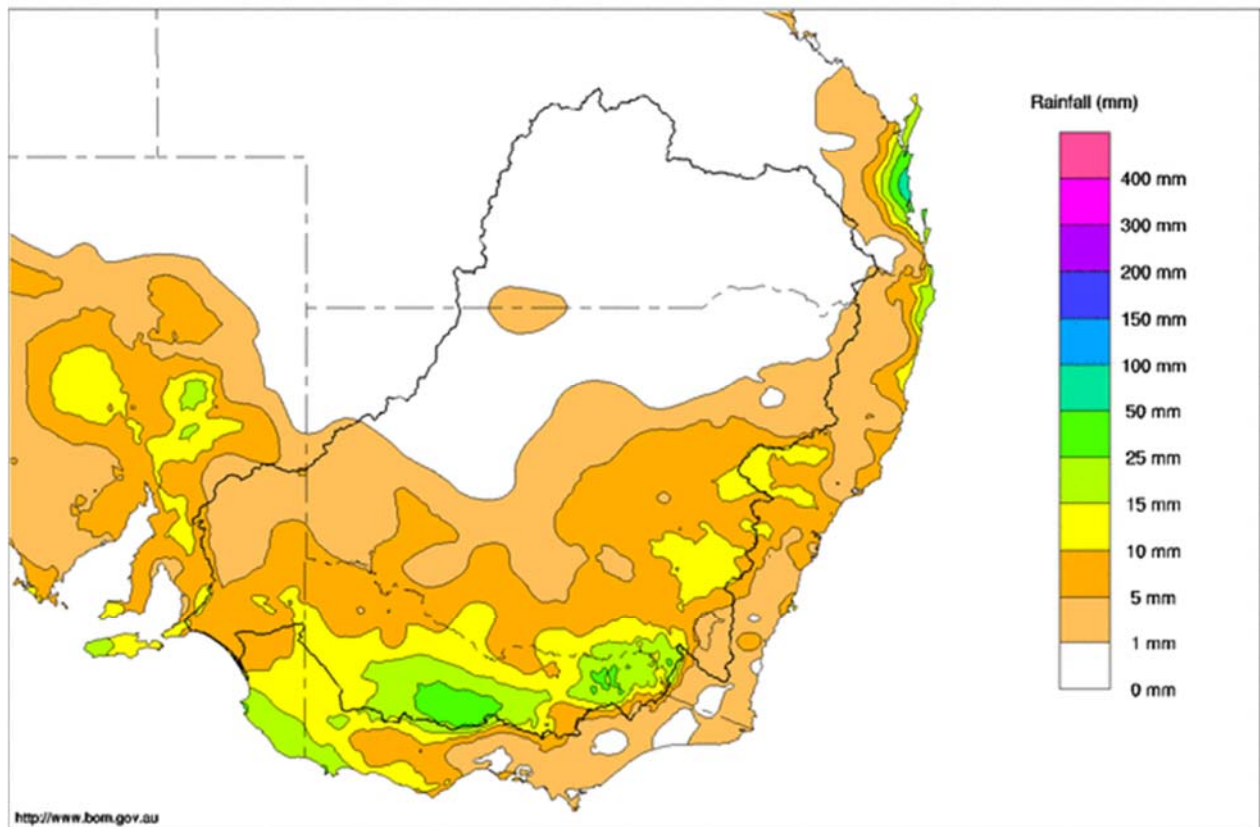
FOR THE WEEK ENDING WEDNESDAY, 30 MAY 2018

Trim Ref: D18/27537

Rainfall and inflows

The week ending the 30th May 2018 brought some welcome rainfall to the southern Murray-Darling Basin. Weekly rainfall totals exceeding 10mm were mostly confined to northern Victoria, the Victorian Alps and south eastern New South Wales (Map 1). The highest Victorian rainfall totals were 20mm at Mount Buffalo, 29mm at Mount Wombat and 25mm at Strathfieldsaye. In New South Wales rainfall totalling 21mm was recorded at Thredbo and 13mm in the Perisher Valley.

Murray-Darling Rainfall Totals (mm) Week Ending 30th May 2018
Australian Bureau of Meteorology



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

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Issued: 30/05/2018

Map 1 - Murray-Darling Basin rainfall map week ending 30 May 2018 (Source: Bureau of Meteorology).

Streamflow in the Upper Murray tributaries continued to recede for most of the week before increasing following rainfall on the 29th May. Flow in the upper Mitta-Mitta River at Hinnomunjie Bridge receded from 370 ML/day to 310 ML/day before increasing to the current flow of 470 ML/day. On the upper Murray, the flow at Biggara receded from 310 ML/day to 280 ML/day before increasing to the current flow of around 360 ML/day. Downstream of Hume Dam, inflows from the Kiewa River, measured at Bandiana, receded from 900 ML/day to the current flow of 480 ML/day. Inflows from the Ovens River, measured at Wangaratta, receded from 420 ML/day to 365 ML/day before increasing to the current flow of 380 ML/day.



River operations

- MDBA active storage increasing
- Lake Mulwala being lowered to help manage invasive aquatic weed *Egeria densa*
- Flow pulse on the Mitta Mitta River commencing on Saturday 2nd June

MDBA active storage increased by 77 GL this week to 4,607 GL (55% capacity).

The storage volume at **Dartmouth Reservoir** increased by 1 GL to 3,415 GL (89% capacity). The release, measured at the Colemans gauge, is currently targeting 500 ML/day. A flow pulse on the Mitta Mitta River is planned to commence this Saturday 2nd June. The pulse will peak briefly around 3,500 ML/day at Colemans Gauge on Saturday afternoon. Flows will gradually return to minimum flows of 500 ML/day by the middle of the week. The pulse will benefit the water quality in the Mitta Mitta River downstream of Dartmouth Dam. For more information on the flow pulse visit <https://www.mdba.gov.au/river-murray-system/flow-advice>.

At **Hume Reservoir**, the storage volume increased by 51 GL to 1,091 GL (36% capacity). The release from Hume is currently targeting 1,200 ML/day. The release is forecast to increase to around 3,000 ML/day over coming days.

Downstream at **Lake Mulwala**, the lake level is currently 121.7 mAHD (3 metres below the normal operating level of 124.7 m AHD). [Lowering of the lake level](#) will continue until the level reaches 120.2 mAHD (4.5 m below normal operating level) in about a week. The lake will remain at this level until mid-July to manage the invasive water weed *Egeria densa*. Lowering the water level and subjecting the exposed weed to drying and frost has proven to be an effective method for controlling its abundance within the weir pool. The draw down also provides an opportunity to undertake works on the lake foreshore.

The release from **Yarrowonga Weir** decreased this week from 7,500 ML/day to the current release of 5,000 ML/day. The release is forecast to remain at this rate over the coming week.

Flow rates through the Edward and Gulpa Creek offtakes continue to vary as required to maintain river levels below 2.6 m at Picnic Point. Flows are currently 1,420 ML/day and 220 ML/day (respectively). In the coming weeks, the offtake gates are expected to be raised clear of the water. Without regulation, the inflows to the Edward-Wakool system can be expected to fluctuate over winter in response to changes in river level downstream of Yarrowonga Weir.

With water delivery finished for the season, [WaterNSW](#) is drawing down **Stevens Weir** pool to allow maintenance works on the weir and at the off-take regulators. The release downstream of Steven's Weir averaged 1,680 ML/day for the week.



Photo 1 – Recently completed erosion protection works on the River Murray just upstream of Bundalong (photo courtesy Hugo Bowman, MDBA)

Inter Valley Transfers (IVT) continue to be delivered from the **Goulburn River** to the Murray to help meet downstream requirements. The flow, measured at McCoys Bridge, increased from around 900 ML/day to the current flow of 1,580 ML/day. The flow at McCoys is forecast to recede to 940 ML/day over the coming week as Murray system demands ease thus reducing the call on IVT from the Goulburn. Information regarding current opportunities for allocation trade between the Goulburn and Murray valleys is available at the [Victorian water register website](#).

At **Torrumbarry Weir**, the pool level has lowered to 85.75 mAHD (30 cm below full supply level (FSL)). The weir pool will fluctuate around this level over coming weeks and will be raised back to FSL before the start of the irrigation season. This action is aimed at helping to improve river bank stability and environmental outcomes within the influence of the weir pool. More information is available at the [MDBA website](#). The downstream release from Torrumbarry Weir averaged 6,380 ML/day this week and is expected rise to around 7,500 ML/day over the coming week.

Diversion into National Channel is currently around 400 ML/day providing water to Gunbower Creek, on behalf of environmental water holders, to maintain winter base flows for the benefit of native fish.

Inflow from the **Murrumbidgee River**, measured at Balranald, averaged 310 ML/day and is expected to remain steady over the coming week.

At **Euston**, the weir pool is currently around 30 cm below FSL. The pool level is being gradually lowered to around 40 cm below FSL as part of the [weir pool variability program](#) which aims to help restore a more natural wetting and drying regime for river banks and wetlands. The downstream release averaged 8,290 ML/day and is currently around 8,470 ML/day. The release is forecast to remain steady over the coming week.

This week **Menindee Lakes** storage volume decreased by 3 GL to 217 GL (13% capacity). WaterNSW continues to manage the Menindee Lakes in accordance with the [Lower Darling Annual Operations Plan](#). The [release from Weir 32](#) is targeting minimum flow rates of around 160 ML/day with the aim to maintain flow in the lower Darling at Burtundy, where the flow is currently around 60 ML/day. A [red alert](#)



warning (high alert) for blue-green algae continues for Lake Tandure and the lower Darling River between Pooncarie and Burtundy.

On the Murray at **Wentworth Weir** the release is currently 7,800 ML/day and is expected to remain steady over the coming week.

The **Locks 7 and 9** weir pools continue to target a water level 10 cm below FSL and will vary between FSL and 10 cm below FSL over the coming weeks. The **Lock 8** weir pool is targeting 30 cm below FSL.

At **Lake Victoria**, the storage volume increased by 25 GL to 295 GL (44% capacity). The storage is expected to continue to increase over the coming weeks, supplemented by water released from the drawdown of Lake Mulwala.

The flow to **South Australia** averaged 3,600 ML/day this week and is expected to increase to 4,000 ML/day for the coming week as environmental water is delivered to the Lower Lakes. Downstream at Lock 6, the planned lowering of the pool by 20 cm has commenced. At locks 5 and 2, weir pool lowering trials are being considered for the coming winter. More information is available in South Australia's [River Murray flow report](#).

At the **Lower Lakes**, the 5-day average water level is 0.55 m AHD. Releases from the barrages averaged 380 ML/day and were prioritised through Tauwitchere and Goolwa barrages.

For media inquiries contact the Media Officer on 02 6279 0141

ANDREW REYNOLDS
Executive Director, River Management



Water in Storage

Week ending Wednesday 30 May 2018

MDBA Storages	Full Supply Level	Full Supply Volume	Current Storage Level	Current Storage		Dead Storage	Active Storage	Change in Total Storage for the Week
	(m AHD)	(GL)	(m AHD)	(GL)	%	(GL)	(GL)	(GL)
Dartmouth Reservoir	486.00	3 856	479.02	3 415	89%	71	3 344	+1
Hume Reservoir	192.00	3 005	179.64	1 091	36%	23	1 068	+51
Lake Victoria	27.00	677	23.50	295	44%	100	195	+25
Menindee Lakes		1 731*		217	13%	(- -) #	0	-3
Total		9 269		5 018	54%	--	4 607	+73
Total Active MDBA Storage							55% ^	

Major State Storages

Burrinjuck Reservoir	1 026	409	40%	3	406	-2
Blowering Reservoir	1 631	846	52%	24	822	+18
Eildon Reservoir	3 334	1 828	55%	100	1 728	-1

* 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 29 May 2018

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2018
Lake Eucumbene - Total	1 092	n/a	Snowy-Murray	+37	140
Snowy-Murray Component	475	n/a	Tooma-Tumut	+1	8
Target Storage	1 290		Net Diversion	36	131
			Murray 1 Release	+37	151

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2017	Victoria	This Week	From 1 July 2017
Murray Irrig. Ltd (Net)	0.0	963	Yarrowonga Main Channel (net)	0	297
Wakool Sys Allowance	1.1	76	Torrumbarry System + Nyah (net)	0	481
Western Murray Irrigation	0.2	25	Sunraysia Pumped Districts	0.6	115
Licensed Pumps	2.1	251	Licensed pumps - GMW (Nyah+u/s)	1	48
Lower Darling	0.2	91	Licensed pumps - LMW	4.6	376
TOTAL	3.6	1406	TOTAL	6.2	1317

* 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	93.0 *
Flow this week	25.3
Flow so far this month	98.0
Flow last month	172.4

(3 600 ML/day)

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

	Current	Average over the last week	Average since 1 August 2017
Swan Hill	90	80	100
Euston	-	-	-
Red Cliffs	110	110	160
Merbein	-	110	160
Burtundy (Darling)	710	720	680
Lock 9	110	120	170
Lake Victoria	190	170	240
Berri	360	350	280
Waikerie	370	360	330
Morgan	370	380	340
Mannum	390	390	370
Murray Bridge	410	410	400
Milang (Lake Alex.)	820	830	710
Poltalloch (Lake Alex.)	790	700	650
Meningie (Lake Alb.)	1 640	1 640	1 580
Goolwa Barrages	7 160	4 770	2 380



River Levels and Flows

Week ending Wednesday 30 May 2018

	Minor Flood Stage	Gauge Height		Flow (ML/day)	Trend	Average Flow this Week (ML/day)	Average Flow last Week (ML/day)
		local (m)	(m AHD)				
River Murray	(m)						
Khancoban	-	-	-	5 280	F	5 930	6 890
Jingellic	4.0	1.88	208.40	5 930	R	6 630	7 290
Tallandoon (Mitta Mitta River)	4.2	1.57	218.46	910	R	910	1 930
Heywoods	5.5	1.58	155.21	1 200	S	910	870
Doctors Point	5.5	1.62	150.09	1 790	S	1 650	1 950
Albury	4.3	0.82	148.26	-	-	-	-
Corowa	4.6	0.74	126.76	1 990	R	1 800	2 270
Yarrowonga Weir (d/s)	6.4	0.97	116.01	4 950	F	6 090	7 440
Tocumwal	6.4	1.66	105.50	5 980	F	6 730	7 310
Torrumbarry Weir (d/s)	7.3	2.14	80.68	6 010	F	6 380	6 250
Swan Hill	4.5	1.30	64.22	6 660	F	6 780	6 210
Wakool Junction	8.8	3.16	52.28	8 330	R	8 160	7 740
Euston Weir (d/s)	9.1	1.67	43.51	8 470	R	8 290	8 170
Mildura Weir (d/s)	-	-	-	8 150	F	7 990	8 350
Wentworth Weir (d/s)	7.3	2.92	27.68	7 800	R	7 570	7 890
Rufus Junction	-	3.01	19.94	3 690	R	3 200	2 580
Blanchetown (Lock 1 d/s)	-	0.64	-	3 890	F	3 870	2 630
Tributaries							
Kiewa at Bandiana	2.8	1.00	154.23	480	F	720	1 140
Ovens at Wangaratta	11.9	7.90	145.58	380	R	380	420
Goulburn at McCoys Bridge	9.0	1.85	93.27	1 580	R	1 060	970
Edward at Stevens Weir (d/s)	5.5	1.79	81.57	1 670	F	1 680	1 380
Edward at Liewah	-	2.09	57.47	1 380	R	1 350	1 360
Wakool at Stoney Crossing	-	1.52	55.01	650	F	680	640
Murrumbidgee at Balranald	5.0	0.62	56.58	290	F	310	360
Barwon at Mungindi	6.1	3.14	-	10	S	10	50
Darling at Bourke	9.0	4.20	-	850	S	690	20
Darling at Burtundy Rocks	-	0.69	-	60	S	50	60

Natural Inflow to Hume	2 300	2 350
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(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	-3.17	-	No. 7 Rufus River	22.10	-0.04	+0.70
No. 26 Torrumbarry	86.05	-0.30	-	No. 6 Murtho	19.25	-0.12	+0.01
No. 15 Euston	47.60	-0.30	-	No. 5 Renmark	16.30	+0.02	+0.10
No. 11 Mildura	34.40	+0.02	+0.21	No. 4 Bookpurnong	13.20	+0.03	+0.41
No. 10 Wentworth	30.80	+0.01	+0.28	No. 3 Overland Corner	9.80	+0.02	+0.18
No. 9 Kulnine	27.40	-0.08	-0.25	No. 2 Waikerie	6.10	+0.03	+0.10
No. 8 Wangumma	24.60	-0.26	+0.02	No. 1 Blanchetown	3.20	+0.00	-0.11

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.55
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Barrages

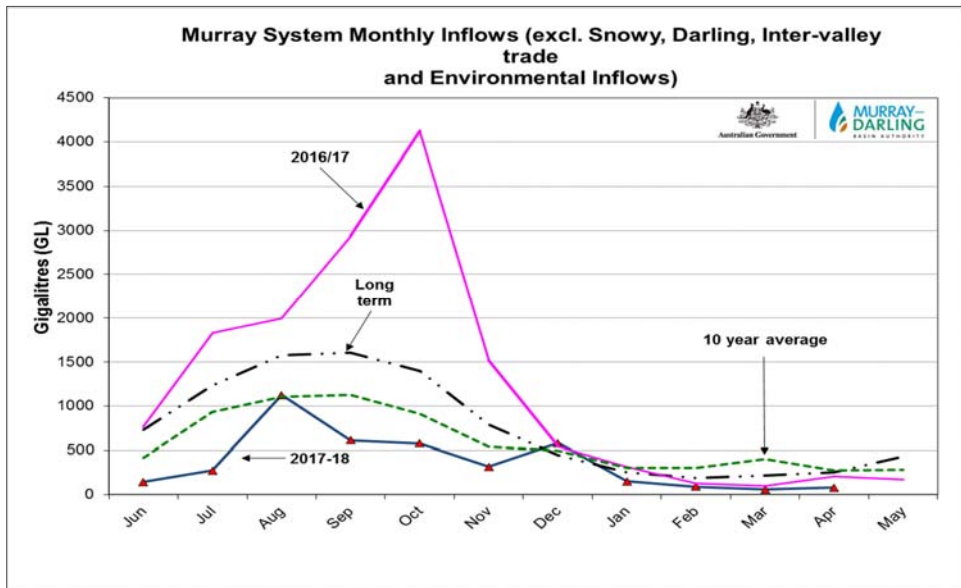
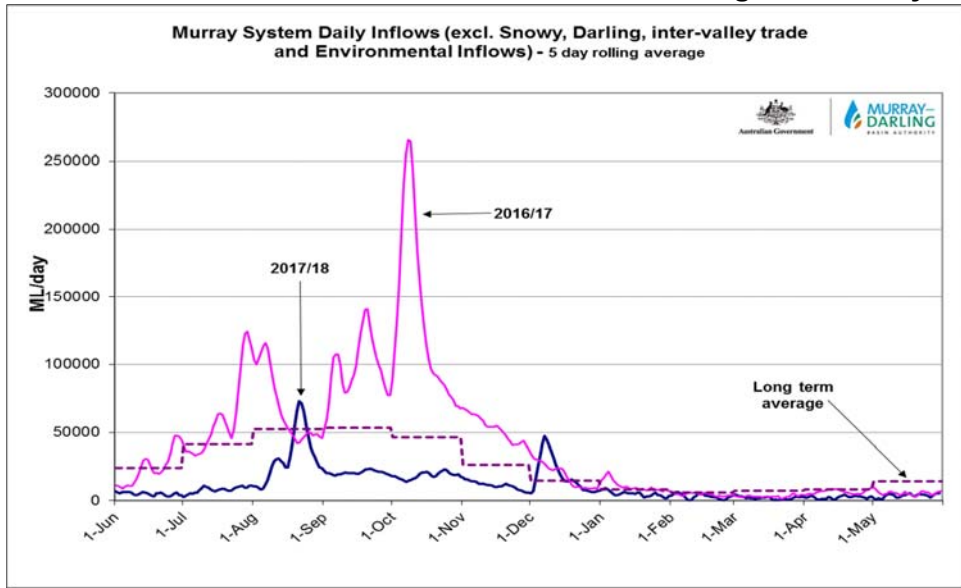
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.54	All closed	-	Open	Open	-
Mundoo	26 openings	0.55	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	All closed	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwitchere	322 gates	0.55	All closed	Open	Open	Open	-

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



Week ending Wednesday 30 May 2018



State Allocations (as at 30 May 2018)

NSW - Murray Valley

High security	97%
General security	39%

Victorian - Murray Valley

High reliability	100%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	33%

Victorian - Goulburn Valley

High reliability	100%
Low reliability	0%

NSW - Lower Darling

High security	100%
General security	100%

South Australia - Murray Valley

High security	100%
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NSW : <http://www.water.nsw.gov.au/water-management/water-availability>
 VIC : <http://nvrn.net.au/seasonal-determinations/current>
 SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

Mitta Mitta Flow Advice

Landholders and river users, including pumpers, on the Mitta Mitta River are advised to take into account the forecast releases of water from Dartmouth Dam and make any necessary adjustment to their river activities.

A brief increase in release is planned for early June to benefit water quality and ecosystem function in the Mitta Mitta River downstream of Dartmouth Dam.

The information in the table below assumes dry conditions, with little or no rainfall for the period. The releases from Dartmouth Dam may vary from those forecast and flows on the Mitta Mitta may increase at any time if rain falls in the catchment downstream of the dam. Under dry conditions, peak flows at the Tallandoon gauge from this release are expected to reach around 3,800 ML/day (2.38 m local gauge height) during Sunday 3 June.

Forecast Mitta Mitta flows 2 June—6 June 2018

Date	Releases from Dartmouth Dam	Colemans Gauge		Tallandoon Gauge		
		Flow (ML/day)	Height (m)	Flow (ML/day)	Height (m)	trend
Saturday 2 June, 0500 hrs	start rising	500	1.17	800	1.52	steady
Saturday 2 June, 1700 hrs	Initial peak	3,500	2.01	800	1.52	steady
Sunday 3 June, 0100 hrs	start falling slowly	3,500	2.01	2,800	2.16	rising
Wednesday 6 June, 2100 hrs	return to minimum flows	400	1.09	900	1.56	falling

Another flow pulse to benefit water quality and ecosystem function in the Mitta Mitta River is possible in late June, depending on system and catchment conditions.

Landholders and river users on the Mitta Mitta are advised to regularly check the [current flows](#) and [forecasts](#) on the MDBA website for more information on releases from Dartmouth Dam. Summary information about the River Murray system is available in the [River Murray weekly report](#).

To subscribe to receive these advices visit <https://www.mdba.gov.au/river-murray-system/flow-advice>.

ENDS

For more information, contact MDBA office using engagement@mdba.gov.au

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