

# REPORT FOR THE WEEK ENDING

Wednesday, 3 September 2003

Our Ref: RMW305/01//01/ng;bwh

4 September, 2003



Light falls of rain were recorded in the southern half of the Murray-Darling Basin with the highest falls of up to 30 mm along the Great Dividing Range in Victoria. Tributary inflows have receded after the rainfall event of late August, but continue to provide welcome inflows to the River Murray.

Total Commission storage volume increased by 274 GL producing an increase in total active storage from 36% to 39% of capacity. Rainfall across major irrigation areas in recent weeks has suppressed demand, and delayed the commencement of irrigation diversions which will assist in increasing storage in Hume in the short term. Storage in Lake Victoria has steadily risen to 77% of capacity (1.4 m below full supply level), and is currently expected to approach full by early October.

## ***System Operation***

The peak release from Yarrawonga Weir was 49 000 ML/day (or 5.3 m gauge height) which was considerably lower than the previous largest peak of 88 000 ML/day (or 6.6 m) in October 2000. Release has since been progressively reduced to 18 000 ML/day (2.8 m gauge height) by 3 September, and without further rain, further reduction will occur next week. Flow from the Goulburn River to the Murray peaked at about 17 000 ML/day on 29 August, and was the major contribution to the peak flow of 23 000 ML/day in the Murray downstream of Torrumbarry Weir late this week. River level at Swan Hill rose from 1.8 to 3.1 m, and is expected to peak at about 3.4 m next week. The Edward River at Deniliquin rose by 0.3 m to 2.5 m gauge height, and a similar rise can be expected next week, however, levels are forecast to begin to fall before mid September.

Flow to South Australia is currently about 4 900 ML/day, and preliminary expectations for the peak flow have been revised downward to a flow of at least 10 000 ML/day by mid September. Further forecasts will be provided when more information on upstream peaks becomes available.

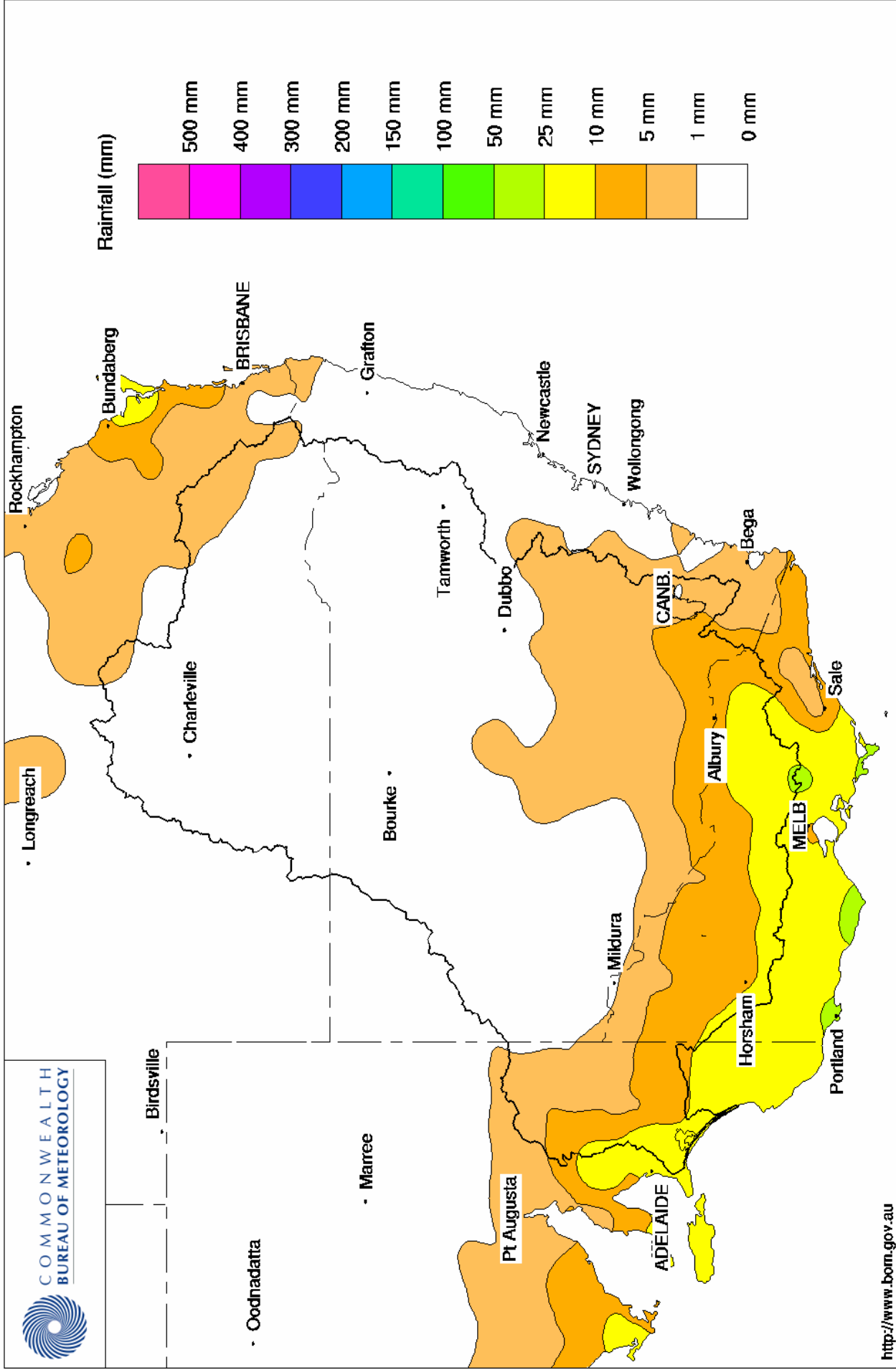
## ***Lower Lakes and Murray Mouth***

The water level of the Lower Lakes has risen over recent weeks as a result of local rainfall and runoff, and also as a result of increased River Murray flows into South Australia following recent heavy rainfall in upstream River Murray catchment areas. With high lake levels, and increased flows in transit, it is necessary to release water from the Barrages to the Murray Mouth. This is the first release from the Barrages since November 2001 and the longest period without release (a period of 21 months). Commencing 4 September 2003, total release from the Barrages will be progressively increased to about 6 000 ML/day, of which about half is to be released each from Tauwitchere and Goolwa Barrages. This operation is being planned and monitored by South Australian agencies in consultation with River Murray Water to ensure a maximum duration of Barrage release for environmental benefit. The program is being closely monitored to ensure that the Lakes are filled to maximum level at the end of the river fresh currently in transit. The release is expected to continue to mid to late September, however, the duration will depend on river and weather conditions over the coming weeks. Further periods of release are possible, especially if there are substantial renewed rises in Murray flow further upstream.

DAVID DOLE  
General Manager

# Murray Darling Rainfall Analysis (mm) Week Ending 3rd September 2003

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)	Active Storage (GL)	Change in Storage for the week (GL)
				(GL)	%			
Dartmouth Reservoir	486.00	3 906	437.44	1 449	37%	80	1 369	+40
Hume Reservoir	192.00	3 038	182.81	1 509	50%	30	1 479	+186
Lake Victoria	27.00	680	25.60	526	77%	100	426	+49
Menindee Lakes		1 603 *		70	4%	640 #	0	-1
<b>Total</b>		<b>9 227</b>		<b>3 554</b>	<b>39%</b>	<b>850</b>	<b>3 274</b>	<b>+274</b>

\* Menindee surcharge capacity 1916 GL

% of Total Active MDBC Storage = **39%**

# NSW Menindee Lakes Reserve

**Major State Storages**

Burrinjuck Reservoir	1 026	280	27%	3	277	+32
Blowering Reservoir	1 631	716	44%	24	692	+80
Eildon Reservoir	3 390	962	28%	100	862	+94

**Snowy Mountains Scheme**

Snowy diversions for week ending 02-Sep-2003

Storage	Active storage (GL)	Weekly change (GL)	Diversion (GL)	This week	From 1 May 2003
Lake Eucumbene - Total	1 599	-1	Snowy-Murray	+25	453
Snowy-Murray Component	696	-	Tooma-Tumut	+17	106
Target Storage	1 240		Nett Diversion	8.0	347
			Murray 1 Release	+35	563

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

New South Wales	This week	From 1 July 2003
Murray Irrig. Ltd (Net)	9.6	31.9
Wakool System loss	0.4	1.2
Western Murray Irrig.	0.1	.7
Licensed Pumps	1.9	7.7
Lower Darling	0.0	.6
<b>TOTAL</b>	<b>12.0</b>	<b>42.0</b>

Victoria	This week	From 1 July 2003
Yarrawonga Main Channel (net)	2.3	2
Torrumbarry System + Nyah (net)	6.5	35
Sunraysia Pumped Districts	0.5	2
Licensed pumps - GMW (Nyah+u/s)	0.0	
Licensed pumps - SRW	4.1	21
<b>TOTAL</b>	<b>13.4</b>	<b>61</b>

**Flow to South Australia (GL)**

Entitlement this month	135	
Flow this week	34.3	(4 900 ML/day)
Flow so far this month	14	
Flow last month	136	

**Salinity (EC)**

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2003
Swan Hill	160	140	120
Euston	120	110	130
Red Cliffs	90	100	120
Merbein	100	90	120
Burtundy (Darling)	1 620	1 640	1 640
Lock 9	130	140	180
Lake Victoria	270	250	250
Berri	320	350	380
Waikerie	480	480	580
Morgan	500	520	570
Mannum	550	550	520
Murray Bridge	590	580	540
Milang (Lake Alex.)	1 030	1 070	1 090
Poltalloch (Lake Alex.)	1 120	1 100	1 060
Meningie (Lake Alb.)	1 560	1 630	1 480
Goolwa Barrages	3 380	3 420	3 620



**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	-	-	-	7 110	F	6 480	6 900
Jingellic	4.0	2.60	209.12	13 400	R	16 370	18 760
Tallandoon ( Mitta Mitta River )	4.2	1.80	218.69	1 960	F	3 000	4 880
Heywoods	5.5	1.17	154.80	600	S	600	600
Doctors Point	5.5	1.98	150.45	3 720	S	4 330	6 870
Albury	4.3	1.01	148.45	-	-	-	-
Corowa	7.0	1.31	127.33	4 530	F	6 900	6 740
Yarrowonga Weir (d/s)	6.4	2.74	117.78	18 000	F	30 590	17 860
Tocumwal	6.4	3.75	107.59	23 260	F	31 770	14 910
Torrumbarry Weir (d/s)	7.3	5.50	84.05	21 500	F	19 980	10 160
Swan Hill	4.5	3.10	66.02	18 630	R	13 730	9 620
Wakool Junction	8.8	4.75	53.87	17 030	R	14 150	12 830
Euston Weir (d/s)	8.8	2.59	44.43	14 030	R	12 900	12 550
Mildura Weir (d/s)	-	-	31.26	16 050	F	13 020	12 290
Wentworth Weir (d/s)	7.3	3.34	28.10	12 000	F	12 040	11 900
Rufus Junction	-	3.11	20.04	4 430	R	4 500	4 380
Blanchetown (Lock 1 d/s)	-	-	-	4 860	F	4 960	4 520
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	2.42	155.65	3 810	R	4 180	7 390
Ovens at Wangaratta	11.9	10.94	148.62	12 507	F	19 300	19 970
Goulburn at McCoys Bridge	9.0	3.48	94.90	4 444	F	11 740	2 430
Edward at Stevens Weir (d/s)	-	-	-	3 450	F	2 710	1 920
Edward at Liewah	-	2.80	58.18	2 430	R	2 380	2 670
Wakool at Stoney Crossing	-	0.67	55.16	886	R	690	390
Murrumbidgee at Balranald	5.0	0.60	56.56	255	F	250	230
Barwon at Mungindi	-	3.14	-	0	F	10	30
Darling at Bourke	-	4.03	-	250	R	220	220
Darling at Burtundy Rocks	-	0.68	-	42	S	50	40

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	32 300	35 550
---	--------	--------

**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	-0.15	-	No. 7 Rufus River	22.10	+0.08	+0.81
No 26 Torrumbarry	86.05	-0.01	-	No. 6 Murtho	19.25	+0.06	+0.03
No. 15 Euston	47.60	-0.03	-	No. 5 Renmark	16.30	+0.02	+0.18
No. 11 Mildura	34.40	-0.04	+0.46	No. 4 Bookpurnong	13.20	+0.06	+0.57
No. 10 Wentworth	30.80	+0.01	+0.70	No.3 Overland Corner	9.80	+0.04	+0.23
No. 9 Kulnine	27.40	+0.09	+0.03	No. 2 Waikerie	6.10	+0.07	+0.17
No. 8 Wangumma	24.60	+0.00	+0.16	No 1. Blanchetown	3.20	+0.04	+0.12

<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	-0.10	0.86	70.21	601
No. 5 Redbank	66.90	-0.37	0.18	61.48	296

**Barrages**

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	0.82	All closed
Mundoo	26 openings	0.80	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwitchere	322 gates	0.81	All closed

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

