

# REPORT FOR THE WEEK ENDING

Wednesday, 17 January 2007



*Our Ref : M2006/01015/prs, ng*  
*Trim Ref : 07/1885*

19 January, 2007

## *Weather and Streamflows*

Very hot conditions were observed across the Murray-Darling Basin this week with temperatures exceeding 40°C across large areas. The north of the basin received welcome falls of up to 50 mm, however little or no rain fell in catchments of the Murray. Tributary inflows to the Murray remain at extremely low levels and large falls of rain will be needed to replenish soil moisture levels and produce reasonable inflows.

As at Friday 19 January, some good falls of rain had been recorded along the full length of the Murray. The falls were generally in excess of 10 mm with isolated heavy storms producing significantly higher falls in some locations. More details of the impacts of the rain will be provided in next week's report.

## *River Murray Operations*

Release from Dartmouth Dam continues at about 10 600 ML/day and is now all being released via the low level outlet. The high level outlet will now be able to be dewatered for inspection and maintenance. The hotter conditions have not actually worsened the situation at Hume Reservoir. Whilst downstream demands increased a little, an increase in electricity demand (associated with increased air-conditioning loads) resulted in the first significant release of water via Murray 1 Power Station from the Snowy Scheme since December. Storage in Hume Reservoir is currently about 90 GL or 3% of capacity.

With levels at Hume Reservoir continuing to fall, the capacity to release water from the valves is diminishing. The dam behaves in much the same way as an urn with a tap at the bottom. When full, the pressure pushes water out of the tap very quickly but as the level drops the flow rate diminishes. This reduction in release capacity could potentially become a problem later in February, so to counter this risk, and therefore provide greater security in meeting irrigation demands over coming weeks, the level of Lake Mulwala is now gradually being increased towards the full supply level of 124.9 m AHD. This will provide a greater volume of water in Lake Mulwala to draw upon in the event that hot conditions result in a rapid increase in demands.

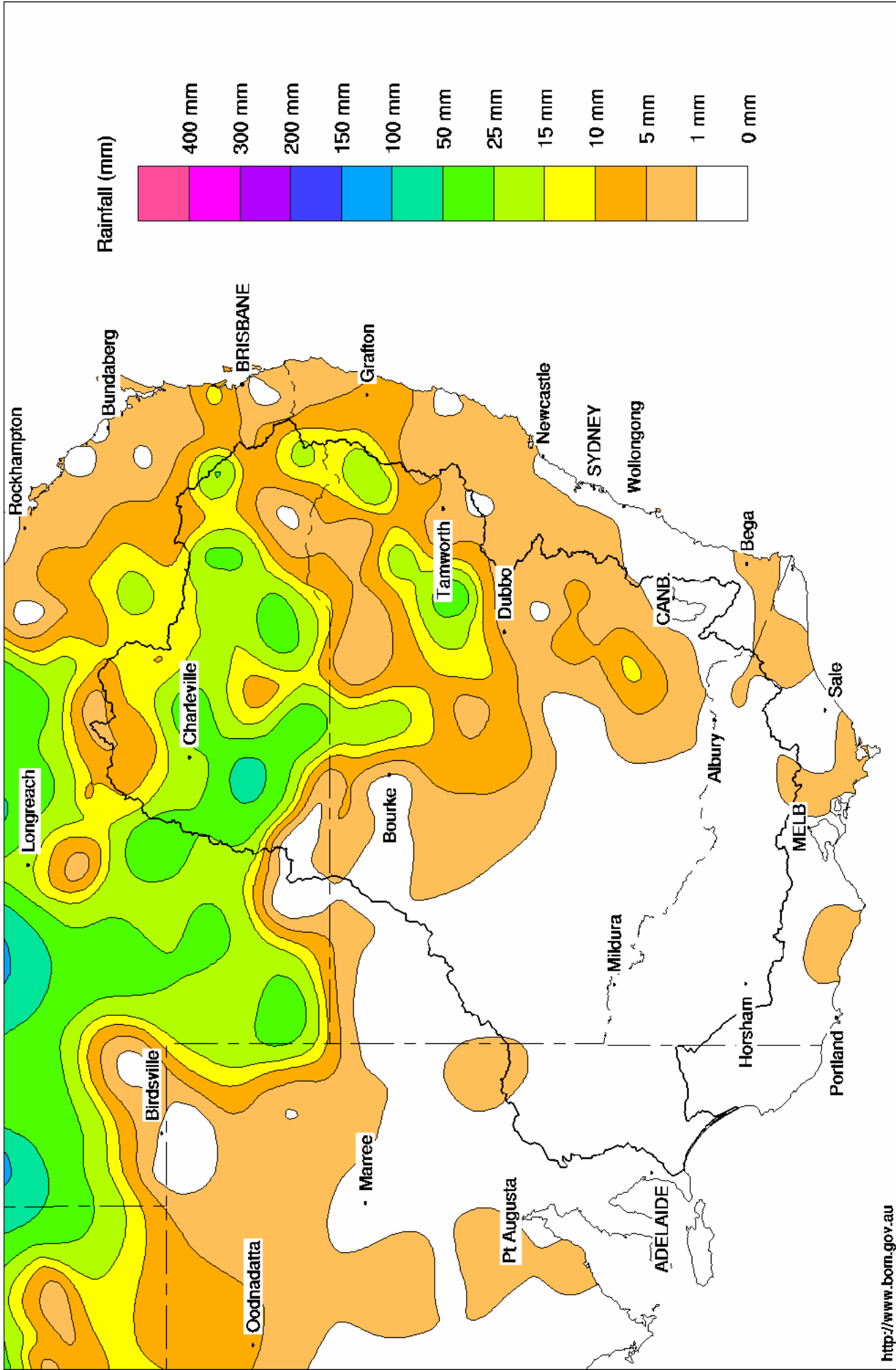
RMW considers that the risk of a 'rain rejection' resulting in unseasonal wetting of the Barmah-Millewa Forest is negligible - even with higher levels in Lake Mulwala. Diversion rates from Lake Mulwala are at very low rates (about 3600 ML/day compared the 13 000 ML/day which might be expected in years with high allocations) and there is currently about 3 000 ML/day of unused channel capacity downstream. This means any unused irrigation orders will be able to be contained or passed downstream without wetting the forest.

Flows in the mid reaches of the Murray have generally been showing a downward trend after reductions release from Yarrawonga Weir made in December and early January. However, reduced diversions and losses from the recent rain may result in renewed, but short-term, rises. More details will be provided on the impacts of the rain next week.

DAVID DREVERMAN  
General Manager

# Murray Darling Rainfall Analysis (mm) Week Ending 17th January 2007

Product of the National Climate Centre



**Water in Storage**

MDBC Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage		Dead Storage (GL)	MDBC Active Storage (GL)	Change in Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 906	424.53	1 029	26%	80	949	-71
Hume Reservoir	192.00	3 038	165.47	90	3%	30	60	-19
Lake Victoria	27.00	677	24.55	401	59%	100	301	-26
Menindee Lakes		1 731 *		168	10%	(- -) #	0	-4
<b>Total</b>		<b>9 352</b>		<b>1 688</b>	<b>18%</b>	<b>--</b>	<b>1 310</b>	<b>-120</b>

\* Menindee surcharge capacity 2050 GL

% of Total Active MDBC Storage = 15%

# NSW takes control of Menindee Lakes when storage falls below 480 GL, and control reverts to MDBC when storage next reaches 640 GL

**Major State Storages**

Burrinjuck Reservoir	1 026		292	28%	3	289	-5
Blowering Reservoir	1 631		266	16%	24	242	+3
Eildon Reservoir	3 390		367	11%	100	267	-18

**Snowy Mountains Scheme**

Snowy diversions for week ending 16-Jan-2007

Storage	Active storage (GL)	Weekly change (GL)	Diversions (GL)	This week	From 1 May 2006
Lake Eucumbene - Total	601	-33	Snowy-Murray	+9	692
Snowy-Murray Component	374	-16	Tooma-Tumut	+7	46
Target Storage	1 520		Nett Diversion	2.3	646
			Murray 1 Release	+16	797

**Major Diversions from Murray and Lower Darling (GL)**

New South Wales	This week	From 1 July 2006
Murray Irrig. Ltd (Net)	4.3	279.6
Wakool System loss	1.4	42.9
Western Murray Irrig.	1.2	15.5
Licensed Pumps	4.5	128.5
Lower Darling	0.4	16.9
<b>TOTAL</b>	<b>11.8</b>	<b>483.3</b>

Victoria	This week	From 1 July 2006
Yarrawonga Main Channel (net)	11.5	257
Torrumbarry System + Nyah (net)	13.3	459
Sunraysia Pumped Districts	6.1	97
Licensed pumps - GMW (Nyah+u/s)	0.8	140
Licensed pumps - LMW	9.0	113
<b>TOTAL</b>	<b>40.7</b>	<b>1 066</b>

**Flow to South Australia (GL)**

Entitlement this month	217	
Flow this week	40.1	(5 700 ML/day)
Flow so far this month	97	
Flow last month	179	

**Salinity (EC)**

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2006
Swan Hill	60	60	70
Euston	80	80	90
Red Cliffs	80	100	110
Merbein	100	90	100
Burtundy (Darling)	1 030	1 020	750
Lock 9	110	110	120
Lake Victoria	170	170	160
Berri	230	230	230
Waikerie	330	320	350
Morgan	340	340	380
Mannum	480	470	460
Murray Bridge	490	480	430
Milang (Lake Alex.)	1 370	1 370	1 200
Poltalloch (Lake Alex.)	1 220	1 190	1 010
Meningie (Lake Alb.)	2 430	2 450	2 250
Goolwa Barrages	3 100	2 920	1 860



**River Levels and Flows**

	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)				
<b>River Murray</b>							
Khancoban	-	-	-	4 030	R	2 030	140
Jingellic	4.0	1.30	207.82	1 850	F	1 020	350
Tallandoon ( Mitta Mitta River )	4.2	3.39	220.28	10 610	S	10 600	10 630
Heywoods	5.5	2.79	156.42	13 280	R	12 670	12 230
Doctors Point	5.5	2.87	151.34	13 200	F	12 970	12 510
Albury	4.3	1.86	149.30	-	-	-	-
Corowa	7.0	2.72	128.74	13 000	S	12 590	12 060
Yarrowonga Weir (d/s)	6.4	1.40	116.44	7 700	S	7 710	7 900
Tocumwal	6.4	1.88	105.72	7 460	R	7 440	7 790
Torrumbarry Weir (d/s)	7.3	1.69	80.24	4 690	R	4 670	5 160
Swan Hill	4.5	0.97	63.89	4 120	F	4 460	4 620
Wakool Junction	8.8	2.47	51.59	5 750	F	6 140	6 340
Euston Weir (d/s)	8.8	1.29	43.13	6 080	R	6 210	6 410
Mildura Weir (d/s)	-	-	-	4 620	F	4 640	5 060
Wentworth Weir (d/s)	7.3	2.90	27.66	4 150	R	3 980	4 460
Rufus Junction	-	3.23	20.16	5 160	S	5 270	5 090
Blanchetown (Lock 1 d/s)	-	0.52	-	2 940	R	2 940	3 160
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	0.58	153.81	120	F	180	50
Ovens at Wangaratta	11.9	7.40	145.08	26	F	30	60
Goulburn at McCoys Bridge	9.0	1.13	92.55	353	S	350	340
Edward at Stevens Weir (d/s)	-	1.62	81.39	1 490	F	1 550	1 630
Edward at Liewah	-	2.22	57.60	1 580	F	1 630	1 810
Wakool at Stoney Crossing	-	0.44	54.93	415	S	390	330
Murrumbidgee at Balranald	5.0	1.55	57.51	975	S	930	890
Barwon at Mungindi	-	3.27	-	154	F	150	90
Darling at Bourke	-	2.67	-	-	F	-	-
Darling at Burtundy Rocks	-	0.72	-	75	R	60	50

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	- 400	470
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**Weirs and Locks**

**Pool levels above or below design level**

<b>Murray</b>	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-0.11	-	No. 7 Rufus River	22.10	+0.12	+0.92
No 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.01	+0.06
No. 15 Euston	47.60	+0.00	-	No. 5 Renmark	16.30	-0.01	+0.15
No. 11 Mildura	34.40	+0.00	+0.11	No. 4 Bookpurnong	13.20	+0.01	+0.46
No. 10 Wentworth	30.80	+0.04	+0.26	No.3 Overland Corner	9.80	-0.01	+0.11
No. 9 Kulnine	27.40	+0.06	+0.03	No. 2 Waikerie	6.10	+0.01	+0.02
No. 8 Wangumma	24.60	+0.03	+0.19	No 1. Blanchetown	3.20	-0.04	-0.23

<b>Murrumbidgee</b>	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-0.43	1.51	70.86	1830
No. 5 Redbank	66.90	-2.90	1.16	62.46	1440



**Lower Lakes**

FSL = 0.75 m AHD

	(m AHD)
Lake Alexandrina average level for the past 5 days	0.41

**Barrages**

**Fishways @ Barrages**

	Openings	Level (m AHD)	Status	Rock Ramp	Vertical Slot
Goolwa	128 openings	0.29	All closed	-	Open
Mundoo	26 openings	0.30	All closed	-	-
Boundary Creek	6 openings	-	All closed	-	-
Ewe Island	111 gates	-	All closed	-	-
Tauwichee	322 gates	0.32	All closed	Closed	Open

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