



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 23 NOVEMBER 2011

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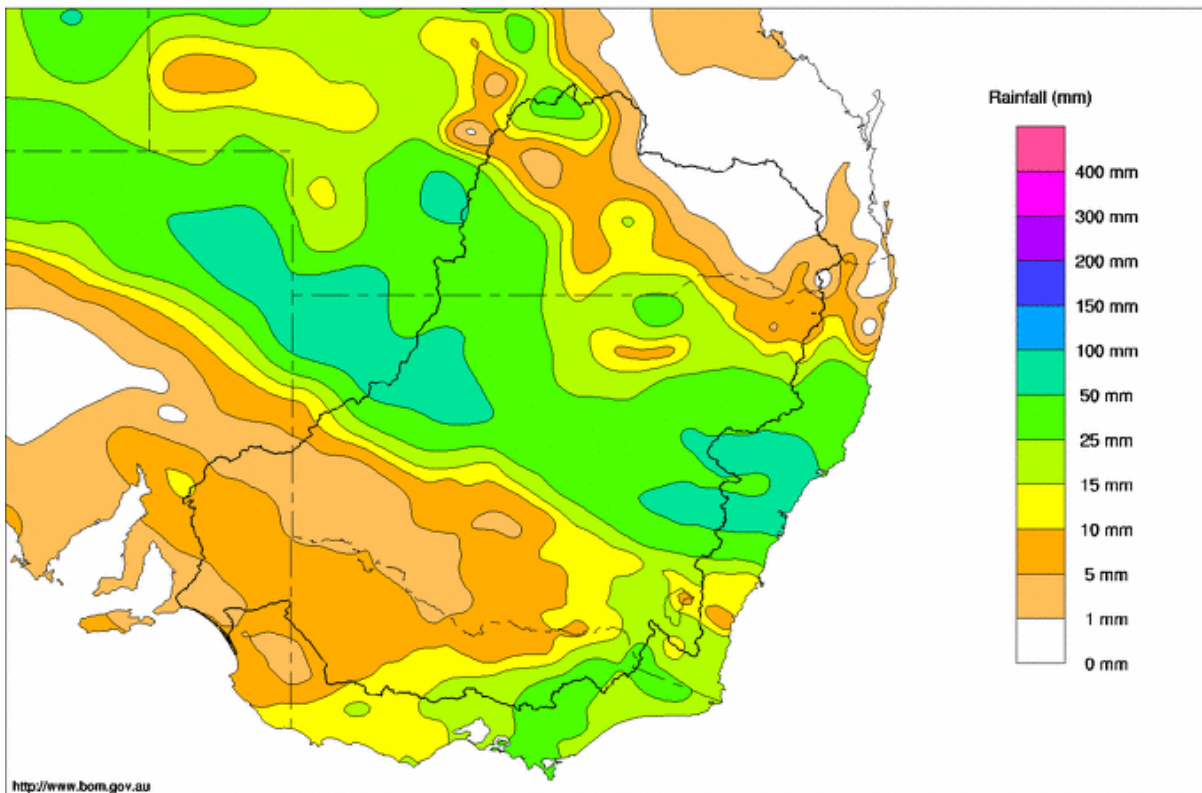
Rainfall and Inflows

The variable weather conditions that are commonly observed during spring across the Murray-Darling Basin continued to affect the region over the last seven days. A period of mostly fine and warm weather early in the week gave way to rainfall as a trough system moved through slowly from the west. This system brought rainfall to the south and south-east during the weekend, before generating a broad band of rain across NSW during the last few days (Map 1). The Bureau of Meteorology is forecasting further rain over a wide area of eastern Australia in the coming days with the possibility of heavy falls over the New England Ranges including the upper Namoi and Peel River catchments.

Highest rain totals for the week fell across the NSW central western slopes and ranges including 81 mm at Orange, 74 mm at Manildra and 69 mm at Dunedoo; while in the northwest of NSW, there was 51 mm at Cobar and 69 mm at White Cliffs. Totals in the south-east ranges included 55 mm at Mt Hotham and 47 mm at Rocky Valley.

Stream flows in the upper Murray catchments rose slightly during the week in response to the rain, but are now receding again. For example, on the Mitta Mitta River, the flow at Hinnomunjie increased from 900 to 1,300 ML/day before receding to 950 ML/day; while on the upper Murray River, the flow at Biggara increased from 1,100 ML/day to a peak of 1,600 ML/day. On the Ovens River, the flow at Rocky Point peaked at 1,800 ML/day during the week, but is now flowing at 1,300 ML/day.

Murray Darling Rainfall Analysis (mm) Week Ending 23rd November 2011
Product of the National Climate Centre



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Map 1 - Murray-Darling Basin rainfall for the week ending 23 November 2011 (Source: Bureau of Meteorology).



River Operations

MDBA active storage decreased by 78 GL during the week to 7,440 GL (87% capacity). At Dartmouth Reservoir, the total storage increased by 13 GL to 2,889 GL, which is 75% capacity. The release remained steady at the normal minimum of 200 ML/day.

Storage in Hume Reservoir continued to fall away, decreasing by 68 GL to 2,737 GL (91% capacity). The release increased from 13,000 ML/d to 19,000 ML/d by the end of the week

At Lake Mulwala, the pool level is currently 124.75 m AHD. Diversions to the Yarrawonga Main Canal were steady at an average of around 1,400 ML/day. Diversions to Mulwala Canal increased over the week from 2,100 ML/day to around 4,500 ML/day. The release from Yarrawonga Weir is currently 13,500 ML/day. The flow will be rising to around 15,500 ML/d over the next few days and is expected to stay at this level for five days before gradually receding back to 11,000 ML/day again. This release is being targeted to supply environmental entitlements that are maintaining over-bank flows to the Barmah-Millewa forest and to stimulate fish breeding.

The release of environmental water to the Goulburn River continued this week. The flow at McCoys Bridge was around 5,600 ML/day for most of the week and is expected to stay at this rate for the coming week.

Flow to the Edward River via the Edward Offtake remained steady at 1,660 ML/day. At Gulpa Offtake the gates are out of the water and flow fell away over the week (from 875 ML/day to 765 ML/day) in response to the falling level in the River Murray at Picnic Point. Inflow of around 1,500 ML over three days from the Edward Escape supplemented the flow in the Edward River to help raise the level in the Stevens Weir pool. An environmental release of up to 800 ML/day to the Colligen Creek system commenced this week with the aim of stimulating fish breeding.

At Torrumbarry Weir, diversion to National Channel increased from 1,500 ML/day to 2,100 ML/day. Flow downstream of the weir was around 11,000 ML/day for most of the week and is expected to remain around this rate for the coming week. Further downstream, the inflow from the Murrumbidgee River increased to 3,600 ML/day and is forecast to rise to around 4,500 ML/day over the next few days before falling away again. Flow at Euston was steady at around 9,100 ML/day for most of the week, but is now rising (currently 9,700 ML/day) and will continue to rise over the coming week to around 15,000 ML/day.

At Menindee Lakes, the total storage decreased by 10 GL and remains surcharged at 1,834 GL (106% capacity). The release, measured at Weir 32 is currently 670 ML/day and will rise to around 750 ML/d over the coming week. On Wednesday 30 November, releases will be further increased to supplement the flow in the River Murray. This will see releases from Menindee Lakes rise to 5,500 ML/day in the coming weeks (see *flow advice* attached).

The storage in Lake Victoria decreased by 13 GL to 654 GL (97% capacity). Net daily release from the storage increased over the week to around 1,500 ML/day to supplement flow in the River Murray to meet downstream requirements to South Australia. The flow to South Australia averaged 8,900 ML/day over the week.

The average level in the Lower Lakes is currently 0.72 m AHD. Reduced inflows have contributed to releases through the barrages falling away to around 800 ML/day and resulted in the Lower Lakes falling below the full supply level of 0.75 m AHD. In order to continue to flush the Coorong and Murray mouth, a flow of around 4,000 ML/day will be targeted through the barrages, which will result in the Lake levels falling away by around 5-10 centimetres over the coming week.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Murray

Water in Storage

Week ending Wednesday 23 Nov 2011

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	469.94	2 889	75%	71	2 818	+13
Hume Reservoir	192.00	3 005	190.63	2 737	91%	23	2 714	-68
Lake Victoria	27.00	677	26.82	654	97%	100	554	-13
Menindee Lakes		1 731*		1 834	106%	(480 #)	1 354	-10
Total		9 269		8 114	88%	--	7 440	-78
Total Active MDBA Storage							87% ^	

Major State Storages

Burrinjuck Reservoir	1 026	911	89%	3	908	-5
Blowering Reservoir	1 631	1 466	90%	24	1 442	-31
Eildon Reservoir	3 334	3 272	98%	100	3 172	-30

* 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 22 Nov 2011

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2011
Lake Eucumbene - Total	1 901	+11	Snowy-Murray	+0	274
Snowy-Murray Component	623	+12	Tooma-Tumut	+7	202
Target Storage	1 450		Net Diversion	-7	72
			Murray 1 Release	+6	537

Major Diversions from Murray and Lower Darling (GL) *

New South Wales	This Week	From 1 July 2011	Victoria	This Week	From 1 July 2011
Murray Irrig. Ltd (Net)	29.4	412	Yarrowonga Main Channel (net)	9.7	95
Wakool Sys Allowance	0.0	-2	Torrumbarry System + Nyah (net)	14.5	186
Western Murray Irrigation	0.8	6	Sunraysia Pumped Districts	3.3	28
Licensed Pumps	4.1	69	Licensed pumps - GMW (Nyah+u/s)	0.2	11
Lower Darling	1.3	25	Licensed pumps - LMW	6	75
TOTAL	35.6	510	TOTAL	33.7	395

* 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 entitlement for November due to Additional Dilution Flow and Unregulated Flows.

Entitlement this month	180.0 *
Flow this week	62.0
Flow so far this month	235.4
Flow last month	502.6

(8 900 ML/day)

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

	Current	Average over the last week	Average since 1 August 2011
Swan Hill	150	180	140
Euston	140	140	130
Red Cliffs	-	-	110
Merbein	150	160	120
Burtundy (Darling)	430	420	360
Lock 9	170	170	130
Lake Victoria	210	200	200
Berri	310	300	200
Waikerie	-	-	10
Morgan	350	360	240
Mannum	350	330	240
Murray Bridge	280	280	230
Milang (Lake Alex.)	520	520	530
Poltalloch (Lake Alex.)	300	310	270
Meningie (Lake Alb.)	5 510	5 330	5 610
Goolwa Barrages	630	620	1 310

River Levels and Flows

Week ending Wednesday 23 Nov 2011

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	-	-	-	900	F	1 670	3 130
Jingellic	4.0	1.63	208.15	3 920	F	4 540	8 560
Tallandoon (Mitta Mitta River)	4.2	1.55	218.44	810	F	870	1 080
Heywoods	5.5	3.34	156.97	19 050	R	15 380	8 150
Doctors Point	5.5	3.53	152.00	21 350	R	17 480	10 200
Albury	4.3	2.56	150.00	-	-	-	-
Corowa	3.8	3.52	129.54	17 020	R	14 710	10 100
Yarrowonga Weir (d/s)	6.4	2.10	117.14	13 490	R	11 540	12 220
Tocumwal	6.4	2.55	106.39	11 340	R	10 800	11 980
Torrumbarry Weir (d/s)	7.3	3.43	81.98	11 180	S	10 850	8 410
Swan Hill	4.5	1.89	64.81	9 410	R	8 230	6 700
Wakool Junction	8.8	3.89	53.01	12 510	R	11 370	10 940
Euston Weir (d/s)	8.8	1.97	43.81	9 710	R	9 180	9 740
Mildura Weir (d/s)	-	-	-	9 460	F	9 430	10 760
Wentworth Weir (d/s)	7.3	3.18	27.94	8 020	R	7 650	9 550
Rufus Junction	-	3.84	20.77	8 280	F	8 090	8 980
Blanchetown (Lock 1 d/s)	-	0.93	-	6 930	F	7 180	8 990
Tributaries							
Kiewa at Bandiana	2.7	1.74	154.97	1 670	F	1 860	1 970
Ovens at Wangaratta	11.9	8.62	146.30	2 220	R	1 860	2 890
Goulburn at McCoys Bridge	9.0	3.74	95.16	5 610	S	5 570	2 320
Edward at Stevens Weir (d/s)	-	1.64	81.41	1 480	F	1 760	2 500
Edward at Liewah	-	2.89	58.27	2 410	R	2 320	2 320
Wakool at Stoney Crossing	-	1.61	55.10	770	R	690	780
Murrumbidgee at Balranald	5.0	3.38	59.34	3 640	R	1 670	540
Barwon at Mungindi	-	3.33	-	350	R	400	1 130
Darling at Bourke	-	4.37	-	1 960	F	2 000	1 890
Darling at Burtundy Rocks	-	-	-	430	F	470	390

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	8 430	14 280
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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	-0.15	-	No. 7 Rufus River	22.10	+0.13	+1.55
No. 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.01	+0.31
No. 15 Euston	47.60	+0.03	-	No. 5 Renmark	16.30	+0.00	+0.29
No. 11 Mildura	34.40	+0.05	+0.28	No. 4 Bookpurnong	13.20	+0.03	+1.02
No. 10 Wentworth	30.80	+0.04	+0.54	No. 3 Overland Corner	9.80	+0.04	+0.39
No. 9 Kulnine	27.40	+0.02	+0.09	No. 2 Waikerie	6.10	+0.02	+0.38
No. 8 Wangumma	24.60	-0.09	+0.32	No. 1 Blanchetown	3.20	+0.02	+0.18

Lower Lakes FSL = 0.75 m AHD

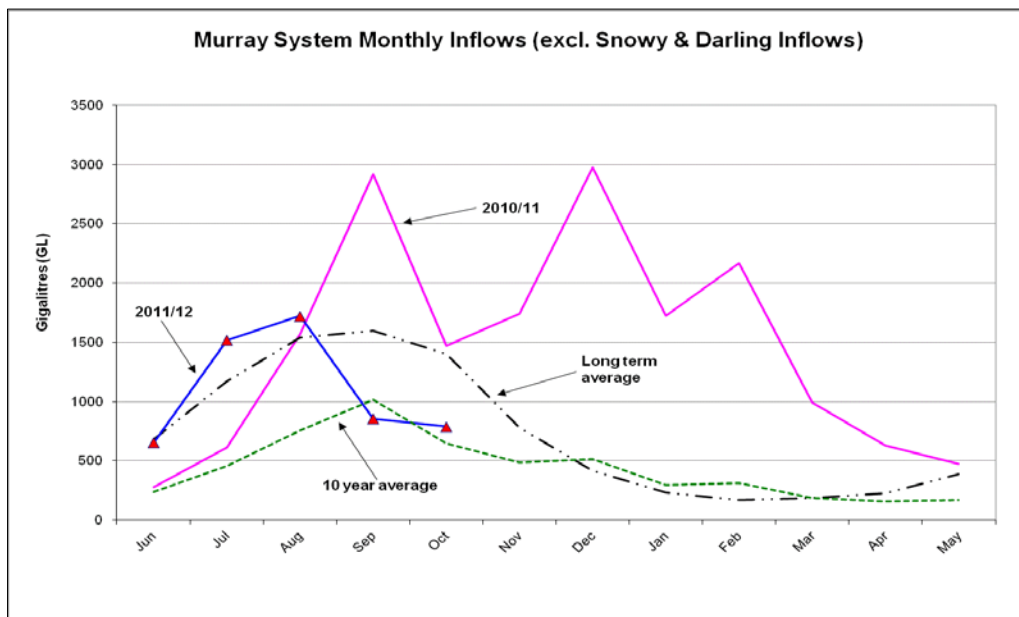
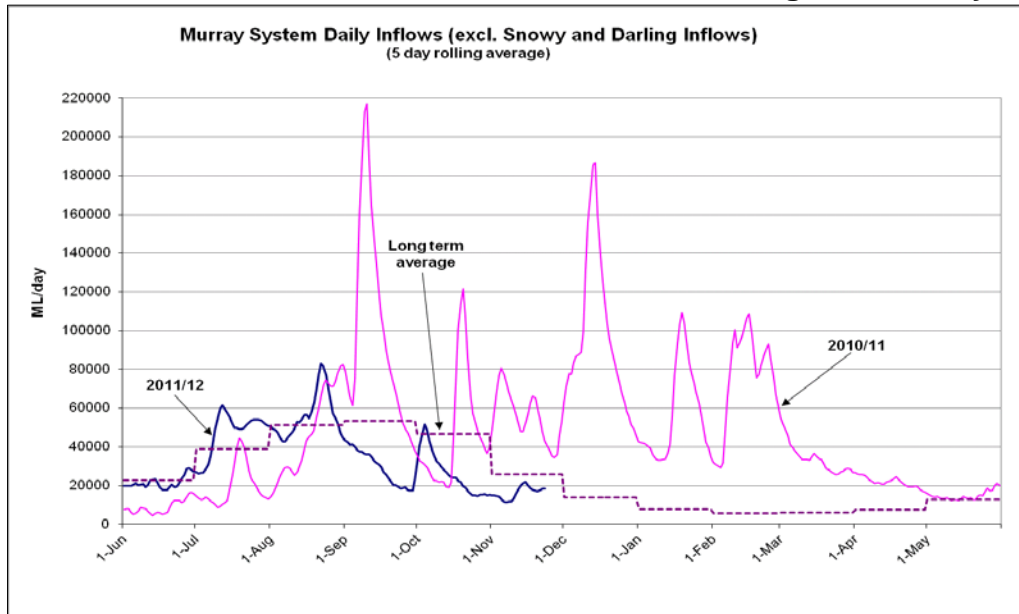
Lake Alexandrina average level for the past 5 days (m AHD)	0.72
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Barrages

Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.71	1	-	Open
Mundoo	26 openings	0.69	All closed	-	-
Boundary Creek	6 openings	-	All closed	-	-
Ewe Island	111 gates	-	2	-	-
Tauwitchere	322 gates	0.71	1	Open	Open

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



State Allocations (as at 23 Nov 2011)

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	72%

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/About-us/Media-releases/media/default.aspx>
 VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>
 SA : <http://www.waterforgood.sa.gov.au/category/news/>

Lower Darling River Flow advice



23 November 2011

Further increases to Weir 32 flows

The Murray-Darling Basin Authority advises that bulk transfers of water from Menindee Lakes to the River Murray will commence on 30 November 2011. Since June the release from Menindee Lakes has varied between 200 and 1,000 ML/day, however as of next week it will start to be increased gradually over about 20 days, to target a flow downstream of Weir 32 of about 5,500 ML/day. The planned increases to release rates and weir pool levels are outlined below:

Table 1. Expected levels and flow rates (assuming dry conditions)

Date	Estimated Weir 32 pool level (m)	Weir 32 flow (ML/day)
Tuesday 29 November	1.69	750
Wednesday 30 November	1.71	800
Thursday 1 December	1.75	900
Friday 2 December	1.78	1,000
Saturday 3 December	1.81	1,100
Sunday 4 December	1.84	1,200
Monday 5 December	1.95	1,600
Tuesday 6 December	2.00	1,800
Wednesday 7 December	2.04	2,000
Thursday 8 December	2.11	2,350
Friday 9 December	2.20	2,800
Saturday 10 December	2.30	3,400
Sunday 11 December	2.38	4,000
Monday 12 December	2.41	4,250
Tuesday 13 December	2.44	4,500
Wednesday 14 December	2.46	4,700
Thursday 15 December	2.48	4,900
Friday 16 December	2.51	5,100
Saturday 17 December	2.53	5,300
Sunday 18 December	2.55	5,500

Downstream on the lower Darling, flows are expected to start increasing at Pooncarie in early December, with flows of up to 5,500 ML/day (3.7 m gauge height) by about 23 December. At Burtundy, flows have been varying between 200 and 1,000 ML/day over recent months, but are now also expected to start rising in early December, with flows increasing to above about 5,000 ML/day (3.2 m gauge height) by about 25 December.

After 18 December, the flow past Weir 32 is likely to be varied between 5,000 ML/day (2.5 m gauge height) and 5,800 ML/day (2.58 m gauge height). Greater variations in flow are possible in January 2012. The planned release pattern will be revised and the plan may change in response to weather and demand conditions at the time, as well as the possibility of higher inflows from the upper reaches of the Darling River in response to future rainfall. A flow advice will be issued prior to any change to the planned flow at Weir 32.

The transfer of water from the Menindee Lakes will supplement the flow in the River Murray to supply South Australia with its water entitlements and trade deliveries. Releases from Menindee Lakes are also required to ensure that the lakes are below full supply level by the end of December.

Landholders and river users, including pumpers, should take into account the increased flow rates along the lower Darling River and make necessary adjustments to their activities.

MDBA will provide regular updates as release patterns vary over the coming summer period. Forecast flows are also available on the MDBA website (see http://www.mdba.gov.au/water/river_info and click on either "storage volumes & releases" for Menindee storage volume and Weir 32 flows or "river flows & levels" for Burtundy flows).

ENDS

For media information contact the MDBA Media Office at media@mdba.gov.au or 02 6279 0141. For other information contact MDBA at inquiries@mdba.gov.au or 02 6279 0100.

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