



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 27TH AUGUST 2014

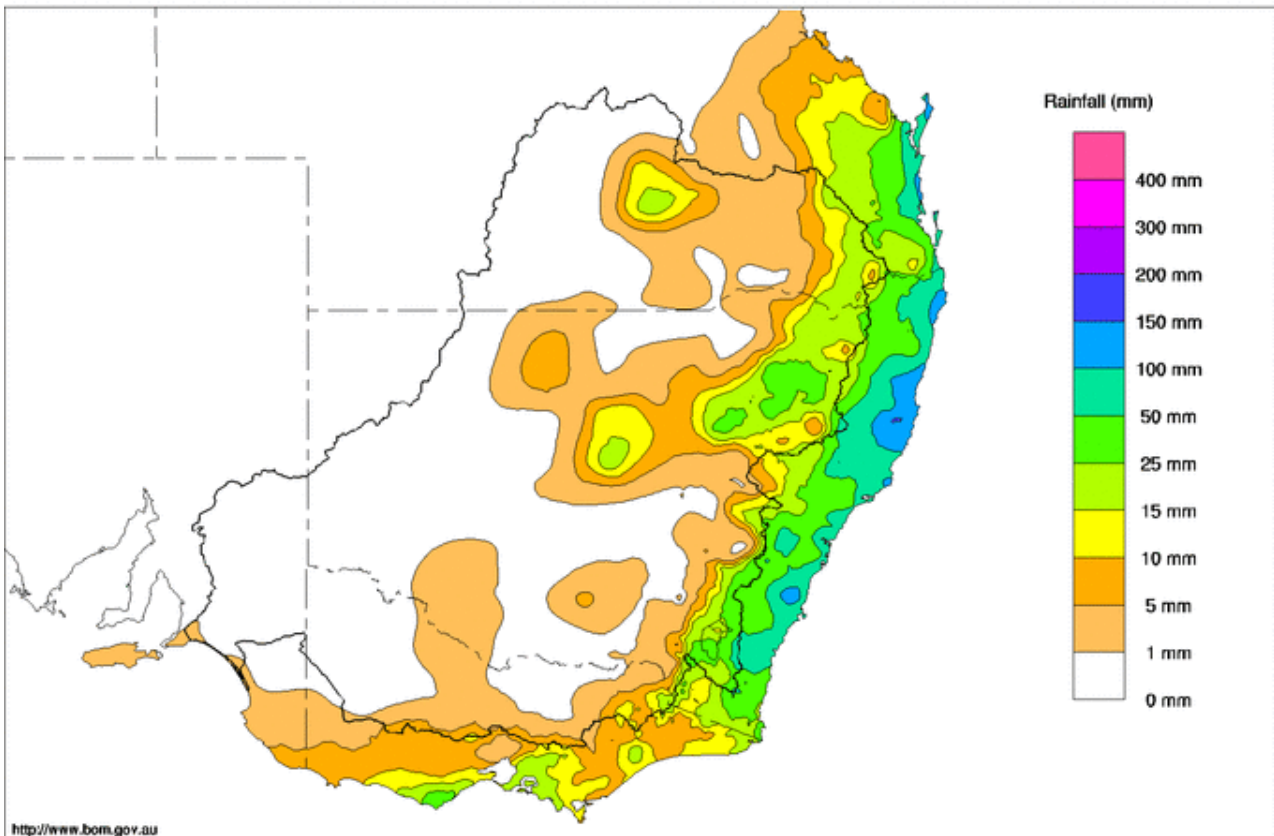
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Rainfall and Inflows

Rainfall over south-eastern Australia had a spring-like flavour this week with on-shore winds feeding moisture from the Tasman Sea into a series of trough systems. Soaking rain was the result along much of the NSW and south-east Queensland coast and adjacent ranges. However, generally only modest rainfall pushed across the Great Divide and into the Murray-Darling Basin catchments; and totals became even lighter and quite patchy further inland. Most of the central and western Basin remained dry (Map 1).

The highest reported rain totals were in NSW and included 54 mm at Captains Flat, 43 mm at Coonabarabran, 28 mm at Gunnedah and 27 mm at Tingha. Totals in south-east Queensland included 32 mm at Mt Kynoch, 27 mm at Clifton and 26 mm at Texas.

Murray-Darling Rainfall Totals (mm) Week Ending 27th August 2014
Product of the National Climate Centre



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Map 1- Murray-Darling Basin rainfall for the week ending 27th August 2014 (Source: Bureau of Meteorology)

Key upper Murray tributaries receded slightly early this week, although flows at most gauges have held fairly steady in recent days. On the upper Murray, the flow at Biggara spent most of the week between 1,300 and 1,400 ML/day with the flow downstream at Jingellic averaging almost 6,000 ML/day.



On the Mitta Mitta River, the flow at Hinnomunjie Bridge began at 1,800 ML/day but spent most of the week at around 1,200 to 1,300 ML/day. On the Ovens River, the flow at Rocky Point decreased early on in the week due to a reduction in release from Lake Buffalo but has since been holding steady at about 1,600 ML/day.

River Operations

- Hume releases continue to increase in response to downstream demand;
- Release downstream of Yarrawonga Weir close to channel capacity;
- Low river levels forecast for Swan Hill next week will soon improve.

MDBA active storage reached a peak of 6,366 GL during the week and is currently 6,359 GL (75% capacity).

At **Dartmouth** Reservoir, the storage volume increased by 6 GL to 3,647 GL (95% capacity). Releases for hydro-electricity generation continued this week. The flow, measured at Colemans, reduced at the start of the week from 3,000 ML/day to 1,000 ML/day.

At **Hume** Reservoir, the storage reached a peak of 2,267 GL early in the week and is currently 2,237 GL (74% capacity). The release peaked at 15,800 ML/day during the week and is currently 15,000 ML/day.

At **Lake Mulwala** diversions to Mulwala Canal and Yarrawonga Main Channel increased to 5,400 ML/day and 1,700 ML/day respectively. The release downstream of **Yarrawonga** Weir has been increased to 10,200 ML/day (close to channel capacity of around 10,600 ML/day) in order to meet downstream demand, including the transfer of water from Hume Reservoir to Lake Victoria.

Due to the dry rainfall outlook, and no water currently available for delivery from the Menindee Lakes, the transfer of water from Hume Reservoir to Lake Victoria has commenced to ensure Lake Victoria holds sufficient volume to help meet South Australia's requirements over summer. Transfers to Lake Victoria are generally made prior to the peak demand periods in late spring and in summer when channel capacity through the Barmah Choke (downstream of Yarrawonga Weir) limits the volume of water able to be delivered from Hume Reservoir.

On the **Edward/Wakool** system, flow through the Edward and Gulpa offtakes has increased in response to rising levels in the River Murray, and will be managed at 1,600 ML/day and 350 ML/day respectively in the coming weeks. Further downstream at Stevens Weir, the release reduced to around 300 ML/day but will target around 600 ML/day in the coming week.

The **Goulburn** River receded this week from 2,600 ML/day to 1,400 ML/day at McCoys Bridge. Downstream on the Murray, diversions to **National Channel** are currently 2,900 ML/day and will increase to 3,500 ML/day in the coming week. Diversions of 500 ML/day have continued at the **Koondrook-Perricoota** inlet regulator.

The flow at **Torrumbarry** Weir reduced to a low of around 2,800 ML/day late in the week, but will begin rising again in the coming week to around 4,500 ML/day. Flows through **Gunbower** forest are returning to the Murray at Chinamens bend and contributing about 500 ML/day. Downstream at **Swan Hill**, the flow is forecast to fall to around 3,400 ML/day (0.8 m local gauge height) if conditions remain dry. However flow rates will increase in the following week. NSW State Water has updated its customer notice regarding low flows on the River Murray which is attached.



On the lower **Darling** River higher salinity levels continued with values of 900 to 1,000 EC recorded at Burtundy this week. Salinity levels are expected to remain around this level for another week before slowly reducing. Forecast salinity levels for Burtundy can be accessed at <http://www.mdba.gov.au/river-data/current-information-forecasts/river-salinity>.

Lake Victoria is around 99% storage capacity and has risen 31 GL this week. The lake will reach effective full supply (that is at or above 99%) in the coming week to maximise the storage of unregulated flows.

At Weir and Lock 8, the level is currently 40 cm above Full Supply Level (FSL). The level will gradually rise to 60cm above FSL in the coming week. This is part of a trial to introduce variations in the weir pool levels to achieve a more natural wetting and drying cycle for the riverine environment. More information about the trial can be found at <http://www.mdba.gov.au/media-pubs/mr/lock-8-and-9-weir-pool-changes-start-in-august>.

Flow to South Australia continued to recede this week and is currently 9,500 ML/day. Unregulated flow periods continued this week from Wentworth to South Australia but can be expected to cease in the coming week when flows to South Australia reduce to entitlement flows only.

At the **Lower Lakes**, the five-day average water level at Lake Alexandrina reduced 7 cm to 0.72 m AHD. The total barrage release reduced from 16,000 ML/day to 2,000 ML/day. A release of 2,000 ML/day will be targeted over the coming weeks, to allow the lake level to rise again as part of the 'cycling' process to improve salinity levels in Lake Albert.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 27 Aug 2014

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	482.76	3 647	95%	71	3 576	+6
Hume Reservoir	192.00	3 005	187.84	2 237	74%	23	2 214	-27
Lake Victoria	27.00	677	26.94	669	99%	100	569	+31
Menindee Lakes		1 731*		358	21%	(-) #	0	-7
Total		9 269		6 911	75%	--	6 359	+4
Total Active MDBA Storage							75% ^	

Major State Storages

Burrinjuck Reservoir	1 026	799	78%	3	796	+23
Blowering Reservoir	1 631	1 171	72%	24	1 147	+9
Eildon Reservoir	3 334	2 882	86%	100	2 782	+18

* 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 26 Aug 2014

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2014
Lake Eucumbene - Total	1 868	n/a	Snowy-Murray	+7	188
Snowy-Murray Component	851	n/a	Tooma-Tumut	+7	124
Target Storage	1 190		Net Diversion	-1	64
			Murray 1 Release	+11	295

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)	34.6	83	Yarrowonga Main Channel (net)	11.6	18
Wakool Sys Allowance	0.0	2	Torrumbarry System + Nyah (net)	22.9	101
Western Murray Irrigation	0.1	1	Sunraysia Pumped Districts	0.2	3
Licensed Pumps	4.7	12	Licensed pumps - GMW (Nyah+u/s)	1.5	2
Lower Darling	1.7	3	Licensed pumps - LMW	1.2	8
TOTAL	41.1	101	TOTAL	37.4	132

* 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 unregulated flows and the delivery of additional environmental water.

Entitlement this month	124.0 *
Flow this week	77.9
Flow so far this month	401.6
Flow last month	214.5

(11 100 ML/day)

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

	Current	Average over the last week	Average since 1 August 2014
Swan Hill	60	90	90
Euston	110	120	110
Red Cliffs	120	110	110
Merbein	120	110	120
Burtundy (Darling)	890	970	910
Lock 9	110	120	130
Lake Victoria	190	180	210
Berri	170	180	220
Waikerie	280	270	320
Morgan	260	250	310
Mannum	370	340	410
Murray Bridge	360	370	470
Milang (Lake Alex.)	750	750	730
Poltalloch (Lake Alex.)	580	610	640
Meningie (Lake Alb.)	2 270	2 260	2 220
Goolwa Barrages	700	700	1 810



River Levels and Flows

Week ending Wednesday 27 Aug 2014

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	-	-	-	2 440	F	2 480	3 050
Jingellic	4.0	1.88	208.40	5 670	F	5 800	6 460
Tallandoon (Mitta Mitta River)	4.2	1.84	218.73	1 680	S	2 110	2 800
Heywoods	5.5	3.00	156.63	15 030	F	12 300	2 190
Doctors Point	5.5	3.14	151.61	16 360	F	14 020	4 210
Albury	4.3	2.14	149.58	-	-	-	-
Corowa	3.8	3.20	129.22	15 420	R	11 110	3 380
Yarrowonga Weir (d/s)	6.4	1.70	116.74	10 310	R	6 950	4 940
Tocumwal	6.4	2.00	105.84	7 800	R	5 980	5 920
Torrumbarry Weir (d/s)	7.3	1.16	79.71	2 800	S	-	8 400
Swan Hill	4.5	0.98	63.90	4 520	F	6 200	11 400
Wakool Junction	8.8	3.19	52.31	8 550	F	10 670	16 800
Euston Weir (d/s)	8.8	2.06	43.90	10 710	F	13 180	20 260
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	3.35	28.11	12 470	F	15 830	20 490
Rufus Junction	-	3.85	20.78	8 780	F	10 350	14 820
Blanchetown (Lock 1 d/s)	-	0.95	-	11 220	S	12 570	16 480
Tributaries							
Kiewa at Bandiana	2.7	1.99	155.22	2 060	R	1 980	2 020
Ovens at Wangaratta	11.9	8.79	146.47	2 650	R	2 870	4 250
Goulburn at McCoys Bridge	9.0	1.77	93.19	1 430	F	1 920	3 100
Edward at Stevens Weir (d/s)	-	0.68	80.45	440	F	460	2 210
Edward at Liewah	-	2.55	57.93	1 970	F	1 970	2 030
Wakool at Stoney Crossing	-	1.67	55.16	1 090	F	1 170	1 740
Murrumbidgee at Balranald	5.0	1.50	57.46	1 080	R	1 140	1 570
Barwon at Mungindi	-	3.10	-	0	F	0	0
Darling at Bourke	-	4.01	-	90	S	70	50
Darling at Burtundy Rocks	-	0.76	-	160	S	150	130

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	9 050	9 270
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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	-0.18	-	No. 7 Rufus River	22.10	+0.00	+1.56
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.00	+0.29
No. 15 Euston	47.60	+0.15	-	No. 5 Renmark	16.30	+0.02	+0.41
No. 11 Mildura	34.40	+0.04	+0.47	No. 4 Bookpurnong	13.20	-0.01	+1.23
No. 10 Wentworth	30.80	+0.03	+0.71	No. 3 Overland Corner	9.80	+0.01	+0.76
No. 9 Kulnine	27.40	+0.13	+0.52	No. 2 Waikerie	6.10	+0.30	+0.76
No. 8 Wangumma	24.60	+0.40	+0.38	No. 1 Blanchetown	3.20	+0.28	+0.20

Lower Lakes FSL = 0.75 m AHD

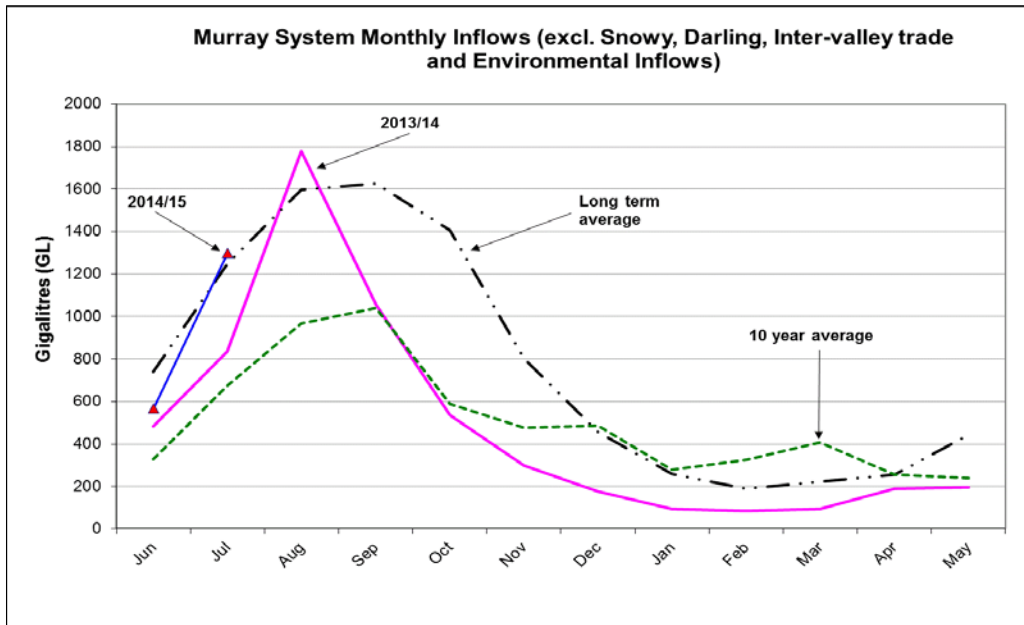
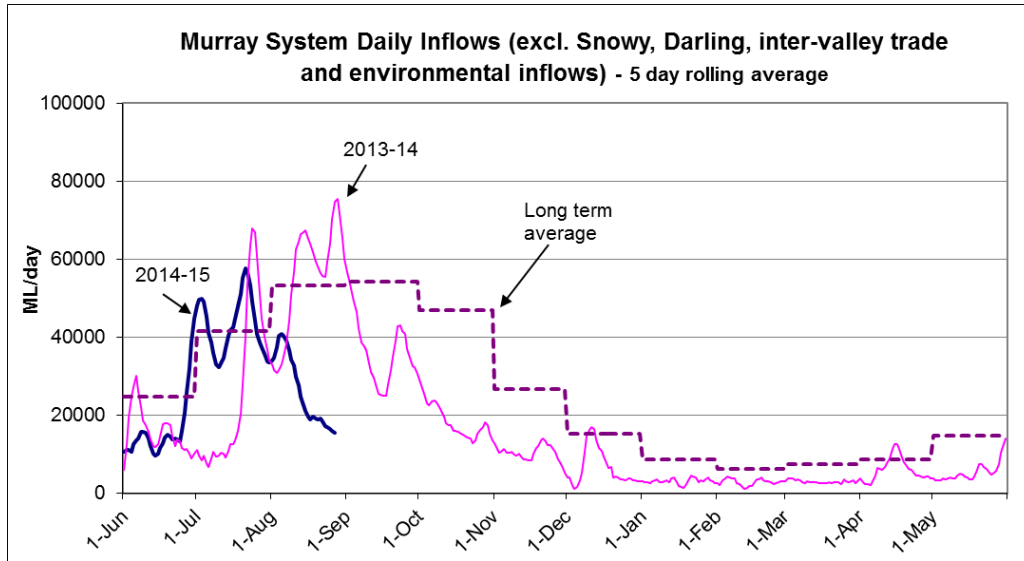
Lake Alexandrina average level for the past 5 days (m AHD)	0.72
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Barrages

Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.74	5	-	Open
Mundoo	26 openings	0.71	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwitchere	322 gates	0.74	4	Open	Open

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



State Allocations (as at 27 Aug 2014)

NSW - Murray Valley

High security	97%
General security	17%

Victorian - Murray Valley

High reliability	90%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	26%

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.g-mwater.com.au/water-resources/allocations/current.asp>
 SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

RIVER MURRAY FORECAST FOR LOW FLOWS – UPDATE

26 August 2014

Due to increased demand and system operation requirements, relief from low river levels are expected. Continued dry conditions has seen irrigation demand increase and commencement of an environmental watering event in the lower Murray, has required the release of additional water.

Releases downstream of Yarrawonga weir have been increasing since Thursday, 21 August, and today releases are at 8,500 ML/day. This has provided increased flow into the Bullatale Creek, Edward River and Gulpa Creek.

Downstream of Stevens Weir, river levels are unlikely to increase significantly due to upstream demand.

Downstream of Torrumbarry, flows are forecast to continue to fall this week. However, the low river level is expected to be short duration, with additional flows arriving as early as the weekend. This will see the river rise downstream of Torrumbarry next week.

Merran Creek customers should prepare for low inflows to the system late this week and early next, however, with additional flows downstream of Torrumbarry weir diversion should increase by mid to late next week.

Customers downstream of Swan Hill should see river levels continue to fall this week, but as with upstream areas, additional flow is in transit.

State Water advises customers that the forecast discussed above is based on current demand and weather forecast. The forecast information is subject to change without notice. State Water is advising customers to keep watch on river levels and consider adjusting their activities as a result of the changes to water levels.

Customers are reminded that a complying water order is to be lodged with State Water prior to extraction as this will assist State Water with forecast demand within the system downstream of Yarrawonga Weir, including the Gulpa Creek and Edward River.

Flow forecast information for a number of Murray River system locations can be found at the Murray-Darling Basin Authority website: <http://www.mdba.gov.au/river-data/current-information-forecasts/river-flows>



Customer Notice

Authorised by:

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