



RIVER MURRAY WEEKLY REPORT

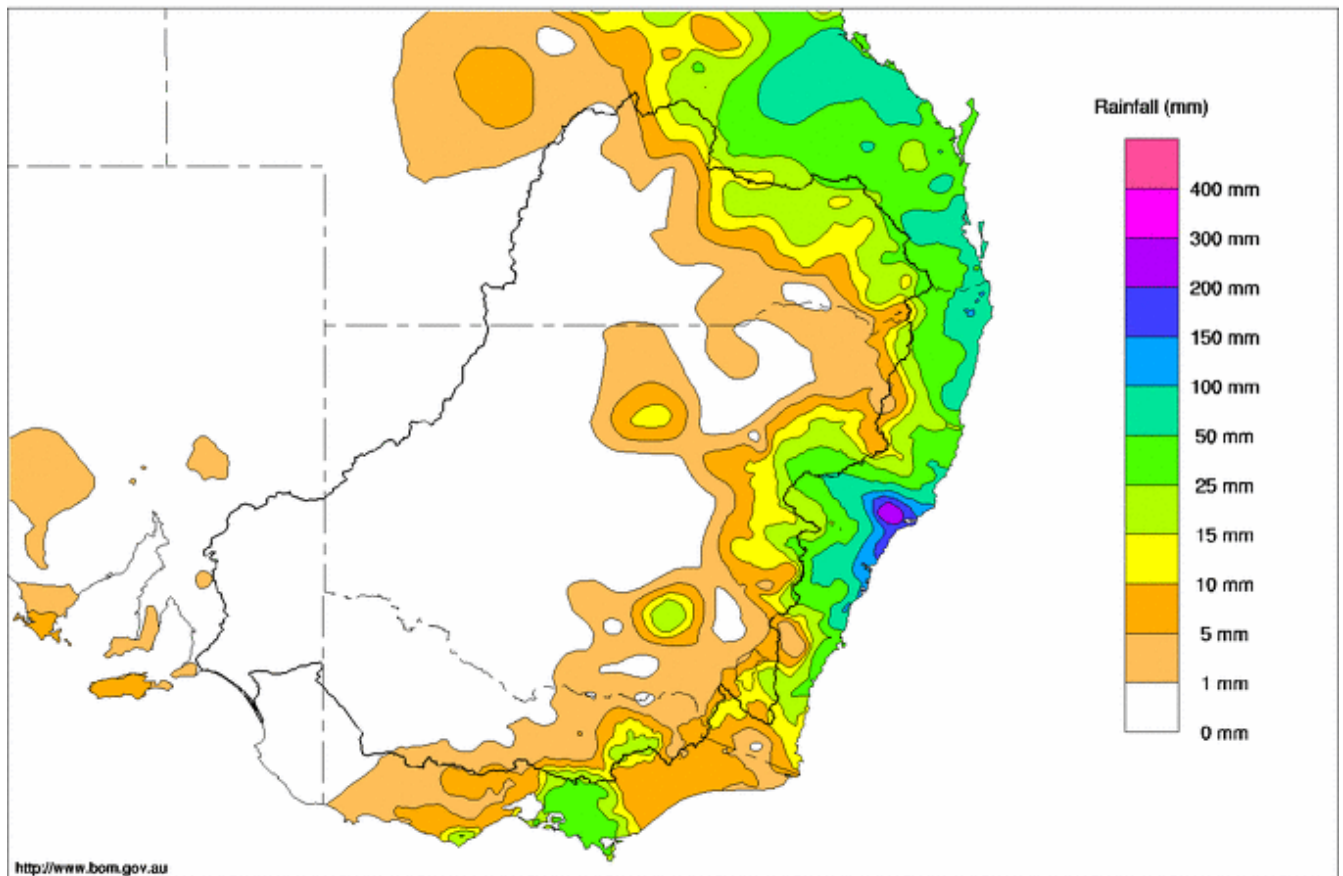
FOR THE WEEK ENDING WEDNESDAY, 20 NOVEMBER 2013

Trim Ref: D13/42031

Rainfall and Inflows

The eastern edge of the Murray-Darling Basin received most of the rain this week as storms and showers penetrated inland across the ranges. Highest totals were generally recorded in southeast Queensland and along the NSW and Victorian Divide (Map 1). In Queensland's Darling Downs, 56 mm was recorded at Drillham, 55 mm at Killarney and 46 mm at Pittsworth. In NSW, 32 mm was recorded at Tenterfield on the northern tablelands, 35 mm at Blackville and 26 mm at Quirindi on the northwest slopes, 34 mm at Temora on the lower southwest slopes and 23 mm at Captains Flat on the southern tablelands. In Victoria, 42 mm was recorded at Mt Buller AWS and 34 mm at Mount Hotham AWS in the upper northeast and 28 mm at Burroweye in the lower northeast.

Murray-Darling Rainfall Totals (mm) Week Ending 20th November 2013
Product of the National Climate Centre



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Map 1 - Murray-Darling Basin rainfall for the week ending 20 November 2013 (Source: Bureau of Meteorology). Issued: 20/11/2013

Tributaries in the upper Murray catchment have receded this week. On the Mitta Mitta River, the flow at Hinnomunjie Bridge reduced from 1,300 ML/day to 600 ML/day. On the upper Murray, the flow at Biggara fell from 1,200 ML/day to 800 ML/day while downstream at Jingellic the flow reduced from 6,400 ML/day to 3,300 ML/day. On the Ovens River the flow at Rocky Point reduced from 1,800 ML/day to 1,300 ML/day.



River Operations

MDBA active storage decreased by 106 GL this week and is currently 7,262 GL, or 84% capacity.

At Dartmouth Reservoir, the storage volume has decreased by 8 GL to 3,798 GL (98% capacity). The release (measured at Colemans) was increased to 3,500 ML/day late in the week, but is expected to reduce to 1,500 ML/day in the coming week. At Hume Reservoir, the storage volume decreased by 55 GL to 2,522 GL (84% capacity). Inflows averaged around 8,000 ML/day. The release increased during the second half of the week from around 12,000 ML/day to 19,800 ML/day as downstream demands increased.

At Yarrawonga Weir, the total daily diversion through Mulwala Canal and Yarrawonga Main Channel more than doubled over the week, reaching 4,400 ML/day, and is expected to continue to increase over the coming week. Lake Mulwala, currently at 124.63 m AHD (27 cm below FSL), has been drawn down to supply additional demand at the irrigation off-takes. The lake level is expected to fall to around 124.6 m AHD in the next few days, before returning to around 124.7 m AHD in the coming week. 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 off-takes is just under 2,800 ML/day. Diversions into the Wakool Main Canal averaged around 850 ML/day, but are expected to increase over the coming week. The flow downstream of Stevens Weir has averaged close to 1,200 ML/day.

On the Goulburn River, an environmental release providing a springtime pulse for the river has increased the flow at McCoys Bridge to 5,850 ML/day. Slightly higher flows are expected during the next few days. On the lower Campaspe River the flow, measured at Rochester, has receded from around 1,500 ML/day to 270 ML/day.

At Torrumbarry Weir, diversions through the National Channel reduced to 1,500 ML/day, but returned to 2,000 ML/day at the end of the week. The flow downstream in the River Murray averaged 11,900 ML/day. Further downstream at Swan Hill, the flow increased to around 11,300 ML/day.

On the lower Murrumbidgee River, the flow at Balranald averaged 1,350 ML/day. Downstream at Euston Weir, the flow along the Murray continued to fall away slowly and is currently 12,300 ML/day.

On the Darling River, total storage in Menindee Lakes decreased by 29 GL to the current volume of 995 GL (57% capacity). 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 continuing, with a flow of around 500 ML/day currently at Packers Crossing. Flow in the Great Darling Anabranch reached the River Murray upstream of Lock 9 this week and is expected to reach around 500 ML/day in the coming week.

At Lake Victoria, the storage volume decreased by 14 GL to 621 GL (92% capacity). The flow to South Australia averaged 13,000 ML/day during the week. The flow is expected to average around 12,000 ML/day for the remainder of 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 eased to 0.77 m AHD. Flows into the Coorong through the Barrages averaged around 3,000 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 20 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	485.11	3 798	98%	71	3 727	-8
Hume Reservoir	192.00	3 005	189.47	2 522	84%	23	2 499	-55
Lake Victoria	27.00	677	26.54	621	92%	100	521	-14
Menindee Lakes		1 731*		995	57%	(480 #)	515	-29
Total		9 269		7 936	86%	--	7 262	-106
Total Active MDBA Storage							84% ^	

Major State Storages

Burrinjuck Reservoir	1 026	691	67%	3	688	+15
Blowering Reservoir	1 631	1 446	89%	24	1 422	-2
Eildon Reservoir	3 334	3 083	92%	100	2 983	-40

* 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 19 Nov 2013

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2013
Lake Eucumbene - Total	1 847	n/a	Snowy-Murray	+4	504
Snowy-Murray Component	808	n/a	Tooma-Tumut	+1	210
Target Storage	1 450		Net Diversion	3	294
			Murray 1 Release	+7	763

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)	18.3	401	Yarrowonga Main Channel (net)	7.7	120
Wakool Sys Allowance	1.9	3	Torrumbarry System + Nyah (net)	9.1	178
Western Murray Irrigation	1.0	7	Sunraysia Pumped Districts	4.1	35
Licensed Pumps	4.9	79	Licensed pumps - GMW (Nyah+u/s)	0.4	8
Lower Darling	9.7	113	Licensed pumps - LMW	6.1	81
TOTAL	35.8	603	TOTAL	27.4	422

* 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	91.5
Flow so far this month	268.5
Flow last month	622.8

(13 100 ML/day)

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

	Current	Average over the last week	Average since 1 August 2013
Swan Hill	90	90	90
Euston	90	90	110
Red Cliffs	110	100	110
Merbein	110	110	120
Burtundy (Darling)	-	-	-
Lock 9	130	120	140
Lake Victoria	180	220	280
Berri	220	210	270
Waikerie	260	250	330
Morgan	210	200	320
Mannum	270	270	380
Murray Bridge	270	250	400
Milang (Lake Alex.)	660	660	650
Poltalloch (Lake Alex.)	460	450	560
Meningie (Lake Alb.)	2 500	2 520	2 570
Goolwa Barrages	830	840	1 690



River Levels and Flows

Week ending Wednesday 20 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	-	-	-	1 110	F	3 050	1 380
Jingellic	4.0	1.57	208.09	3 300	F	4 600	4 020
Tallandoon (Mitta Mitta River)	4.2	2.34	219.23	3 610	S	3 050	2 660
Heywoods	5.5	3.39	157.02	19 810	R	15 050	15 170
Doctors Point	5.5	3.48	151.95	20 590	F	15 990	15 870
Albury	4.3	2.54	149.98	-	-	-	-
Corowa	3.8	3.47	129.49	17 310	R	14 770	16 790
Yarrowonga Weir (d/s)	6.4	2.29	117.33	15 050	R	14 830	15 130
Tocumwal	6.4	2.93	106.77	14 430	R	14 590	14 880
Torrumbarry Weir (d/s)	7.3	3.68	82.23	11 920	S	11 880	10 880
Swan Hill	4.5	2.10	65.02	11 350	R	10 610	10 650
Wakool Junction	8.8	4.12	53.24	12 640	R	12 490	13 100
Euston Weir (d/s)	8.8	2.27	44.11	12 260	S	12 570	13 180
Mildura Weir (d/s)	-	-	-	-	-	-	-
Wentworth Weir (d/s)	7.3	3.05	27.81	10 820	S	11 170	11 960
Rufus Junction	-	4.39	21.32	12 670	R	12 480	13 430
Blanchetown (Lock 1 d/s)	-	1.09	-	9 730	F	10 780	11 320
Tributaries							
Kiewa at Bandiana	2.7	1.43	154.66	1 100	R	930	770
Ovens at Wangaratta	11.9	8.43	146.11	1 640	R	1 820	1 730
Goulburn at McCoys Bridge	9.0	3.92	95.34	5 850	R	2 450	1 280
Edward at Stevens Weir (d/s)	-	1.40	81.17	1 190	F	1 260	1 160
Edward at Liewah	-	2.03	57.41	1 350	S	1 380	1 420
Wakool at Stoney Crossing	-	1.68	55.18	1 120	R	1 140	1 130
Murrumbidgee at Balranald	5.0	1.65	57.61	1 210	R	1 360	1 170
Barwon at Mungindi	-	3.11	-	0	F	0	0
Darling at Bourke	-	3.97	-	30	S	30	30
Darling at Burtundy Rocks	-	0.74	-	140	R	110	130

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	5 890	6 000
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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	-0.27	-	No. 7 Rufus River	22.10	+0.02	+2.06
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	-0.01	+0.54
No. 15 Euston	47.60	-0.01	-	No. 5 Renmark	16.30	-0.02	+0.50
No. 11 Mildura	34.40	-0.03	+0.34	No. 4 Bookpurnong	13.20	+0.05	+1.31
No. 10 Wentworth	30.80	+0.00	+0.41	No. 3 Overland Corner	9.80	+0.04	+0.59
No. 9 Kulnine	27.40	-0.22	+0.47	No. 2 Waikerie	6.10	+0.03	+0.56
No. 8 Wangumma	24.60	+0.26	+0.36	No. 1 Blanchetown	3.20	-0.03	+0.34

Lower Lakes FSL = 0.75 m AHD

Lake Alexandrina average level for the past 5 days (m AHD)	0.77
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Barrages

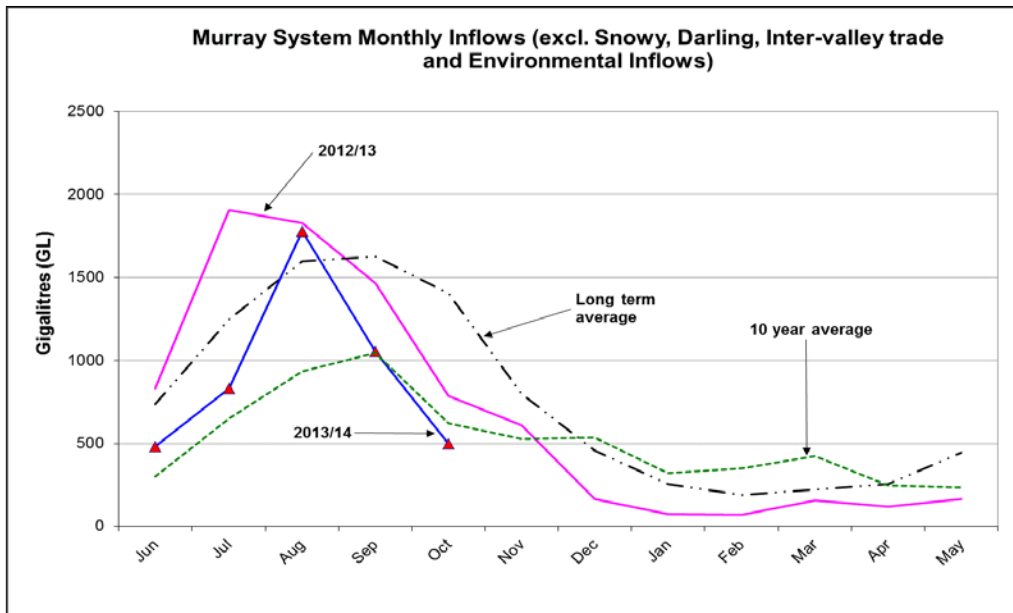
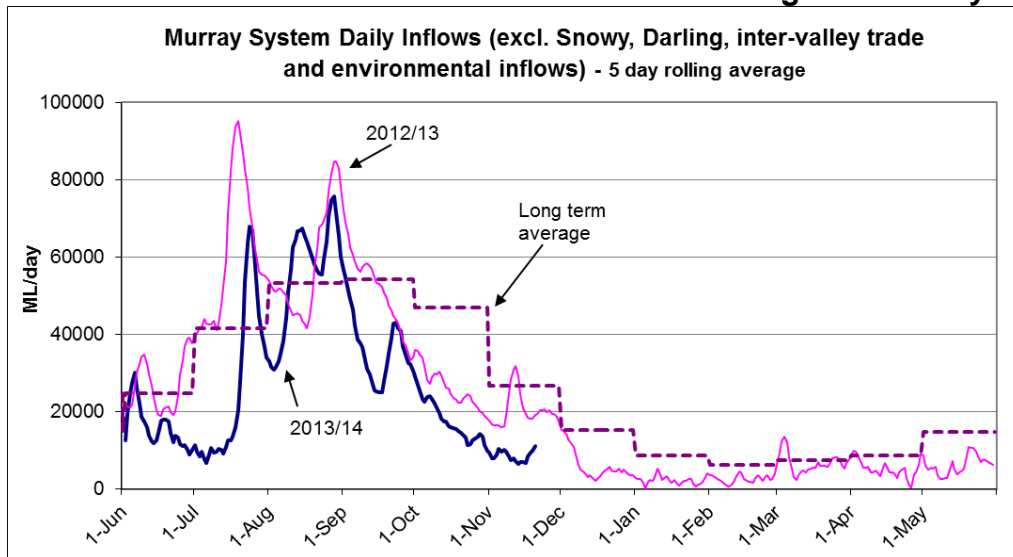
Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.76	All closed	-	Open
Mundoo	26 openings	0.69	All closed	-	-
Boundary Creek	6 openings	-	0.1	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.59	13	Open	Open

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



Week ending Wednesday 20 Nov 2013



State Allocations (as at 20 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	47%

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>