



RIVER MURRAY WEEKLY REPORT

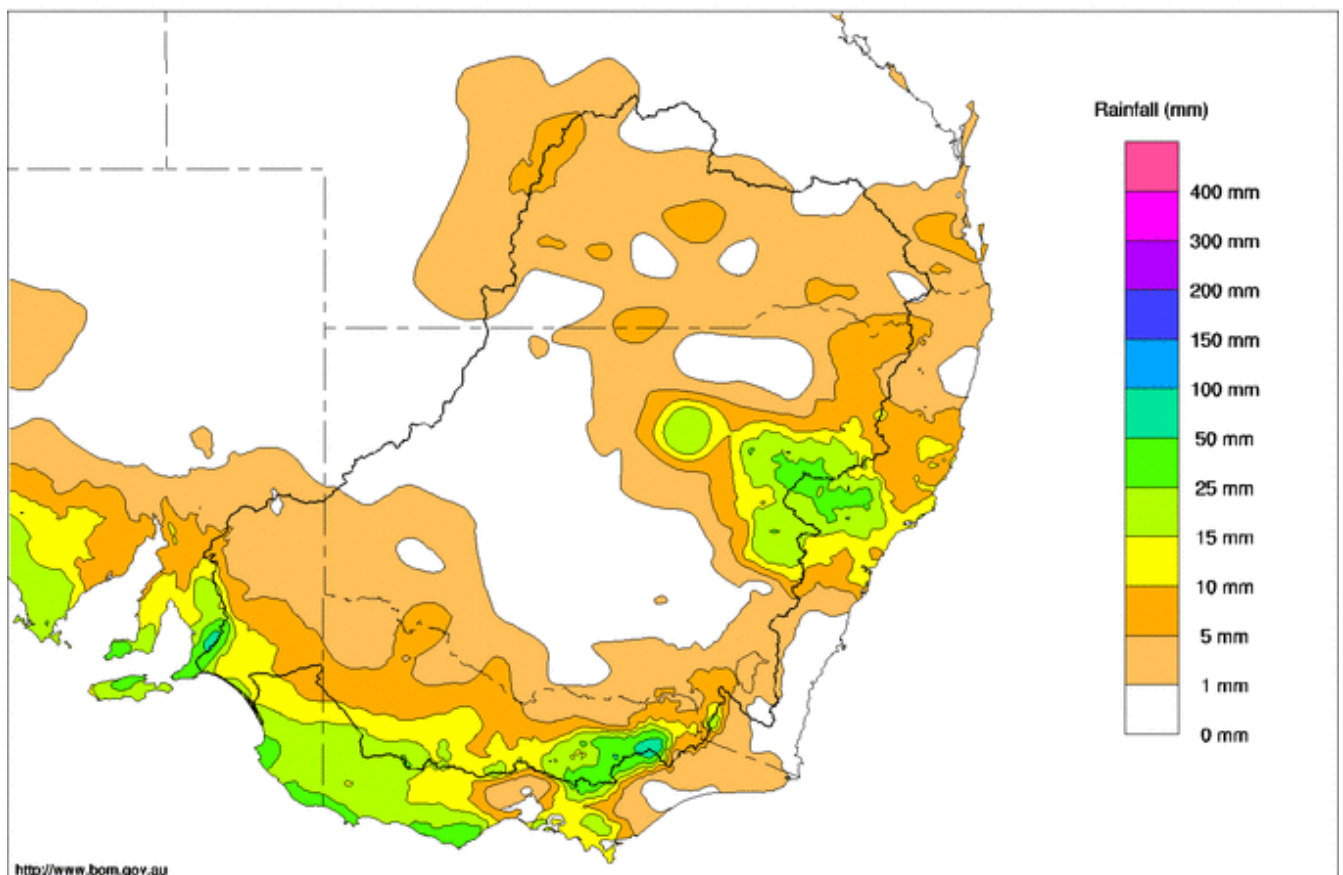
FOR THE WEEK ENDING WEDNESDAY, 30 JULY 2014

Trim Ref: D14/28952

Rainfall and Inflows

Rainfall and isolated showers were recorded mostly around the southern and eastern edge of the Murray-Darling Basin this week (Map 1). The highest weekly rainfall totals were in the Victorian Alps, including 87 mm at Mt Buller AWS and 67 mm at Rocky Valley. Other notable totals throughout the Basin included 56 mm at Mount Barker in South Australia, and in NSW, 28 mm at Quirindi, 27 mm at Quambone and 26 mm at Mudgee Airport AWS.

Murray-Darling Rainfall Totals (mm) Week Ending 30th July 2014
Product of the National Climate Centre



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Map 1 - Murray-Darling Basin rainfall for the week ending 30 July 2014 (Source: Bureau of Meteorology)

Stream flows in the upper Murray tributaries generally eased during the week, however rainfall on Wednesday 30 July has resulted in renewed minor rises. On the Mitta Mitta River at Hinnomunjie, the flow reached 4,200 ML/day on Thursday 31 July. On the upper Murray, the flow at Biggara rose to 2,400 ML/day. On the Ovens River, the flow at Rocky point peaked at 8,100 ML/day.



River Operations

- Much of the River Murray is currently unregulated. However operators remain alert for a potential return to drier conditions;
- Diversions are underway at the major irrigation offtakes in preparation for the coming irrigation season;
- Mildura weir pool is being refilled following completion of trestle upgrade works.

Continuing inflows from the tributaries downstream of the major storages on the Murray, Goulburn and Murrumbidgee Rivers over the past week have contributed to the continuation of unregulated flows in the River Murray from Barmah through to the South Australian border (including the Edward River). Within the River Murray system, unregulated flows are defined as flows that are in excess of downstream water demand (including South Australia entitlement), and which cannot be captured within Lake Victoria – the most downstream storage in the system.

MDBA total storage rose by 132 GL this week, with the active storage now 6,029 GL (71% capacity).

At **Dartmouth** Reservoir, the storage volume increased by 17 GL to 3,603 GL (93% capacity). The release is steady at 200 ML/day at Colemans gauge. Inflows into Hume Reservoir over the past week averaged 13,500 ML/day, with the storage rising 90 GL to 2,048 GL (68% capacity). The release remains at the minimum flow of 600 ML/day. Inflows from the Kiewa River downstream of Hume maintained the flow in the Murray at Doctors Point at an average of 3,000 ML/day.

At **Lake Mulwala** preparations for the coming irrigation season are underway at the major irrigation offtakes. Diversions to Mulwala Canal commenced this week and are currently 1,500 ML/day. Yarrawonga Main Channel is continuing to divert around 100 ML/day. Due to receding inflows from the Ovens River, the release from Yarrawonga Weir reduced over the week to 12,000 ML/day. Further downstream, most regulators into the Barmah-Millewa Forest remain open as flows continue above the channel capacity of the Barmah Choke.

In the **Edward-Wakool** system, flows through the Edward and Gulpa River offtakes are 1,800 ML/day and 700 ML/day respectively. Both these offtakes are fully open, with their flow varying in response to the water level in the Murray at Picnic Point. Downstream of the offtakes at Toonalook, the flow has peaked at around 5,800 ML/day with approximately 3,000 ML/day entering from the Murray via the Millewa Forest. At Stevens Weir, diversions at Wakool Canal commenced this week and are currently 500 ML/day. The release downstream of Stevens Weir is currently around 4,700 ML/day.

On the **Goulburn** River, the flow at McCoys Bridge has receded to 6,800 ML/day. On the **Campaspe** River, a pulse of environmental water is currently being released from Lake Eppalock. The release will continue for two weeks with a four day peak of around 1,500 ML/day.

At **Torrumbarry** Weir, diversions at National Channel are steady at 1,650 ML/day. The majority of this flow is being diverted for environmental benefit, with around 700 ML/day currently being directed into Gunbower Forest and 400 ML/day passing into Gunbower Creek. Water travelling through Gunbower is now exiting the forest at Chinamans Bend and returning to the River Murray (directly upstream of Barham) via Gunbower Creek. These return flows transport valuable organic material from the forest to the river, providing an important food source for in-stream micro-organisms that sustain aquatic ecosystem health.

On the **Murrumbidgee** River, the flow at Balranald is currently 2,900 ML/day and is expected to reach above 5,000 ML/day in the coming week. At Euston Weir, the pool level is 36 cm above the Full Supply Level (FSL) of 47.6 m AHD. The flow downstream of Euston Weir is currently 20,100 ML/day and forecast to continue rising to around 24,000 ML/day over the next week.

At **Mildura** Weir, the pool is currently being refilled following the completion of the upgrade works to the weir's trestles. The weir pool is currently 175 cm below FSL and will be gradually returned to FSL over the coming week.



Storage in **Menindee Lakes** was steady this week at around 369 GL (21% capacity). The release at Weir 32 remains steady at around 200 ML/day and the flow downstream at Burtundy is 140 ML/day. At Wentworth Weir, the downstream flow averaged 17,200 ML/day. The flow past Wentworth is forecast to continue rising over the coming week towards 20,000 ML/day.

At Weirs and **Locks 9 and 8**, the pool levels will gradually increase to around 15 cm and 40 cm, respectively, above FSL over 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 (see attached media release for more details).

At **Lake Victoria**, the storage volume increased by 25 GL to 572 GL (84% capacity). The rate of filling has been slowed this week because there are sufficient upstream flows in transit to ensure that the storage can be filled to FSL at a later date. Under the Lake Victoria Operating Strategy, MDBA aims to fill the storage as late as possible. This provides benefits for the lake's foreshore vegetation, which assists in the protection of important cultural heritage material. Flow to South Australia is currently around 15,000 ML/day.

At the **Lower Lakes**, the 5-day average water level in Lake Alexandrina is currently 0.74 m AHD. The release from the barrages is estimated to have averaged around 4,400 ML/day during the week.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 30 Jul 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	482.07	3 603	93%	71	3 532	+17
Hume Reservoir	192.00	3 005	186.70	2 048	68%	23	2 025	+90
Lake Victoria	27.00	677	26.12	572	84%	100	472	+25
Menindee Lakes		1 731*		369	21%	(- -) #	0	+0
Total		9 269		6 592	71%	--	6 029	+132
Total Active MDBA Storage							71% ^	

Major State Storages

Burrinjuck Reservoir	1 026	749	73%	3	746	+12
Blowering Reservoir	1 631	1 133	69%	24	1 109	+8
Eildon Reservoir	3 334	2 705	81%	100	2 605	+46

* 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 29 Jul 2014

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2014
Lake Eucumbene - Total	1 669	+31	Snowy-Murray	+17	149
Snowy-Murray Component	839	-11	Tooma-Tumut	+7	91
Target Storage	1 170		Net Diversions	10	58
			Murray 1 Release	+16	221

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)	2.1	2	Yarrowonga Main Channel (net)	0.4	1
Wakool Sys Allowance	0.0	2	Torrumbarry System + Nyah (net)	10.6	20
Western Murray Irrigation	0.1	0	Sunraysia Pumped Districts	0	1
Licensed Pumps	0.6	3	Licensed pumps - GMW (Nyah+u/s)	0	0
Lower Darling	0.1	1	Licensed pumps - LMW	0.5	3
TOTAL	2.9	8	TOTAL	11.5	25

* 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 unregulated flow.

Entitlement this month	108.5 *
Flow this week	93.4
Flow so far this month	200.1
Flow last month	103.6

(13 300 ML/day)

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

	Current	Average over the last week	Average since 1 August 2013
Swan Hill	110	110	110
Euston	110	120	110
Red Cliffs	140	160	130
Merbein	160	190	140
Burtundy (Darling)	710	690	520
Lock 9	190	190	180
Lake Victoria	230	230	240
Berri	230	320	290
Waikerie	440	490	340
Morgan	440	500	340
Mannum	450	430	360
Murray Bridge	510	500	380
Milang (Lake Alex.)	690	720	680
Poltalloch (Lake Alex.)	480	530	570
Meningie (Lake Alb.)	2 220	2 200	2 580
Goolwa Barrages	1 040	970	1 550



River Levels and Flows

Week ending Wednesday 30 Jul 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	-	-	-	4 520	F	3 510	4 720
Jingellic	4.0	2.25	208.77	8 980	R	9 370	13 630
Tallandoon (Mitta Mitta River)	4.2	1.71	218.60	1 290	F	1 470	2 030
Heywoods	5.5	1.30	154.93	600	S	600	600
Doctors Point	5.5	1.78	150.25	2 710	F	3 040	4 510
Albury	4.3	0.89	148.33	-	-	-	-
Corowa	3.8	1.03	127.05	3 320	F	3 980	5 110
Yarrowonga Weir (d/s)	6.4	1.92	116.96	12 030	F	15 710	20 570
Tocumwal	6.4	2.76	106.60	13 010	F	17 460	18 680
Torrumbarry Weir (d/s)	7.3	4.75	83.30	16 280	F	16 620	14 450
Swan Hill	4.5	2.84	65.76	16 860	S	15 850	12 410
Wakool Junction	8.8	5.32	54.44	19 720	R	18 080	13 850
Euston Weir (d/s)	8.8	3.19	45.03	20 070	R	18 290	14 840
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	3.50	28.26	16 810	F	17 210	14 130
Rufus Junction	-	4.56	21.49	13 960	R	12 330	4 970
Blanchetown (Lock 1 d/s)	-	1.07	-	13 690	R	10 470	5 910
Tributaries							
Kiewa at Bandiana	2.7	2.06	155.29	2 170	F	2 480	4 300
Ovens at Wangaratta	11.9	10.07	147.75	7 220	F	8 420	16 700
Goulburn at McCoys Bridge	9.0	4.33	95.75	6 840	F	7 390	7 340
Edward at Stevens Weir (d/s)	-	3.34	83.11	4 690	S	4 400	4 040
Edward at Liewah	-	3.02	58.40	2 590	R	2 440	1 790
Wakool at Stoney Crossing	-	1.99	55.48	2 270	R	2 070	1 430
Murrumbidgee at Balranald	5.0	3.13	59.09	2 870	R	2 400	2 640
Barwon at Mungindi	-	3.11	-	0	F	0	0
Darling at Bourke	-	4.00	-	50	F	70	70
Darling at Burtundy Rocks	-	0.74	-	140	S	140	120

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	13 920	23 580
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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	-0.14	-	No. 7 Rufus River	22.10	+0.08	+2.20
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.01	+0.58
No. 15 Euston	47.60	+0.36	-	No. 5 Renmark	16.30	+0.01	+0.61
No. 11 Mildura	34.40	-1.75	+0.71	No. 4 Bookpurnong	13.20	+0.05	+1.47
No. 10 Wentworth	30.80	-0.03	+0.86	No. 3 Overland Corner	9.80	+0.07	+1.04
No. 9 Kulnine	27.40	-0.00	+0.47	No. 2 Waikerie	6.10	+0.05	+0.78
No. 8 Wangumma	24.60	+0.07	+0.82	No. 1 Blanchetown	3.20	+0.04	+0.32

Lower Lakes FSL = 0.75 m AHD

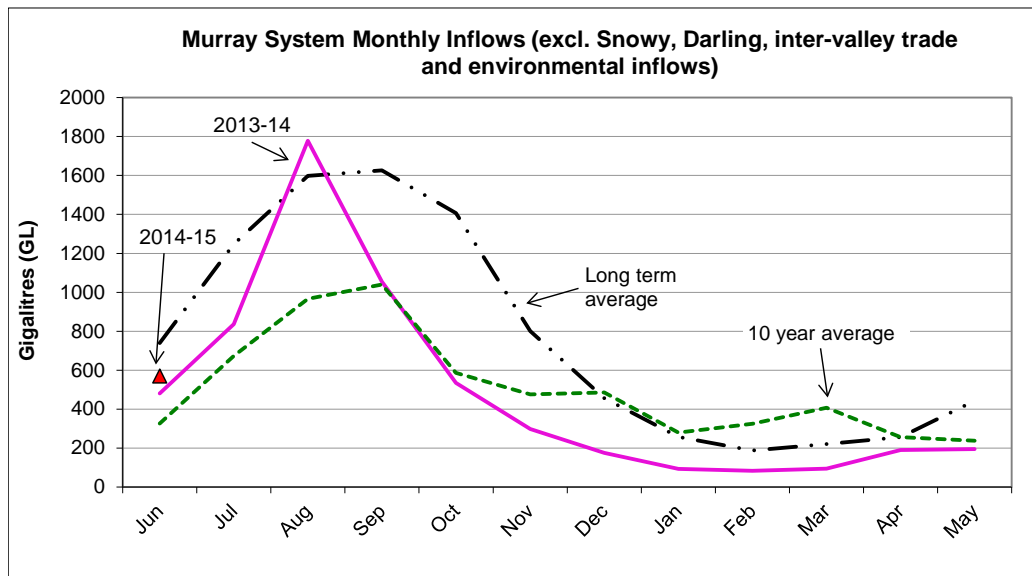
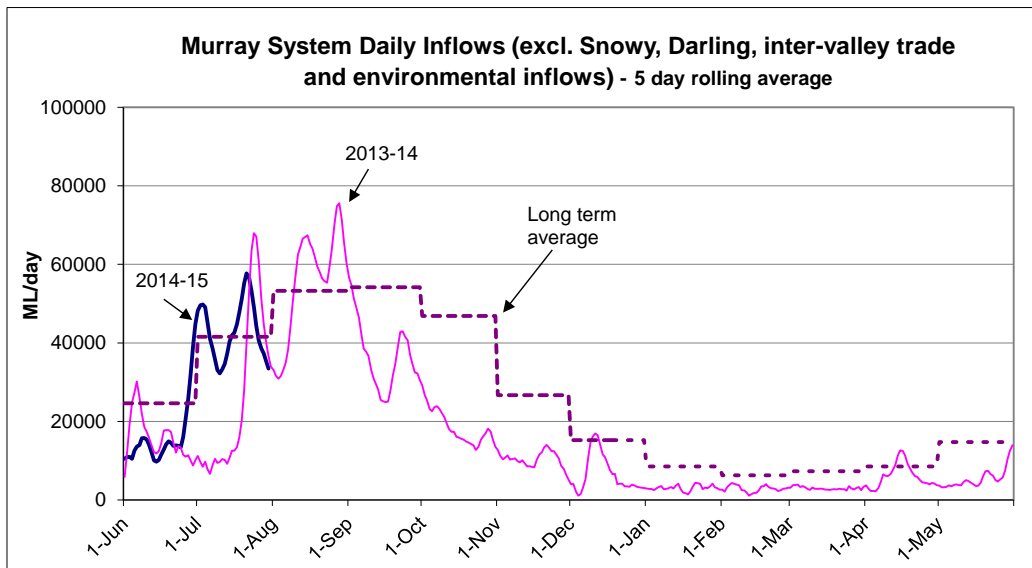
Lake Alexandrina average level for the past 5 days (m AHD)	0.74
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Barrages

Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.67	All closed	-	Open
Mundoo	26 openings	0.72	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.75	12	Open	Open

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



State Allocations (as at 30 Jul 2014)

NSW - Murray Valley

High security	97%
General security	9%

Victorian - Murray Valley

High reliability	76%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	17%

Victorian - Goulburn Valley

High reliability	90%
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>

MEDIA RELEASE



30 July 2014

Lock 8 and 9 weir pool changes start in August

River Murray water users and landholders at Lock 8 and Lock 9 can expect changing weir pool heights over the next eight to ten months, and are advised to take action as required.

The changes are part of a trial by the New South Wales Office of Water to introduce variations in the weir pool levels to achieve a more natural wetting and drying cycle for the riverine environment.

The Lock 9 weir pool level is expected to increase by up to 15cm above the full supply level over spring, and the Lock 8 weir pool is expected to increase by about 80cm above full supply level.

Over summer and autumn, the weir pools will be lower than full supply level. Lock 9 is expected to be drawn down to about 10cm below full supply level and Lock 8 will be drawn down to about 60cm below full supply level.

Both weir pools will be gradually raised back to full supply level by winter 2015.

The table below outlines the overall plan on a month-by-month basis. These are indicative water levels only; actual river operations may differ.

Adjustment in pool height relative to full supply level (metres)

Month	Lock 8	Lock 9	Month	Lock 8	Lock 9
July 2014	+0	+0	January 2015	-0.25	-0.1
August	+0.4	+0.15	February	-0.5	-0.1
September	+0.6	+0.15	March	-0.6	-0.1
October	+0.8	+0.15	April	-0.25	+0
November	+0.4	+0.15	May	+0	+0
December	+0	+0	June	+0	+0

The MDBA will issue a revised flow advice if there are any significant changes to the plan, which will also be available on the MDBA website at www.mdba.gov.au.

River users wanting more information on river heights can contact MDBA on (02) 6279 0100 or receive updates at www.mdba.gov.au/river-data/current-information-forecasts/weekly-report.

The trial is being conducted by the MDBA in cooperation with the New South Wales Office of Water, SA Water and the Mallee Catchment Management Authority.

ENDS

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

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