



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 21 DECEMBER 2011

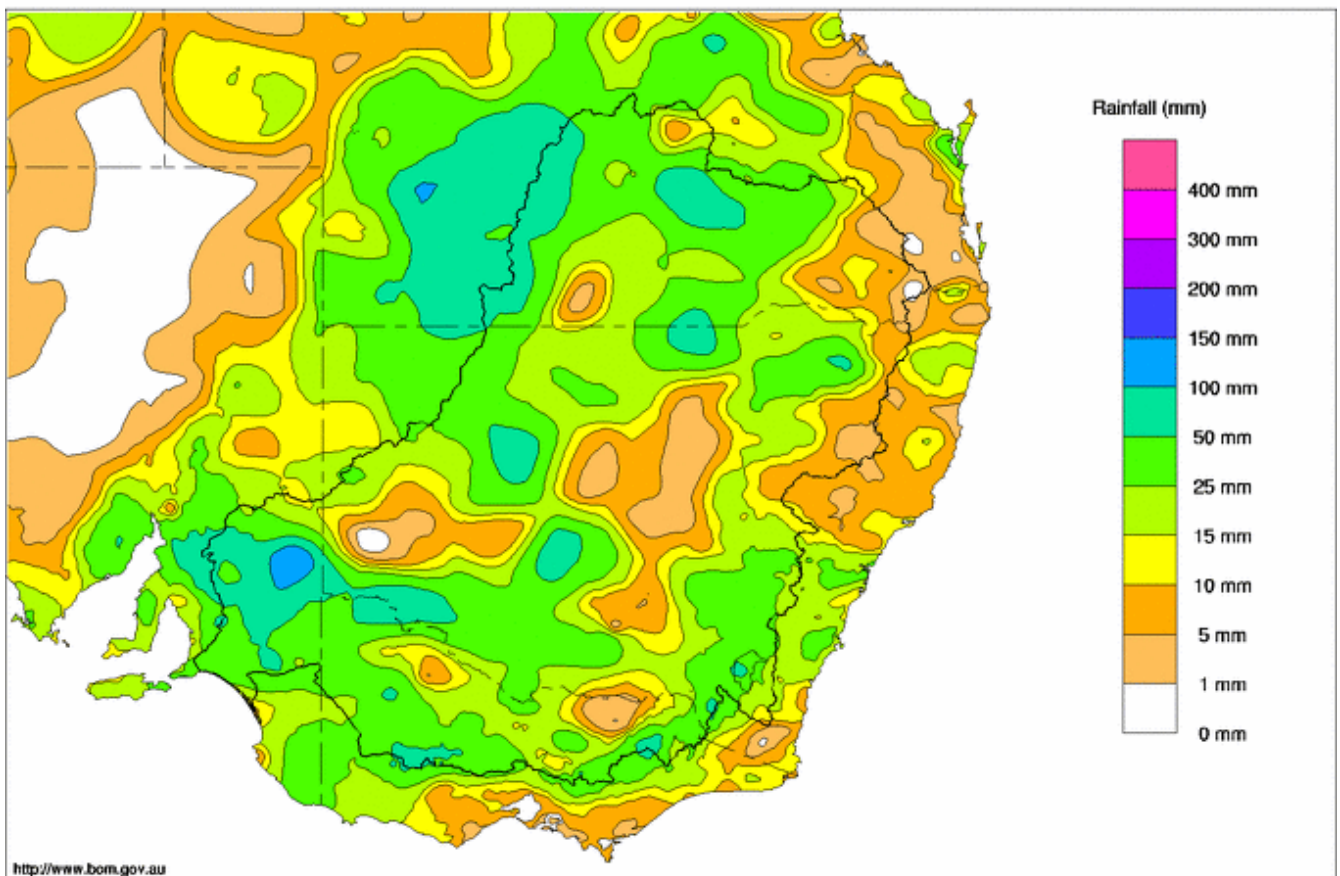
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Rainfall and Inflows

Widespread showers and thunderstorms developed across the Murray-Darling Basin once again this week as a new trough system moved across the region from the west. The bulk of the rain fell from the weekend onwards, and although there was some very intense rainfall reported, totals were spatially quite variable due to the patchy, 'hit and miss' nature of thunderstorm activity.

Areas to receive heavy rain included parts of South Australia, western Victoria including the western uplands and Grampians, several areas through south-western and central NSW, the Riverina, the NSW western slopes and parts of southern Queensland (Map 1). In South Australia there was heavy rain along the lower Murray valley including 81 mm at Point Pass and 63 mm at Blanchetown, Morgan and Waikerie. In Victoria, the heaviest totals included 99 mm at Stawell, 95 mm at Mt William and 72 mm at Avoca, while across the border in NSW there was 73 mm at Wentworth, 55 mm at Lake Victoria, 95 mm at Booroorban and 90 mm at Coleambally. Further north, there was heavy rain in the Gwydir catchment including 127 mm at Gravesend and 80 mm at Delundra; while in Queensland totals included 109 mm at Mitchell and 83 mm at Dalmally.

Murray Darling Rainfall Totals (mm) Week Ending 21st December 2011
Product of the National Climate Centre



Map 1 - Murray-Darling Basin rainfall for the week ending 21 December 2011 (Source: Bureau of Meteorology).



In the northern Basin, flood waters continue flowing along the Barwon-Darling River and several tributaries. At Walgett, the Barwon River is peaking for a second time since the beginning of December, with the current flow of 112,000 ML/day slightly higher than the previous peak. The Bureau of Meteorology is now forecasting a peak to arrive at Brewarrina around 27 December. Downstream on the Darling River, flow increases have commenced at all gauges and higher inflows have started entering the Menindee Lakes. For more information regarding flood warnings, see the Bureau of Meteorology website at <http://www.bom.gov.au/>.

In the upper Murray tributaries flows receded for much of the week before some small rises occurred following the rain. The best responses were observed on the Mitta Mitta River, where for example the flow at Hinnomunjie increased from around 700 to around 1,300 ML/day. On the upper Murray River, the flow at Jingellic has averaged around 4,000 ML/day during the past week, down from around 6,300 ML/day during the previous week.

River Operations

MDBA active storage decreased by 107 GL during the week to 7,223 GL (84% capacity). At Dartmouth Reservoir, the total storage increased by 6 GL to 2,941 GL, which is 76% capacity.

The release at Dartmouth was increased as planned during the week to pass a flow pulse with a peak of 2,500 ML/day at Colemans, while downstream at Tallandoon, the river reached a peak of around 3,100 ML/day. The release has now been decreased to 670 ML/day and will be further decreased to the normal minimum of 200 ML/day in the coming days. This flow pulsing is consistent with environmental management guidelines for the Mitta Mitta River downstream of the dam, and is undertaken as a pre-emptive action to manage water quality issues such as algal growth during warm weather.

At Hume Reservoir the storage volume is currently 2,631 GL (88%), which is a decrease of 62 GL. The release was increased in the last few days to meet downstream demand and is currently at 16,200 ML/day.

Downstream at Lake Mulwala, diversions have increased in the last few days, and combined with lower than forecast inflows have resulted in the pool level lowering slightly to 124.67 m AHD, or 3 cm below the target level of 124.7 m AHD. The pool level should rise back to the target over the next few days. The release at Yarrawonga Weir is currently 11,000 ML/day, which is the target release to continue supplying environmental entitlements that are maintaining over-bank flows to the Barmah-Millewa forest.

On the Edward River, diversions through the Edward and Gulpa offtakes remain steady. Downstream at Stevens Weir, diversion into the Wakool Main Canal has dropped back over the last few days, and flow past Stevens Weir has increased from 1,200 to 1,700 ML/day. Downstream on the Wakool River, the flow at Kyalite peaked at 3,500 ML/day during the week and has now receded to 3,200 ML/day. The flow should continue receding here over the coming week.

At McCoys Bridge, flow in the Goulburn River has receded from 3,600 to 1,800 ML/day during the week is now expected to continue to slowly recede to below 1,000 ML/day over the next few weeks depending on rain.

At Torrumbarry Weir, diversions at the National Channel were decreased to 1,150 ML/day following the rain. Releases from Torrumbarry Weir averaged 9,300 ML/day during the week and the release is expected to continue decreasing over the coming week.

On the Murrumbidgee River, the flow at Balranald increased as expected, with the current flow now at 5,000 ML/day. The river should rise further over the coming days. Downstream on the Murray, the flow at Euston eased early in the week, but has increased to 12,700 ML/day during the last few days. The flow is expected to increase further in the next few days.



At Menindee Lakes, the total storage decreased by 44 GL and the lakes are now below full supply – the first time they have been below full supply since March 2011. The lakes are currently holding 1,707 GL (99% capacity) and should continue to fall over the coming week as airspace is created ahead of floodwaters arriving from upstream during the coming weeks and months. The release measured at Weir 32 has been increased by the NSW Office of Water and State Water to 9,400 ML/day after they commenced flood operations last week. The release is now expected to reach 16,000 ML/day by 24 December, where it is forecast to remain over the Christmas-New Year period before rising further in early January. At this stage, the release will likely increase to around 24,000 ML/day during early to mid January 2012. For further information regarding flood operations at Menindee Lakes, please refer to information from the NSW Office of Water (<http://www.water.nsw.gov.au/>)

Storage in Lake Victoria decreased by 9 GL during the week to 618 GL, which is 91%. Heavy rainfall on and around Lake Victoria during the week reduced the rate of fall. The flow to South Australia is currently 15,000 ML/day, but will rise in the coming days to in excess of 20,000 ML/day by New Year.

The five day average level in the Lower Lakes increased 0.01 m to 0.64 m AHD and the flow out the Barrages continued to average around 4,500 ML/day for the week.

The Murray-Darling Basin Authority and staff at the storages, weirs and barrages of the River Murray System wish all our readers a safe and happy festive season.

Note: As in previous years there will be no Weekly Report issued for the week ending 28th December 2011. The next report will cover the two week period ending 4th January 2012.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Murray

Water in Storage

Week ending Wednesday 21 Dec 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	470.88	2 941	76%	71	2 870	+6
Hume Reservoir	192.00	3 005	190.07	2 631	88%	23	2 608	-62
Lake Victoria	27.00	677	26.51	618	91%	100	518	-9
Menindee Lakes		1 731*		1 707	99%	(480 #)	1 227	-42
Total		9 269		7 897	85%	--	7 223	-107
Total Active MDBA Storage							84% ^	

Major State Storages

Burrinjuck Reservoir	1 026	946	92%	3	943	-5
Blowering Reservoir	1 631	1 522	93%	24	1 498	-3
Eildon Reservoir	3 334	3 247	97%	100	3 147	-1

* 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 20 Dec 2011

Storage	Active Storage (GL)	Weekly Change (GL)	Diversions (GL)	This Week	From 1 May 2011
Lake Eucumbene - Total	2 084	n/a	Snowy-Murray	+1	275
Snowy-Murray Component	702	n/a	Tooma-Tumut	+7	237
Target Storage	1 510		Net Diversion	-7	39
			Murray 1 Release	+6	578

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)	37.7	546	Yarrowonga Main Channel (net)	6.2	122
Wakool Sys Allowance	0.0	-2	Torrumbarry System + Nyah (net)	16.1	255
Western Murray Irrigation	0.5	9	Sunraysia Pumped Districts	2.5	40
Licensed Pumps	4.0	88	Licensed pumps - GMW (Nyah+u/s)	1.1	12
Lower Darling	2.5	28	Licensed pumps - LMW	11.2	115
TOTAL	44.7	669	TOTAL	37.1	544

* 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 December due to Additional Dilution Flow and water trades to SA.

Entitlement this month	217.0 *
Flow this week	111.8
Flow so far this month	311.4
Flow last month	296.6

(16 000 ML/day)

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

	Current	Average over the last week	Average since 1 August 2011
Swan Hill	170	140	140
Euston	110	120	130
Red Cliffs	-	-	110
Merbein	140	140	120
Burtundy (Darling)	520	430	370
Lock 9	150	150	140
Lake Victoria	210	210	200
Berri	280	260	220
Waikerie	-	-	-
Morgan	280	310	260
Mannum	430	420	270
Murray Bridge	350	350	250
Milang (Lake Alex.)	460	470	510
Poltalloch (Lake Alex.)	420	420	290
Meningie (Lake Alb.)	5 060	4 980	5 510
Goolwa Barrages	520	540	1 190

River Levels and Flows

Week ending Wednesday 21 Dec 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	-	-	-	1 720	F	1 280	2 100
Jingellic	4.0	1.79	208.31	5 190	R	4 090	6 320
Tallandoon (Mitta Mitta River)	4.2	2.06	218.95	2 490	F	1 430	1 010
Heywoods	5.5	3.09	156.72	16 180	R	13 450	12 690
Doctors Point	5.5	3.25	151.72	17 820	R	14 960	14 640
Albury	4.3	2.25	149.69	-	-	-	-
Corowa	3.8	3.13	129.15	14 240	R	13 670	14 190
Yarrowonga Weir (d/s)	6.4	1.79	116.83	11 050	S	11 320	11 110
Tocumwal	6.4	2.44	106.28	10 520	F	10 830	10 690
Torrumbarry Weir (d/s)	7.3	2.91	81.46	9 380	S	9 340	10 200
Swan Hill	4.5	1.76	64.68	8 520	F	9 020	8 960
Wakool Junction	8.8	4.10	53.22	13 470	F	13 300	13 220
Euston Weir (d/s)	8.8	2.38	44.22	12 660	R	12 050	12 120
Mildura Weir (d/s)	-	-	-	13 160	F	12 990	13 070
Wentworth Weir (d/s)	7.3	3.56	28.32	15 490	R	13 360	11 580
Rufus Junction	-	4.64	21.57	14 360	R	15 160	15 830
Blanchetown (Lock 1 d/s)	-	1.33	-	17 900	S	16 210	13 310
Tributaries							
Kiewa at Bandiana	2.7	1.70	154.93	1 580	R	1 450	1 920
Ovens at Wangaratta	11.9	8.55	146.23	2 030	R	1 850	2 500
Goulburn at McCoys Bridge	9.0	1.95	93.37	1 830	F	2 530	3 990
Edward at Stevens Weir (d/s)	-	1.77	81.54	1 660	F	1 340	2 330
Edward at Liewah	-	2.54	57.92	1 960	F	2 160	2 230
Wakool at Stoney Crossing	-	1.67	55.16	960	F	1 110	1 020
Murrumbidgee at Balranald	5.0	3.95	59.91	4 980	R	2 230	1 360
Barwon at Mungindi	-	7.01	-	13 400	F	16 170	12 620
Darling at Bourke	-	9.69	-	32 480	R	26 010	13 830
Darling at Burtundy Rocks	-	2.71	-	4 140	R	2 950	820

Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme)	9 530	10 820
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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	-0.23	-	No. 7 Rufus River	22.10	+0.05	+2.31
No. 26 Torrumbarry	86.05	-0.15	-	No. 6 Murtho	19.25	-0.03	+0.71
No. 15 Euston	47.60	+0.03	-	No. 5 Renmark	16.30	+0.02	+0.65
No. 11 Mildura	34.40	+0.02	+0.43	No. 4 Bookpurnong	13.20	+0.01	+1.65
No. 10 Wentworth	30.80	-0.05	+0.92	No. 3 Overland Corner	9.80	+0.02	+1.02
No. 9 Kulnine	27.40	-0.04	+0.41	No. 2 Waikerie	6.10	+0.07	+1.09
No. 8 Wangumma	24.60	+0.00	+0.78	No. 1 Blanchetown	3.20	+0.10	+0.58

Lower Lakes FSL = 0.75 m AHD

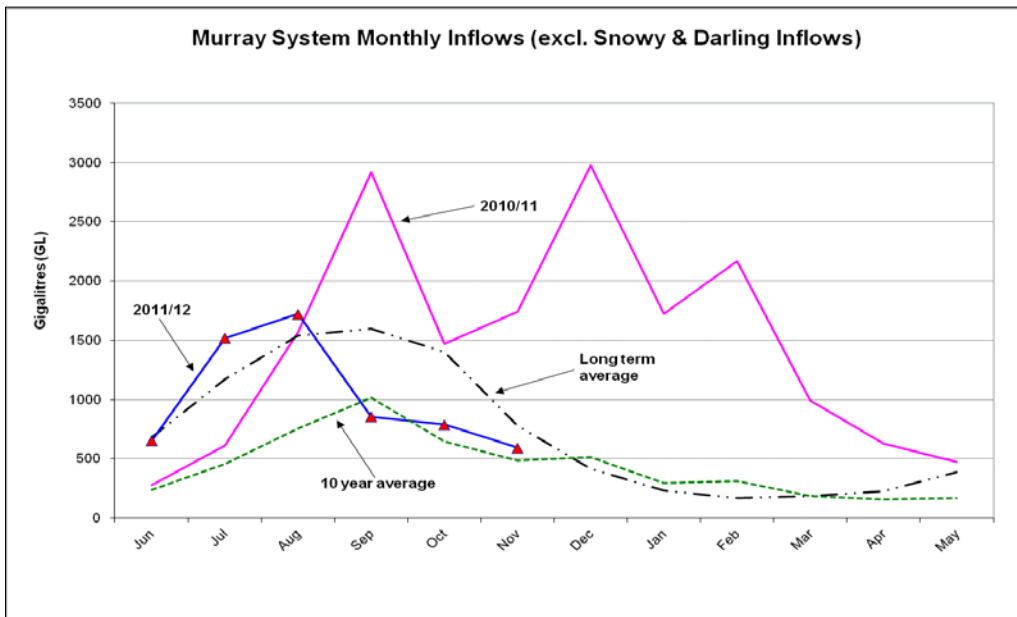
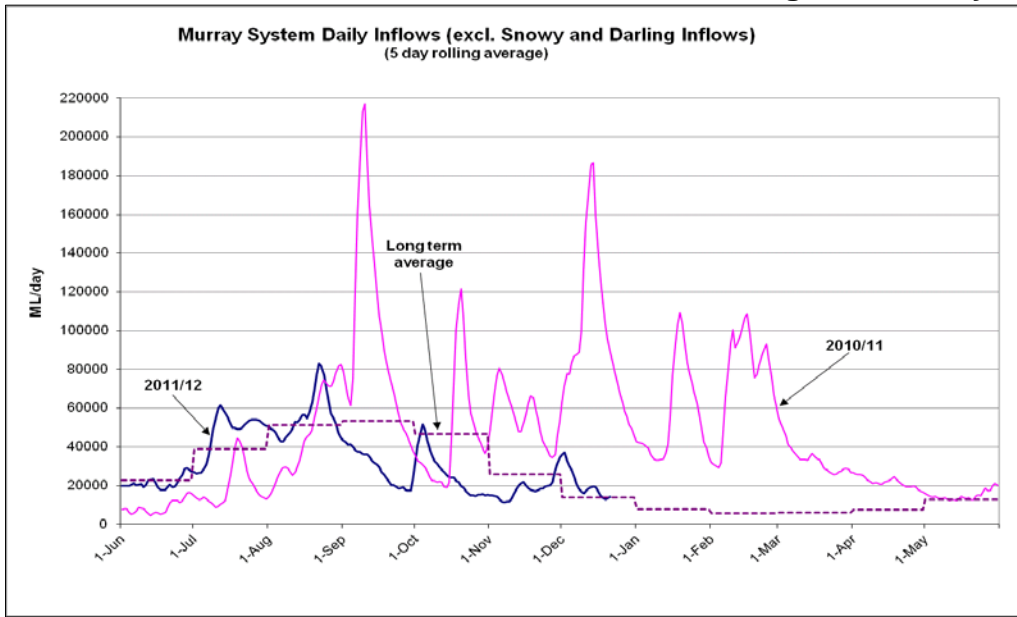
Lake Alexandrina average level for the past 5 days (m AHD)	0.64
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Barrages

Fishways at Barrages

	Openings	Level (m AHD)	No. Open	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.70	5	-	Open
Mundoo	26 openings	0.65	4	-	-
Boundary Creek	6 openings	-	1	-	-
Ewe Island	111 gates	-	3	-	-
Tauwichee	322 gates	0.67	5	Open	Open

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



State Allocations (as at 21 Dec 2011)

NSW - Murray Valley

High security	100%
General security	100%

Victorian - Murray Valley

High reliability	100%
Low reliability	0%

NSW - Murrumbidgee Valley

High security	100%
General security	100%

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/>