



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 13 NOVEMBER 2013

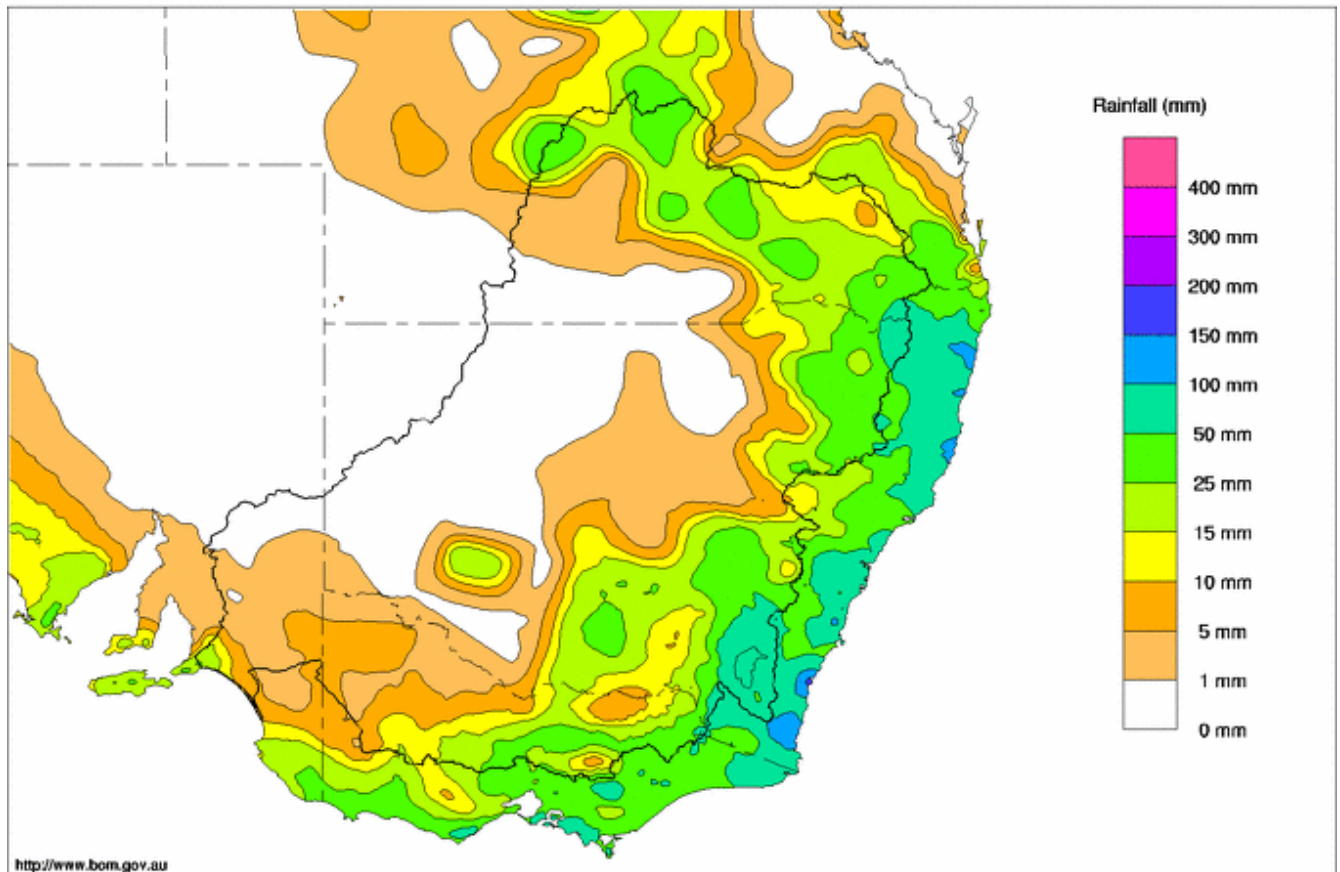
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Rainfall and Inflows

There was welcome precipitation over northern, eastern and southern parts of the Murray-Darling Basin this week as a complex, slow-moving trough system developed over south-eastern Australia. The system was fed by a moist easterly airstream and generated areas of rain and scattered thunderstorms over a period of several days.

The highest rainfall totals were recorded along the NSW Divide, in the ACT and in south-east Queensland with patchier totals reported further inland. Large parts of the western Basin remained dry (Map 1). Notable rainfall totals in the south-east included 88 mm at Gungahlin, 74 mm at Cooma Airport, 72 mm at Canberra Airport and 66 mm at Burrinjuck Dam; while parts of the NSW Snowy Mountains recorded more than 100 mm, with unseasonal snow falling at higher elevations. In northern NSW, there was 76 mm at Tenterfield and Glen Innes and 74 mm at Emmaville. Queensland totals included 74 mm at Wallangarra and 66 mm at Stanthorpe. In western Victoria there was 53 mm at Mt William, and further east, there was 50 mm at Polly McGuinns Weir, 43 mm at Mt Hotham and 40 mm at Strathbogie.

Murray-Darling Rainfall Totals (mm) Week Ending 13th November 2013
Product of the National Climate Centre



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

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Map 1 - Murray-Darling Basin rainfall for the week ending 13 November 2013 (Source: Bureau of Meteorology).



There were widespread, although relatively modest stream flow responses along Basin river systems following the rain. In the upper Murray system tributaries, the most significant rises were reported along the upper Murray and upper Mitta Mitta Rivers. For example, the flow in the Mitta Mitta River at Hinnomunjie Bridge increased from 550 to 1,350 ML/day; while on the upper Murray, the flow at Biggara increased from 850 to 1,500 ML/day. On the Ovens River, the flow at Rocky Point has increased from around 1,300 ML/day early in the week to the current flow of 1,700 ML/day.

River Operations

MDBA active storage decreased by 121 GL this week and is currently 7,369 GL, or 86% capacity.

At Dartmouth Reservoir, the storage volume has decreased by 7 GL to 3,806 GL (99% capacity). The release (measured at Colemans) was increased to 2,500 ML/day early in the week and is expected to remain at this flow for the next few days. A plan to increase releases is currently being considered although it is anticipated that increases will not begin until at least after the coming weekend. The MDBA will issue a flow advice to provide further information when required.

At Hume Reservoir, the storage volume decreased by 64 GL to 2,577 GL (86% capacity). Inflows averaged around 6,300 ML/day and the release was further reduced over the week from around 16,000 to 13,500 ML/day as downstream demands continued to ease.

At Yarrawonga Weir, the total daily diversion through Mulwala Canal and Yarrawonga Main Channel has decreased to about 2,350 ML/day following the rain across parts of the irrigation districts. The current level in Lake Mulwala is 124.83 m AHD (7 cm below FSL) with levels close to FSL quite likely during the next few days. The release remains at 15,000 ML/day and includes environmental water for the benefit of the Barmah-Millewa Forest and the river downstream all the way to the Murray Mouth.

On the Edward River system, the combined inflow through the Edward and Gulpa offtakes is just under 2,900 ML/day. Diversions into the Wakool Main Canal eased back slightly, with a weekly average of around 800 ML/day. The flow downstream of Stevens Weir is close to 1,200 ML/day.

On the Goulburn River, the flow at McCoys Bridge is currently 1,250 ML/day, with slightly lower flows expected during the next few days. On the lower Campaspe River, flows are currently increasing due to an environmental release providing a springtime pulse for the river. The current flow at Rochester is around 1,550 ML/day.

At Torrumbarry Weir, diversions through the National Channel have remained at 2,000 ML/day throughout the week, although lower diversions are expected for the days ahead. The flow downstream in the River Murray is rising slowly and is currently 10,800 ML/day. Downstream at Swan Hill, the flow has eased this week to around 10,300 ML/day and should continue to recede for a few more days.

On the lower Murrumbidgee River, the flow at Balranald has started to increase, with a flow greater than 1,500 ML/day expected in the next day or two. Inflows from the Murrumbidgee River will be above the normal end-of-system target during the remainder of November and December due to the delivery of around 500 ML/day of traded environmental water. Downstream at Euston Weir, the flow along the Murray continues to fall away slowly. The current flow is 13,000 ML/day and flows slightly less than 13,000 ML/day are expected later in the coming week. Downstream at Mildura and Wentworth, flows are also receding slowly.



On the Darling River, total storage in Menindee Lakes decreased by a further 25 GL to the current volume of 1,024 GL and the release (measured at Weir 32) remains at 300 ML/day. The release of environmental water from Lake Cawndilla into the Great Darling Anabranch is also continuing, with a flow of 1,300 ML/day maintained throughout the week. Inflows to the Menindee Lakes remain very low, although upstream on the Barwon River there have been modest flow increases at gauges upstream of Walgett due to the arrival of environmental water from the Gwydir River system. This water was released primarily to provide environmental benefits along the Mehi River (a Gwydir River anabranch). Flows in the range of 200-800 ML/day are now expected to arrive in the Darling River at Bourke in the next week or two.

At Lake Victoria, the storage volume decreased by 25 GL to 636 GL (94% capacity). The volume will continue to decrease in the coming weeks. The flow to South Australia averaged 14,000 ML/day during the week, with a reduction to 13,000 ML/day to commence from 14 November. The flow remains above the normal South Australian entitlement due to the delivery of additional traded environmental water.

At the Lower Lakes, the 5-day average level for Lake Alexandrina increased to 0.78 m AHD. Flows into the Coorong through the Barrages have been averaging around 2,000 to 3,000 ML/day during the last few weeks. However, a higher release has now begun, with 5 additional gates opened so far to pass a flow up to around 5,000 ML/day. Barrage releases are now being managed to gradually decrease the Lower Lakes level with a target of around 0.70 m AHD set for the end of November.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 13 Nov 2013

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	485.23	3 806	99%	71	3 735	-7
Hume Reservoir	192.00	3 005	189.77	2 577	86%	23	2 554	-65
Lake Victoria	27.00	677	26.66	636	94%	100	536	-25
Menindee Lakes		1 731*		1 024	59%	(480 #)	544	-25
Total		9 269		8 043	87%	--	7 369	-121
Total Active MDBA Storage							86% ^	

Major State Storages

Burrinjuck Reservoir	1 026	676	66%	3	673	+8
Blowering Reservoir	1 631	1 449	89%	24	1 425	-2
Eildon Reservoir	3 334	3 124	94%	100	3 024	-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 12 Nov 2013

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2013
Lake Eucumbene - Total	1 858	n/a	Snowy-Murray	+0	500
Snowy-Murray Component	792	n/a	Tooma-Tumut	+5	209
Target Storage	1 450		Net Diversion	-5	291
			Murray 1 Release	+10	756

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2013	Victoria	This Week	From 1 July 2013
Murray Irrig. Ltd (Net)	22.2	382	Yarrowonga Main Channel (net)	7.5	113
Wakool Sys Allowance	1.7	1	Torrumbarry System + Nyah (net)	11.3	169
Western Murray Irrigation	0.8	6	Sunraysia Pumped Districts	3.4	31
Licensed Pumps	4.8	74	Licensed pumps - GMW (Nyah+u/s)	1	8
Lower Darling	9.7	103	Licensed pumps - LMW	10.5	75
TOTAL	39.2	566	TOTAL	33.7	396

* 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	180.0 *
Flow this week	98.2
Flow so far this month	177.0
Flow last month	622.8

(14 000 ML/day)

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

	Current	Average over the last week	Average since 1 August 2013
Swan Hill	80	80	100
Euston	90	90	110
Red Cliffs	100	90	110
Merbein	100	100	120
Burtundy (Darling)	-	-	-
Lock 9	120	120	140
Lake Victoria	240	250	290
Berri	210	210	280
Waikerie	260	270	340
Morgan	230	250	330
Mannum	260	250	390
Murray Bridge	250	230	410
Milang (Lake Alex.)	650	650	650
Poltalloch (Lake Alex.)	400	370	570
Meningie (Lake Alb.)	2 550	2 510	2 580
Goolwa Barrages	850	840	1 740



River Levels and Flows

Week ending Wednesday 13 Nov 2013

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	-	-	-	820	F	1 490	1 490
Jingellic	4.0	1.56	208.08	3 230	R	4 020	3 130
Tallandoon (Mitta Mitta River)	4.2	2.18	219.07	2 900	R	2 660	2 450
Heywoods	5.5	2.89	156.52	13 400	F	15 170	17 710
Doctors Point	5.5	2.98	151.45	14 530	R	15 870	18 650
Albury	4.3	1.96	149.40	-	-	-	-
Corowa	3.8	3.29	129.31	16 040	F	16 790	19 030
Yarrawonga Weir (d/s)	6.4	2.30	117.34	15 130	S	15 130	14 990
Tocumwal	6.4	2.99	106.83	15 050	S	14 880	14 840
Torrumbarry Weir (d/s)	7.3	3.41	81.96	10 840	R	10 880	12 020
Swan Hill	4.5	1.95	64.87	10 310	F	10 650	11 270
Wakool Junction	8.8	4.14	53.26	12 740	F	13 060	13 810
Euston Weir (d/s)	8.8	2.36	44.20	12 970	F	13 180	14 350
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	3.31	28.07	11 730	R	11 960	13 450
Rufus Junction	-	4.44	21.37	13 040	F	13 430	12 300
Blanchetown (Lock 1 d/s)	-	1.14	-	11 360	R	11 320	11 200
Tributaries							
Kiewa at Bandiana	2.7	1.28	154.51	890	R	770	960
Ovens at Wangaratta	11.9	8.47	146.15	1 750	R	1 730	2 040
Goulburn at McCoys Bridge	9.0	1.69	93.11	1 250	F	1 280	2 500
Edward at Stevens Weir (d/s)	-	1.40	81.17	1 190	F	1 160	1 210
Edward at Liewah	-	2.05	57.43	1 390	S	1 420	1 610
Wakool at Stoney Crossing	-	1.69	55.18	1 120	S	1 120	1 200
Murrumbidgee at Balranald	5.0	1.80	57.76	1 350	R	1 180	1 470
Barwon at Mungindi	-	3.05	-	0	F	0	10
Darling at Bourke	-	3.98	-	30	S	30	80
Darling at Burtundy Rocks	-	0.73	-	120	S	130	140

Natural Inflow to Hume	5 490	5 610
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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
Yarrawonga	124.90	-0.07	-	No. 7 Rufus River	22.10	+0.04	+2.10
No. 26 Torrumbarry	86.05	+0.01	-	No. 6 Murtho	19.25	+0.00	+0.61
No. 15 Euston	47.60	+0.02	-	No. 5 Renmark	16.30	-0.01	+0.59
No. 11 Mildura	34.40	-0.00	+0.46	No. 4 Bookpurnong	13.20	+0.03	+1.42
No. 10 Wentworth	30.80	+0.02	+0.67	No. 3 Overland Corner	9.80	+0.02	+0.69
No. 9 Kulnine	27.40	+0.10	+0.44	No. 2 Waikerie	6.10	+0.05	+0.65
No. 8 Wangumma	24.60	+0.35	+0.29	No. 1 Blanchetown	3.20	+0.02	+0.39

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.78
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Barrages

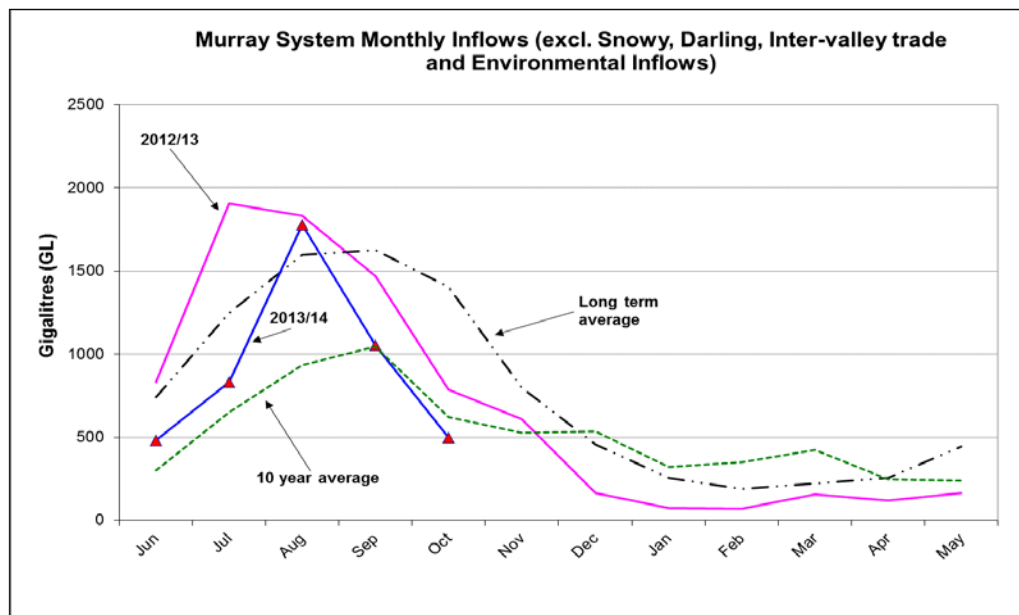
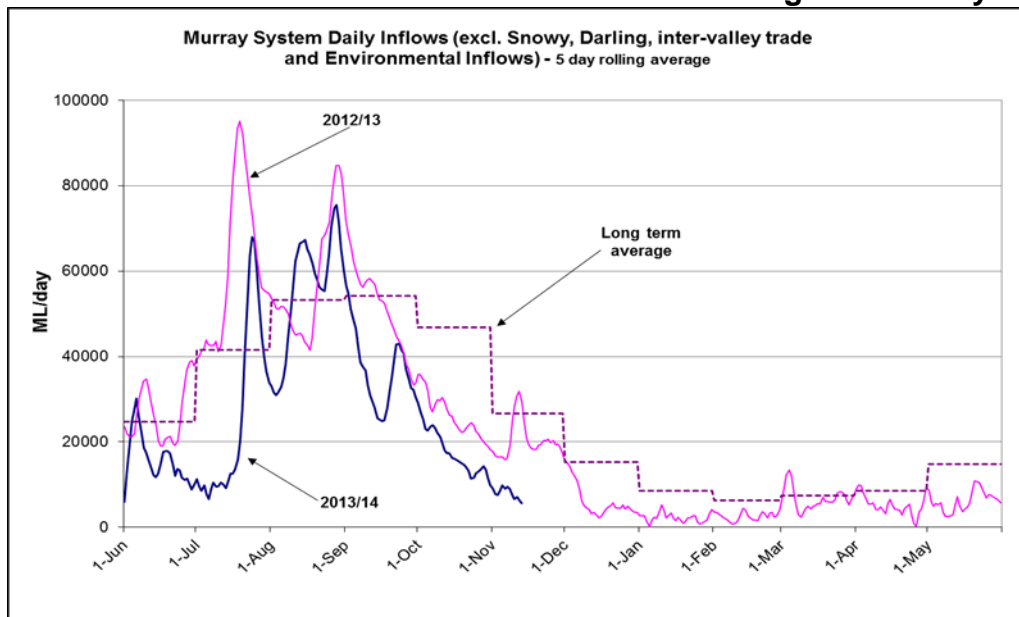
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.80	4	-	Open
Mundoo	26 openings	0.77	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.77	11	Open	Open

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



Week ending Wednesday 13 Nov 2013



State Allocations (as at 13 Nov 2013)

NSW - Murray Valley

High security	100%
General security	100%

Victorian - Murray Valley

High reliability	100%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	95%
General security	43%

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>