



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 17 JUNE 2015

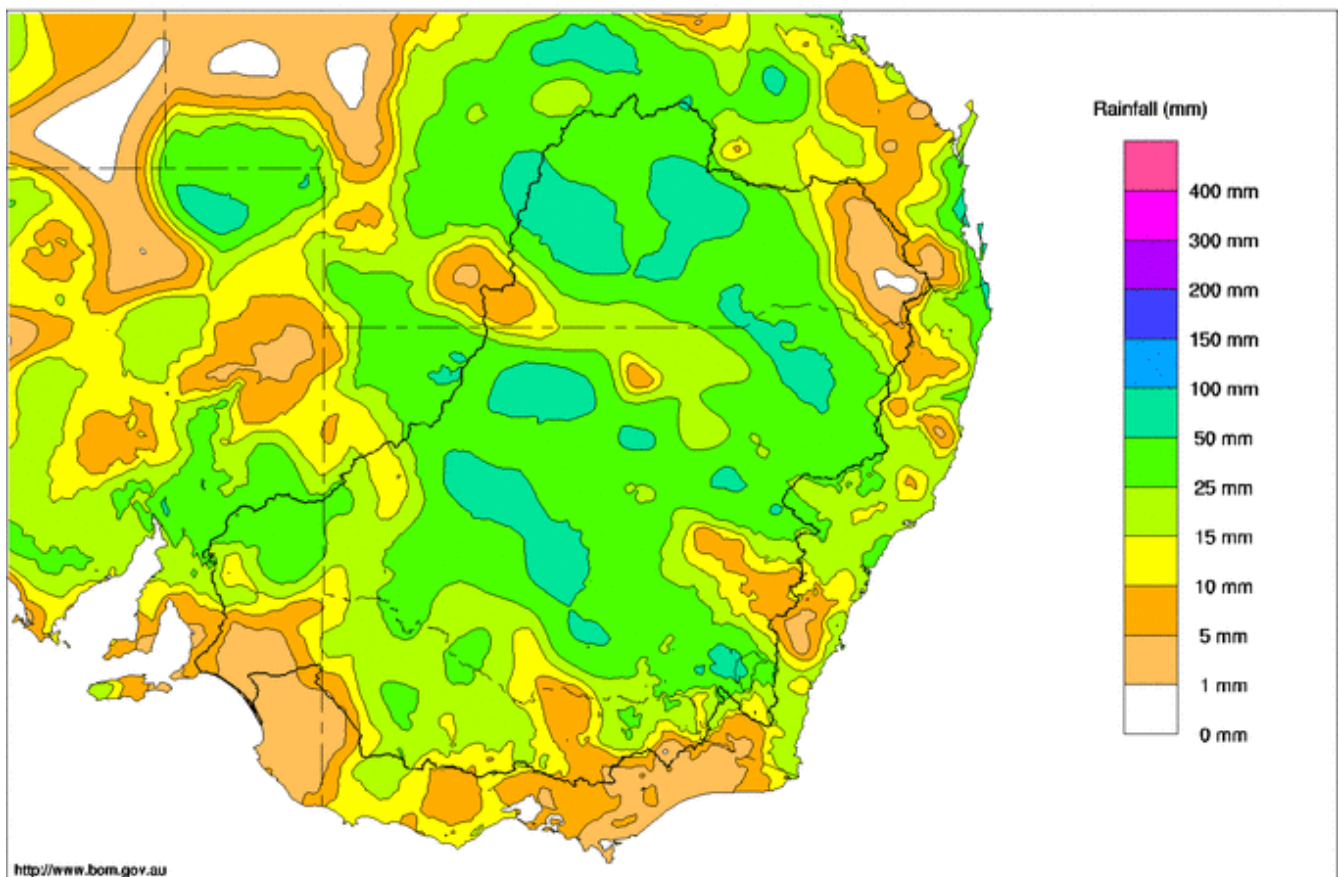
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Rainfall and Inflows

Rainfall was widespread across the Murray-Darling Basin this week, including large parts of the interior. The rain developed as an easterly airstream fed moisture into a series of slow moving troughs that traversed eastern Australia. There were totals in excess of 25 mm over a significant area of the Basin and totals over 50 mm recorded at many sites in Queensland and NSW (Map 1).

The highest weekly totals fell in Queensland and included 87 mm at Mitchell, 83 mm at Havelock, 78 mm at Wallan and 61 mm at Roma. Totals in NSW included 70 mm at Darlington Point, 63 mm at Burrinjuck Dam, 61 mm at Hillston, 56 mm at Mungindi and 53 mm at Dubbo Airport. Notable Victorian totals included 50 mm at Mt Buffalo and 28 mm at Birchip.

Murray-Darling Rainfall Totals (mm) Week Ending 17th June 2015
Australian Bureau of Meteorology



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Map 1 - Murray-Darling Basin rainfall for the week ending 17 June 2015 (Source: Bureau of Meteorology).

Stream flow responses in the upper Murray tributaries have been only small this week due to the relatively light rainfall over the upper catchments. On the Mitta Mitta River, the flow at Hinnomunjie Bridge has increased from 600 to 800 ML/day. On the upper Murray at Biggara, the flow increased from 500 to 750 ML/day. On the Ovens River, the flow at Rocky Point increased from 700 to 1,100 ML/day, with further increases possible in the coming days.



River Operations

- Bulk water transfer releases continue at Dartmouth Dam
- Lake Mulwala remains at drawdown target level
- Winter environmental flow release underway on the Goulburn River

MDBA total storage increased by 71 GL this week, with the active storage now 3,956 GL or 47% capacity.

At **Dartmouth** Reservoir, the storage volume decreased by 13 GL to 2,835 GL (74% capacity). Bulk transfer releases continue from Dartmouth to Hume Reservoir, although the flow at Colemans was reduced from 3,400 ML/day to 2,650 ML/day. The release is planned to continue decreasing and is likely to be below 2,000 ML/day in about a week's time before increasing again in late June.

At **Hume** Reservoir, the storage level increased by 47 GL to 854 GL (30% capacity). The release from Hume remains at the minimum flow of 600 ML/day. Downstream at Doctors Point, the flow has averaged just under 2,000 ML/day.

The water level in Lake Mulwala remained close to the current drawdown target of 121.2 m AHD throughout the week. This level is about 3.5 m below the normal operating level, and the drawdown is planned to continue until mid-July, prior to refilling the lake in preparation for the commencement of the irrigation season in August. The release from **Yarrowonga** Weir averaged 3,100 ML/day. However, the release will decrease to 2,000 ML/day during the next few days to facilitate maintenance works planned for several regulating structures at downstream locations in the coming weeks. This flow reduction will cause a temporary rise of about 0.5 m in Lake Mulwala over the coming weekend before higher releases can recommence.

Road users and the community are also advised that the road way across Yarrowonga Weir will be temporarily closed on Tuesday 23 June due to works activities. It is expected that public access to the road will be restricted until at least mid-afternoon.

On the **Edward** River system, flows through the Edward and Gulpa Creek offtakes continued to slowly decrease through the week. The gates at these offtakes have now been lifted clear of the water and flows over the winter period will vary in response to river level fluctuations in the Murray. At Stevens Weir, the pool level remains drawn down to a level of 2.5 m on the local gauge (2.7 m below the normal operating level). The flow downstream of Stevens Weir has receded below 1,000 ML/day, while downstream on the Edward River at Liewah, the flow has receded from 1,900 to 1,460 ML/day.

On the **Goulburn** River, the flow at McCoys Bridge has started increasing as a winter pulse of environmental water arrives from releases upstream at Eildon Reservoir. The flow at McCoys Bridge is currently 1,450 ML/day and may exceed 8,000 ML/day during the coming week. The release is anticipated to provide environmental benefits along the Goulburn River before adding significantly to flows along the Murray all the way into South Australia. More information is available on the [Goulburn-Broken Catchment Management Authority](#) website and in the attached media release.

Flows past **Torrumbarry** Weir continued receding for most of the week and fell to a rate of 3,300 ML/day on 17 June. The diversion through National Channel for both environmental and mid-Murray storage requirements averaged around 800 ML/day this week and has now decreased to 300 ML/day. This reduction has increased flow downstream of Torrumbarry to 4,000 ML/day. The flow rate will continue rising towards 10,000 ML/day over the coming week with the arrival of higher flows from the Goulburn River.

Downstream at **Swan Hill**, the flow has receded steadily to 3,500 ML/day. Higher flows will begin arriving in the next few days, with flows above 10,000 ML/day likely in early July.

The weir pool at **Euston** is currently 47.86 m AHD, which is about 26 cm above its Full Supply Level and a little above the current target of 47.80 m AHD.

At **Mildura**, the repairs and maintenance of the trestleway, and the lock refurbishment, are continuing. The flow has receded to 8,400 ML/day and will continue receding in the coming week. Salinity in the Mildura weir pool and downstream has risen to around 200 EC (compared to values of about 100 EC



prior to the current drawdown). The salinity is expected to rise a little more over the next week as the flow rate, and hence dilution, decreases. However, the salinity level is still relatively low when compared to salinities observed over the long term in this part of the river.

The storage volume in the **Menindee Lakes** increased by 2 GL during the week. A slow recession in flows along the Darling River upstream is expected to continue despite appreciable local rain in recent days temporarily increasing river levels at a number of gauges. The storage in the Menindee Lakes is now 77 GL (4% capacity) and release, measured at Weir 32, remains at zero.

The flow across the **South Australia** border is currently 3,500 ML/day and a rate of 3,750 ML/day will be targeted for the coming week. Higher flow rates are expected to begin in early July with the arrival of Goulburn River environmental water. Downstream at **Lock 1**, the flow has averaged about 3,300 ML/day and has increased slightly due to local rain.

At the **Lower Lakes**, the 5 day average level has increased to 0.66 m AHD. Small releases have been maintained throughout the week at the Goolwa and Tauwitchere barrages following a period of reverse flow closure due to high tides in the Coorong during the preceding week (Figure 1).



Figure 1 – Winter light over the Coorong during high tide at Tauwitchere Barrage - 8 June 2015. Environmental water delivered to the lower Murray during recent months has helped maintain barrage releases and hydrological connectivity between the Lower Lakes and the Coorong (Photo: Andrew Bishop, MDBA).

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 17 Jun 2015

MDBA Storages	Full Supply Level	Full Supply Volume (GL)	Current Storage Level	Current Storage		Dead Storage (GL)	Active Storage (GL)	Change in Total Storage for the Week (GL)
	(m AHD)		(m AHD)	(GL)	%			
Dartmouth Reservoir	486.00	3 856	468.94	2 835	74%	71	2 764	-13
Hume Reservoir	192.00	3 005	177.89	901	30%	23	878	+47
Lake Victoria	27.00	677	24.68	414	61%	100	314	+35
Menindee Lakes		1 731*		77	4%	(- -) #	0	+2
Total		9 269		4 227	46%	--	3 956	+71
Total Active MDBA Storage							47% ^	

Major State Storages

Burrinjuck Reservoir	1 026	443	43%	3	440	+12
Blowering Reservoir	1 631	461	28%	24	437	+24
Eildon Reservoir	3 334	1 891	57%	100	1 791	-26

* Menindee surcharge capacity – 2050 GL

** All Data is rounded to nearest GL **

NSW takes control of Menindee Lakes when storage falls below 480 GL, and control reverts to MDBA when storage next reaches 640 GL

^ % of total active MDBA storage

Snowy Mountains Scheme

Snowy diversions for week ending 16 Jun 2015

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2015
Lake Eucumbene - Total	2 155	n/a	Snowy-Murray	+5	61
Snowy-Murray Component	1 064	n/a	Tooma-Tumut	+5	26
Target Storage	1 240		Net Diversion	1	35
			Murray 1 Release	+13	96

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2014	Victoria	This Week	From 1 July 2014
Murray Irrig. Ltd (Net)	0.0	842	Yarrowonga Main Channel (net)	0	301
Wakool Sys Allowance	0.1	94	Torrumbarry System + Nyah (net)	4.2	615
Western Murray Irrigation	0.1	24	Sunraysia Pumped Districts	0	105
Licensed Pumps	0.9	284	Licensed pumps - GMW (Nyah+u/s)	2	77
Lower Darling	0.1	61	Licensed pumps - LMW	1.5	299
TOTAL	1.2	1305	TOTAL	7.7	1397

* Figures derived from estimates and monthly data. 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 the delivery of additional environmental water.

Entitlement this month	90.0 *
Flow this week	25.9
Flow so far this month	63.3
Flow last month	137.5

(3 700 ML/day)

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

	Current	Average over the last week	Average since 1 August 2014
Swan Hill	80	70	80
Euston	-	-	100
Red Cliffs	200	180	120
Merbein	200	180	130
Burtundy (Darling)	920	920	830
Lock 9	170	180	130
Lake Victoria	190	190	210
Berri	250	250	220
Waikerie	300	300	290
Morgan	310	310	280
Mannum	310	310	320
Murray Bridge	330	340	350
Milang (Lake Alex.)	740	730	750
Poltalloch (Lake Alex.)	550	620	650
Meningie (Lake Alb.)	2 210	2 180	2 420
Goolwa Barrages	2 260	2 480	1 590



River Levels and Flows

Week ending Wednesday 17 Jun 2015

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	-	-	-	1 610	F	2 160	3 020
Jingellic	4.0	1.51	208.03	2 980	F	3 320	4 870
Tallandoon (Mitta Mitta River)	4.2	2.19	219.08	2 970	S	3 170	4 380
Heywoods	5.5	1.42	155.05	600	S	600	600
Doctors Point	5.5	1.67	150.14	2 150	R	1 950	2 200
Albury	4.3	0.82	148.26	-	-	-	-
Corowa	4.6	0.77	126.79	2 070	F	1 990	2 330
Yarrowonga Weir (d/s)	6.4	0.62	115.66	3 060	R	3 120	3 940
Tocumwal	6.4	1.16	105.00	3 270	F	3 500	4 660
Torrumbarry Weir (d/s)	7.3	1.45	80.00	4 050	R	3 760	5 210
Swan Hill	4.5	0.83	63.75	3 580	F	4 230	6 340
Wakool Junction	8.8	2.61	51.73	6 330	F	7 120	9 480
Euston Weir (d/s)	9.1	1.53	43.37	7 690	F	8 070	10 380
Mildura Weir (d/s)	-	-	-	8 400	F	9 090	10 510
Wentworth Weir (d/s)	7.3	3.02	27.78	8 920	S	9 480	11 040
Rufus Junction	-	2.90	19.83	3 100	S	3 370	3 550
Blanchetown (Lock 1 d/s)	-	0.65	-	3 940	R	3 290	3 110
Tributaries							
Kiewa at Bandiana	2.8	1.68	154.91	1 500	R	1 330	1 650
Ovens at Wangaratta	11.9	8.23	145.91	1 190	R	1 130	1 240
Goulburn at McCoys Bridge	9.0	1.78	93.20	1 450	R	1 030	960
Edward at Stevens Weir (d/s)	5.5	0.98	80.75	740	F	860	1 230
Edward at Liewah	-	2.12	57.50	1 460	F	1 630	2 010
Wakool at Stoney Crossing	-	1.42	54.91	430	S	440	580
Murrumbidgee at Balranald	5.0	0.90	56.86	520	F	560	540
Barwon at Mungindi	6.1	3.36	-	440	R	440	460
Darling at Bourke	9.0	4.15	-	590	R	500	430
Darling at Burtundy Rocks	-	-	-	0	R	0	0

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	4 030	4 460
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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	-3.72	-	No. 7 Rufus River	22.10	-0.00	+0.59
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.02	-0.03
No. 15 Euston	47.60	+0.26	-	No. 5 Renmark	16.30	+0.01	+0.14
No. 11 Mildura	34.40	-3.40	+0.20	No. 4 Bookpurnong	13.20	+0.07	+0.44
No. 10 Wentworth	30.80	+0.02	+0.38	No. 3 Overland Corner	9.80	+0.03	+0.14
No. 9 Kulnine	27.40	-0.02	+0.00	No. 2 Waikerie	6.10	+0.03	+0.06
No. 8 Wangumma	24.60	+0.01	+0.03	No. 1 Blanchetown	3.20	-0.06	-0.10

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.66
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Barrages

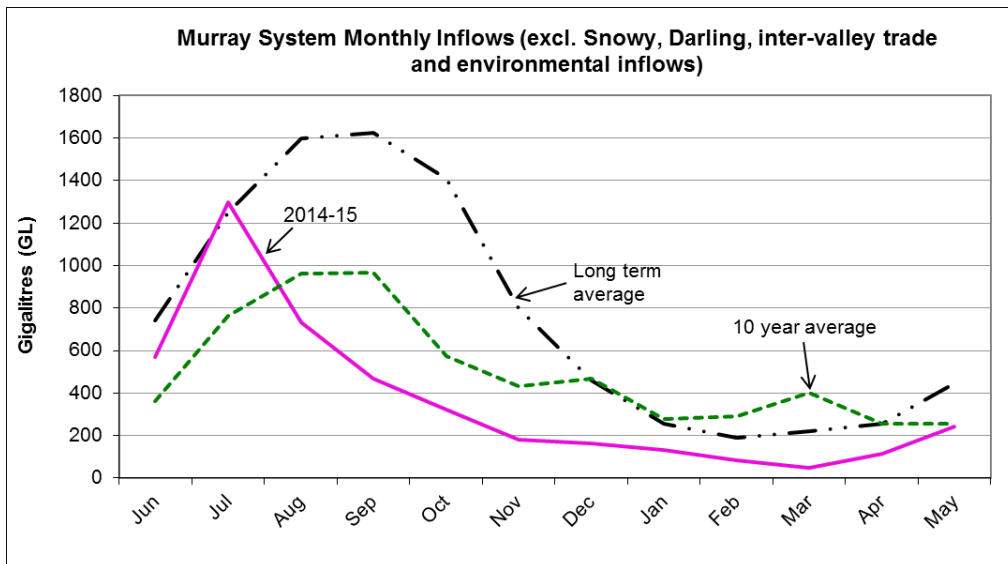
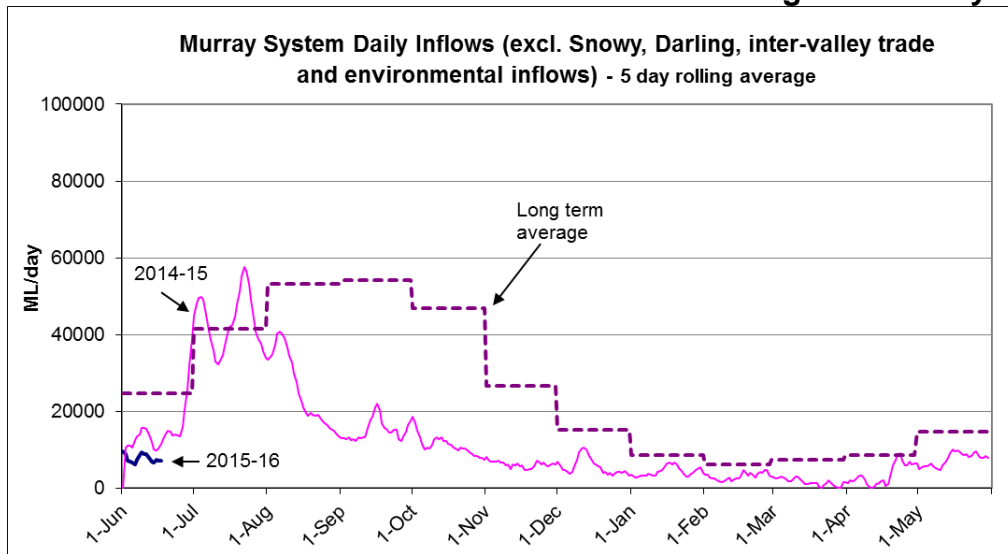
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.66	1	-	Open
Mundoo	26 openings	-	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwitchere	322 gates	0.67	2	Open	Open

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



Week ending Wednesday 17 Jun 2015



State Allocations (as at 17 Jun 2015)

NSW - Murray Valley

High security	97%
General security	61%

Victorian - Murray Valley

High reliability	100%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	53%

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/Water-allocations/Water-allocations-summary/water-allocations-summary/default.aspx>
- VIC : <http://www.nvrn.net.au/allocations/current.aspx>
- SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

MEDIA RELEASE



17 June 2015

River Murray flows to vary this winter

Communities along the River Murray in New South Wales and Victoria are advised to expect varying flows in the river during winter and consider adjusting their activities, pumps and moorings accordingly.

Starting in mid-June, river users in the Echuca district and downstream need to be aware that levels will rise noticeably, as an environmental pulse enters the River Murray from the Goulburn River.

By late June, the flow downstream of Torrumbarry Weir might exceed 10,000 megalitres per day for a short period (gauge height of 3.1 metres) before receding gradually, assuming conditions remain dry.

River levels downstream of Hume Dam are also likely to fluctuate as environmental water starts to be released from Hume Reservoir in late June. The volume of water released will remain well below normal summer rates but is likely to rise and fall to mimic natural flows expected at this time of year.

The environmental flows will use water allocations held by the Commonwealth Environmental Water Holder to benefit native fish and vegetation on the Murray and Goulburn Rivers. A small volume of water from the Victorian Environmental Water Holder will also contribute to outcomes in the Goulburn River and Gunbower Creek.

The water may also be used to support environmental watering actions at a range of sites including the Edward-Wakool River system, Barmah-Millewa Forest, Gunbower Forest, Hattah Lakes and the Coorong and Lower Lakes.

To keep up to date on the latest flow forecasts along the River Murray, visit the MDBA website www.mdba.gov.au/river-data/current-information-forecasts/storage-volumes

Live river data for sites on the River Murray system can be seen at <http://livedata.mdba.gov.au>

Summary information for the week is available in the River Murray weekly report: www.mdba.gov.au/river-data/current-information-forecasts/weekly-report

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For more information, contact the MDBA Media office at media@mdba.gov.au or 02 6279 0141

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