



# RIVER MURRAY WEEKLY REPORT

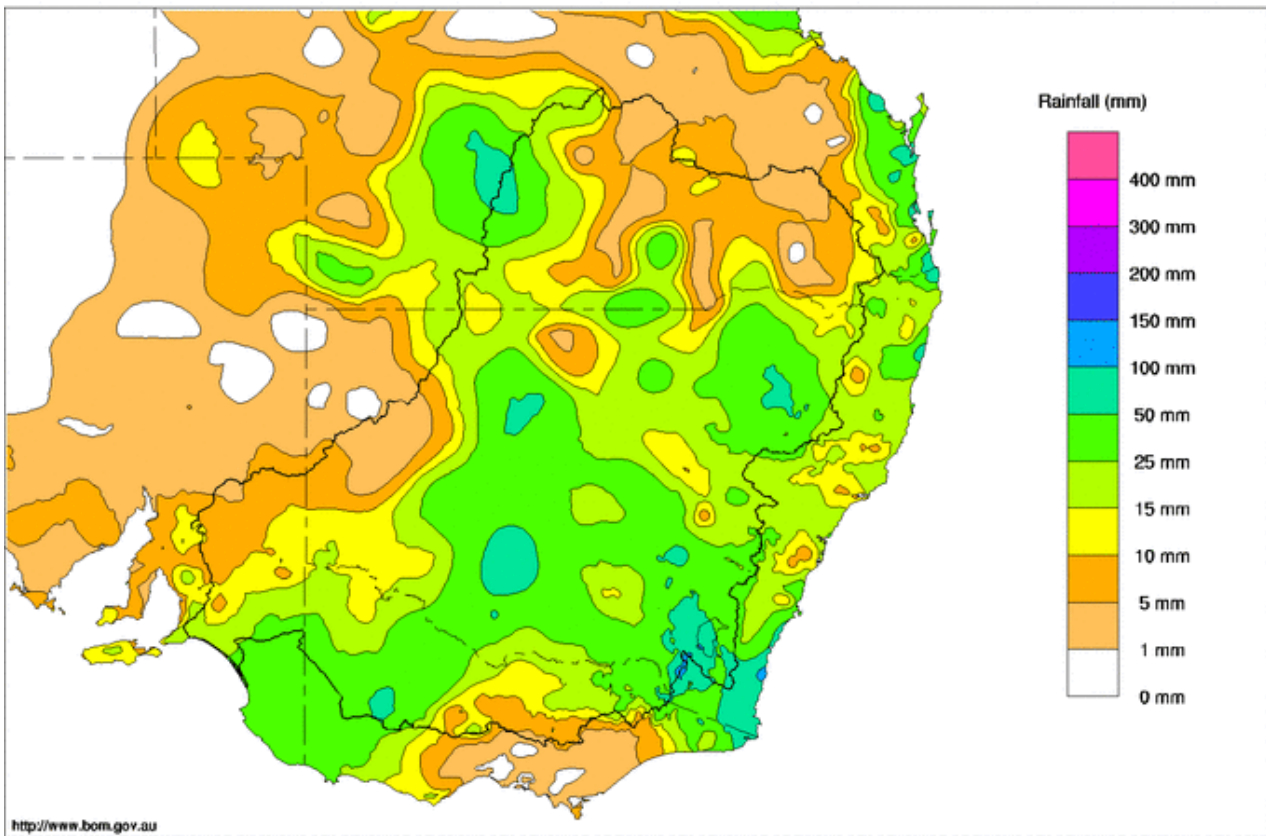
FOR THE WEEK ENDING WEDNESDAY, 24 MAY 2017

Trim Ref: D17/20678

## Rainfall and inflows

For the week ending 24 May 2017 moderate to heavy rainfall was recorded across the Basin (Map 1). The majority of the Basin received rainfall between 15-50 mm, with totals in excess of 50 mm recorded in small pockets across Victoria, NSW and the ACT. A total of 93 mm was recorded at Mount Ginini on the border between NSW and the ACT and similar totals were also recorded over the NSW Snowy Mountains. Other significant totals occurred at Cooma, NSW, where 59 mm was recorded, and at locations in Victoria's Wimmera district, where there were totals around 60 mm.

Murray-Darling Rainfall Totals (mm) Week Ending 24th May 2017  
Australian Bureau of Meteorology



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Map 1 - Murray-Darling Basin rainfall map week ending 24 May 2017. Source: Bureau of Meteorology

Widespread rain across the upper catchments saw a rise in stream flows along upper Murray tributaries. The Mitta Mitta River at Hinnomunjie bridge increased to 330 ML/day from around 260 ML/day. The upper Murray at Biggara saw a slightly higher boost in flow, increasing to almost 600 ML/day from 330 ML/day at the beginning of the week. The Ovens River, measured at Rocky Point, increased to almost 700 ML/day from around 500 ML/day. Stream flows have already begun to recede as rainfall clears the region.

A chance of rain between 1-15 mm is currently forecast for the southern Basin and upper catchments of the River Murray in the next few days, which may result in another modest rise in stream flows.



## River operations

- Lake Mulwala to decrease temporarily below 124.7 m AHD
- Torrumbarry Weir pool variation program begins

The total MDBA storage increased by 54 GL this week, and total active storage is now 5,440 GL (63% capacity).

At **Dartmouth Reservoir**, the storage volume decreased by 1 GL to 3,004 GL (78% capacity). The release from Dartmouth, measured at Coleman's, remained steady at just over 200 ML/day.

At **Hume Reservoir**, the storage volume increased by 53 GL to 1,929 GL (64% capacity). Releases from Hume Reservoir averaged about 950 ML/day during the week, peaking at almost 1,500 ML/day at the end of the week. Releases are currently being held at low levels to assist with the construction of erosion control works on the Dights Creek anabranch of the Murray between Hume Dam and Lake Mulwala (Photo 1). Dights Creek was enlarging rapidly as it captured increasing flow from the main channel of the River Murray. The works, Australia's largest engineered log jam, will slow flow entering the anabranch, assisting the River Murray to remain as the primary channel.



Photo 1 – Log jam construction on Dights Creek, an anabranch of the River Murray, downstream of Hume Reservoir.  
Source: Ben Berry, NSW Department of Primary Industries

At **Lake Mulwala**, the pool level is currently 124.71 m AHD. A slight decrease in the level is expected over this coming weekend with the levels between 124.6 and 124.7 m AHD likely during the next week. This is a temporary measure in response to decreased releases from Hume that are facilitating the engineering works at Dights Creek. The release downstream of **Yarrowonga Weir** has averaged around 3,500 ML/day with similar flow rates expected over the coming days.

Inflows have steadily declined on the **Edward-Wakool** system. Flows through the Edward River and Gulpa Creek offtakes are currently around 450 ML/day and 150 ML/day respectively. Flow downstream of **Stevens Weir** is currently around 530 ML/day. The weir pool is around 3.96 m AHD and will vary between 3.8 and 4.0 m over winter to provide connectivity for fish in the Yallakool and downstream in the Wakool Rivers. Visit the [WaterNSW](http://WaterNSW) website for more information.

On the **Goulburn River**, the flow at McCoys Bridge is targeting 940 ML/day, with water above the minimum flow of 350 ML/day being provided for the environment. An environmental flow pulse for the





Goulburn River is currently planned for late June. More information will be provided in future weekly reports. On the **Campaspe River**, the flow at Rochester is just over 40 ML/day.

On Tuesday 23 May, the **Torrumbarry Weir pool** began being drawn down. The pool is currently at 86.0 m AHD, or 5 cm below full supply level (FSL). In the coming weeks, as part of the weir pool variability program, the pool level is expected to be varied, with the level planned to decrease as much as 50 cm below FSL. Visit the [MDBA](#) website for more information. Diversions to National Channel were very low for much of the week, but have now been increased to around 450 ML/day to supply environmental flows along Gunbower Creek. Release downstream of Torrumbarry Weir remained steady and averaged around 4,000 ML/day.

Inflows from the **Murrumbidgee River** remained steady this week at around 400 ML/day (measured at Balranald). In coming weeks, inflows are expected to increase in response to recent rainfall in the upper Murrumbidgee catchment. Releases from Burrinjuck Dam increased to 4,000 ML/day this week in accordance with the [water sharing plan for the Murrumbidgee regulated river](#). These 'translucency' releases are determined by rules in the water sharing plan and pass a proportion of the dam inflows in order to vary the flow downstream for the benefit of the riverine environment. There have also been small responses in tributaries downstream of Burrinjuck and Blowering Dams.

At **Euston Weir**, the pool level has remained around the FSL (47.60 m AHD). The flow rate downstream of the weir has averaged 6,000 ML/day and is likely to remain around this rate over the coming week.

On the Darling River, the total storage volume in the **Menindee Lakes** decreased by 3 GL and is currently 792 GL (46% capacity). This week the lakes have continued to receive inflows at low rates. A total of about 5 GL passed Wilcannia, with the daily flow continuing to recede (currently around 550 ML/day). Releases from Menindee Lakes to the lower Darling River at Weir 32 are currently around 400 ML/day. This is above the normal minimum of 200 ML/day at this time of year. The additional water is being released on behalf of environmental water holders to benefit native fish in the lower Darling River. Releases from Cawndilla outlet increased from 400 ML/day to 700 ML/day this week as part of the delivery of water to the Great Darling Anabranch for the benefit of native fish. These flows, which are also being delivered on behalf of environmental entitlement holders, are now being gradually wound back with rates around 100 ML/day expected by late June.

Downstream on the lower **Darling River** at Burtundy, the flow has remained around 300 ML/day.

**At Lake Victoria**, the storage level has varied between 24.40 m and 24.44 m AHD over the past two weeks. MDBA is currently targeting a lake level of 24.5 m AHD (395 GL) at the end of May in accordance with the Lake Victoria Operating Strategy. This end-of-May limit is applied in years when water remains available to MDBA in Menindee Lakes or when reserves held for NSW are in excess of 1,000 GL. From 1 June, MDBA will manage the filling of Lake Victoria so that the storage volume peaks as late in the year as possible. This strategy also aims to encourage the growth of foreshore vegetation and helps protect against erosional impacts on aboriginal cultural heritage, whilst maximising storage available to help supply flow to South Australia during next summer and autumn.

Flow to **South Australia** averaged 7,000 ML/day. The flow downstream at **Lock 1** reduced from around 10,500 ML/day to 5,400 ML/day.

At the **Lower Lakes**, the 5-day average water level in Lake Alexandrina has increased to 0.65 m AHD. Barrage releases totalled around 58 GL this week as higher flows were released to assist in scouring sand around the Murray mouth. Releases through Mundoo, Tauwitchere and Goolwa barrages peaked around 14,000 ML/day with the release prioritised predominantly via Goolwa Barrage.

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

DAVID DREVERMAN  
Executive Director, River Management



**Water in Storage**

**Week ending Wednesday 24 May 2017**

MDBA Storages	Full Supply Level	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)
	(m AHD)			(GL)	%			
Dartmouth Reservoir	486.00	3 856	472.01	3 004	78%	71	2 933	+1
Hume Reservoir	192.00	3 005	185.94	1 929	64%	23	1 906	+53
Lake Victoria	27.00	677	24.44	389	57%	100	289	+4
Menindee Lakes		1 731*		792	46%	(480 #)	312	-3
<b>Total</b>		<b>9 269</b>		<b>6 114</b>	<b>66%</b>	<b>--</b>	<b>5 440</b>	<b>+54</b>
Total Active MDBA Storage							63% ^	

**Major State Storages**

Burrinjuck Reservoir	1 026	636	62%	3	633	+9
Blowering Reservoir	1 631	1 111	68%	24	1 087	+10
Eildon Reservoir	3 334	2 179	65%	100	2 079	-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 23 May 2017

Storage	Active Storage (GL)	Weekly Change (GL)	Diversion (GL)	This Week	From 1 May 2017
Lake Eucumbene - Total	1 638	n/a	Snowy-Murray	+36	129
Snowy-Murray Component	808	n/a	Tooma-Tumut	+0	
Target Storage	1 290		Net Diversion	36	129
			Murray 1 Release	+35	139

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

New South Wales	This Week	From 1 July 2016	Victoria	This Week	From 1 July 2016
Murray Irrig. Ltd (Net)	-0.1	903	Yarrowonga Main Channel (net)	0.1	240
Wakool Sys Allowance	0.3	36	Torrumbarry System + Nyah (net)	0.6	423
Western Murray Irrigation	0.1	25	Sunraysia Pumped Districts	0.2	96
Licensed Pumps	n/a	254	Licensed pumps - GMW (Nyah+u/s)	1.3	41
Lower Darling	n/a	110	Licensed pumps - LMW	4.6	297
<b>TOTAL</b>	<b>0.3</b>	<b>1328</b>	<b>TOTAL</b>	<b>6.8</b>	<b>1097</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 environmental water delivery.

Entitlement this month	93.0 *
Flow this week	42.0
Flow so far this month	171.2
Flow last month	173.8

(6 000 ML/day)

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

	Current	Average over the last week	Average since 1 August 2016
Swan Hill	100	100	110
Euston	-	-	-
Red Cliffs	180	170	170
Merbein	-	-	170
Burtundy (Darling)	600	590	590
Lock 9	210	200	220
Lake Victoria	220	210	200
Berri	340	350	290
Waikerie	490	510	350
Morgan	520	540	350
Mannum	470	460	360
Murray Bridge	480	490	320
Milang (Lake Alex.)	540	540	510
Poltalloch (Lake Alex.)	610	600	390
Meningie (Lake Alb.)	1 630	1 670	1 770
Goolwa Barrages	600	730	1 110



## River Levels and Flows

Week ending Wednesday 24 May 2017

River Murray	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)				
Khancoban	-	-	-	4 690	F	5 410	6 180
Jingellic	4.0	1.84	208.36	5 390	R	6 630	6 710
Tallandoon ( Mitta Mitta River )	4.2	1.37	218.26	550	R	560	1 830
Heywoods	5.5	1.49	155.12	1 020	F	970	2 200
Doctors Point	5.5	1.56	150.03	1 420	F	1 430	3 350
Albury	4.3	0.76	148.20	-	-	-	-
Corowa	4.6	0.70	126.72	1 860	F	2 200	4 140
Yarrowonga Weir (d/s)	6.4	0.65	115.69	3 450	S	3 430	3 920
Tocumwal	6.4	1.29	105.13	3 370	R	3 450	3 810
Torrumbarry Weir (d/s)	7.3	1.44	79.99	3 580	F	4 060	3 640
Swan Hill	4.5	1.03	63.95	4 500	F	4 480	4 220
Wakool Junction	8.8	-	-	6 190	S	5 980	6 600
Euston Weir (d/s)	9.1	1.39	43.23	6 080	S	6 020	7 750
Mildura Weir (d/s)	-	-	-	6 840	F	7 150	9 650
Wentworth Weir (d/s)	7.3	2.95	27.71	6 670	S	6 970	9 390
Rufus Junction	-	3.51	20.44	6 580	R	6 530	9 870
Blanchetown (Lock 1 d/s)	-	0.60	-	5 410	F	8 310	8 750
<b>Tributaries</b>							
Kiewa at Bandiana	2.8	0.97	154.20	490	F	540	1 110
Ovens at Wangaratta	11.9	8.01	145.69	650	F	720	590
Goulburn at McCoys Bridge	9.0	1.50	92.92	950	F	940	910
Edward at Stevens Weir (d/s)	5.5	0.70	80.48	390	F	460	430
Edward at Liewah	-	1.43	56.81	790	F	860	1 210
Wakool at Stoney Crossing	-	1.58	55.07	820	S	810	860
Murrumbidgee at Balranald	5.0	0.79	56.75	430	S	410	640
Barwon at Mungindi	6.1	3.45	-	640	F	790	1 120
Darling at Bourke	9.0	4.14	-	540	S	540	500
Darling at Burtundy Rocks	-	0.81	-	330	S	320	310

Natural Inflow to Hume	2 900	2 210
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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	-0.19	-	No. 7 Rufus River	22.10	+0.07	+1.19
No. 26 Torrumbarry	86.05	-0.05	-	No. 6 Murtho	19.25	+0.10	+0.10
No. 15 Euston	47.60	+0.03	-	No. 5 Renmark	16.30	+0.03	+0.20
No. 11 Mildura	34.40	+0.00	+0.14	No. 4 Bookpurnong	13.20	+0.02	+0.80
No. 10 Wentworth	30.80	+0.02	+0.31	No. 3 Overland Corner	9.80	+0.00	+0.26
No. 9 Kulnine	27.40	+0.02	+0.09	No. 2 Waikerie	6.10	+0.01	+0.13
No. 8 Wangumma	24.60	+0.01	+0.25	No. 1 Blanchetown	3.20	-0.08	-0.15

## Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.65
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## Barrages

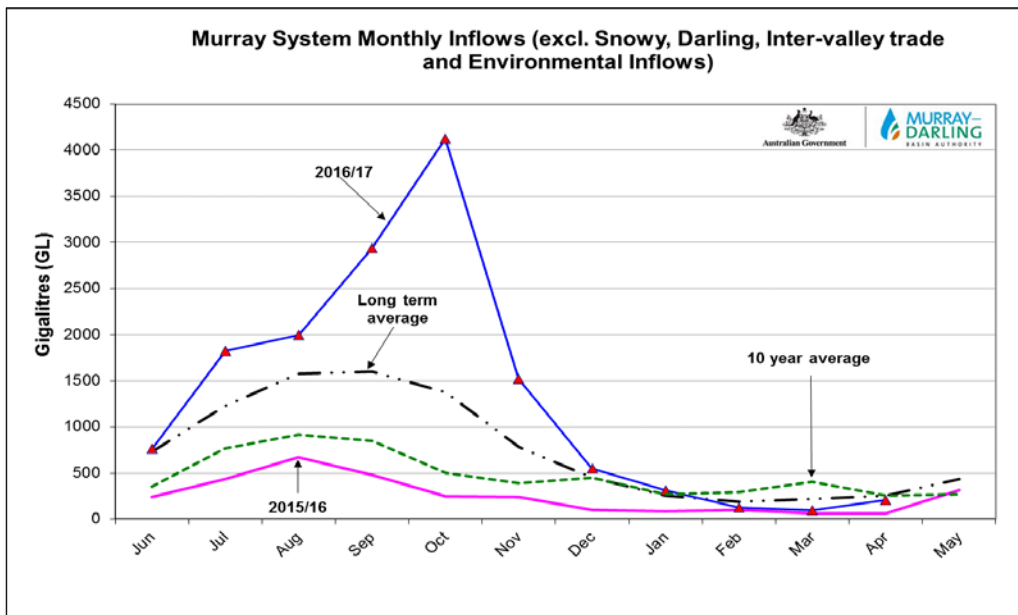
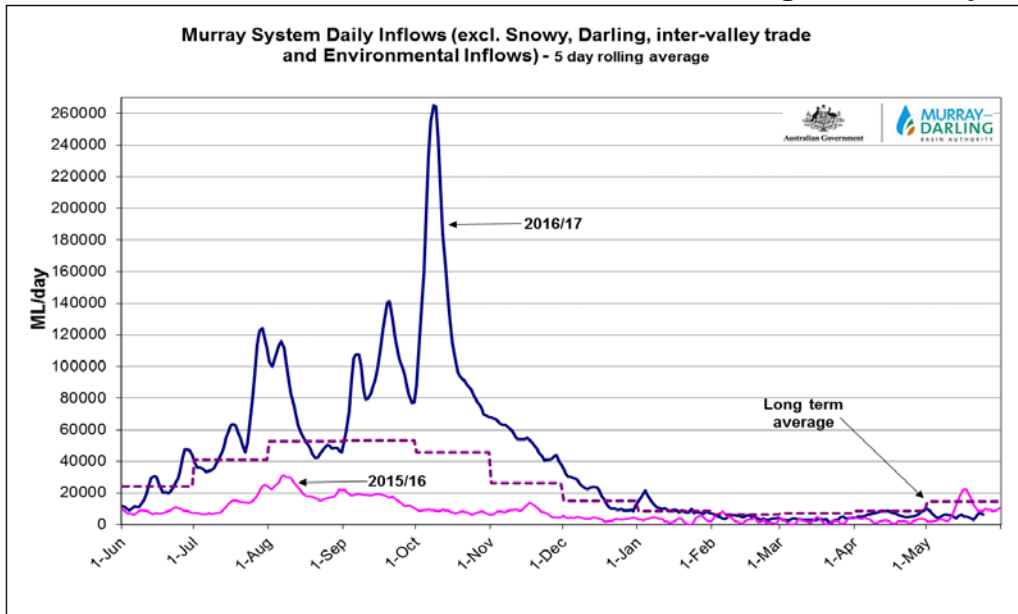
## Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot 1	Vertical Slot 2	Dual Vertical Slots
Goolwa	128 openings	0.59	All closed	-	Open	Open	-
Mundoo	26 openings	0.51	All closed	-	-	-	Open
Hunters Creek	-	-	-	-	Open	-	-
Boundary Creek	6 openings	-	1	-	Open	-	-
Ewe Island	111 gates	-	All closed	-	-	-	Open
Tauwitchere	322 gates	0.60	3	Open	Open	Open	-

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



Week ending Wednesday 24 May 2017



State Allocations (as at 24 May 2017)

NSW - Murray Valley

High security	100%
General security	100%

Victorian - Murray Valley

High reliability	100%
Low reliability	5%

NSW - Murrumbidgee Valley

High security	100%
General security	100%

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>