

# REPORT FOR THE WEEK ENDING

Wednesday, 1 October 2003

Our Ref : RMW305/01//01/prs

29 April, 2004



## ***Rainfall and inflows in the upper Murray***

Rainfall totals across the Basin were relatively low this week, with most areas receiving less than 10 mm. In the Upper Murray catchment areas, totals were generally less than 25 mm for the week, comprising light falls over a number of days. Hence, streamflow responses were slight.

The short term outlook for weather conditions next week shows promise of heavier falls, with the Bureau of Meteorology's short range predictive models indicating total rainfall for the next 2-3 days of about 40-50 mm over Upper Murray catchment areas. As this report is being written on 1 October, widespread rain is falling over these catchments, however the falls have been relatively light so far.

## ***Irrigation Demands Increase***

Irrigation demands at the major gravity diversion offtakes increased this week as a result of the relatively warm, dry and windy conditions. A total of about 19 GL was diverted from Lake Mulwala via Mulwala Canal and Yarrawonga Main Channel this week, compared to about 9 GL last week. Similarly, a total of about 29 GL was diverted via National Channel and Wakool Canal, compared to about 16 GL last week. Irrigation demands are expected to reduce next week if forecast rainfall is realised.

## ***Flows Recede in Lower Murray***

Releases from Yarrawonga Weir were steadily reduced from 17 000 ML/day to 11 000 ML/day this week as inflows from the Kiewa and Ovens Rivers receded. At Torrumbarry Weir, flows were relatively steady at about 10 600 ML/day all week, and are expected to recede next week unless flow in the River Murray and Goulburn River increase following the rain. Further downstream at Euston Weir, flows receded steadily all week from 15 000 ML/day to 11 000 ML/day. At the South Australian Border, flow averaged about 9 900 ML/day this week compared to 13 000 ML/day last week, and has now receded to 7 000 ML/day.

Lake Victoria currently holds 649 GL (95% capacity), and due to receding flow in the River Murray upstream, the outlet regulator is being slowly closed to bring Lake Victoria up to maximum capacity. However, if inflows to the River Murray upstream again increase following heavy rainfall, water will be released from Lake Victoria to temporarily lower water levels, and the Lake refilled later in accordance with the Lake Victoria Operating Strategy.

## ***Lower Lakes and Barrages Operations***

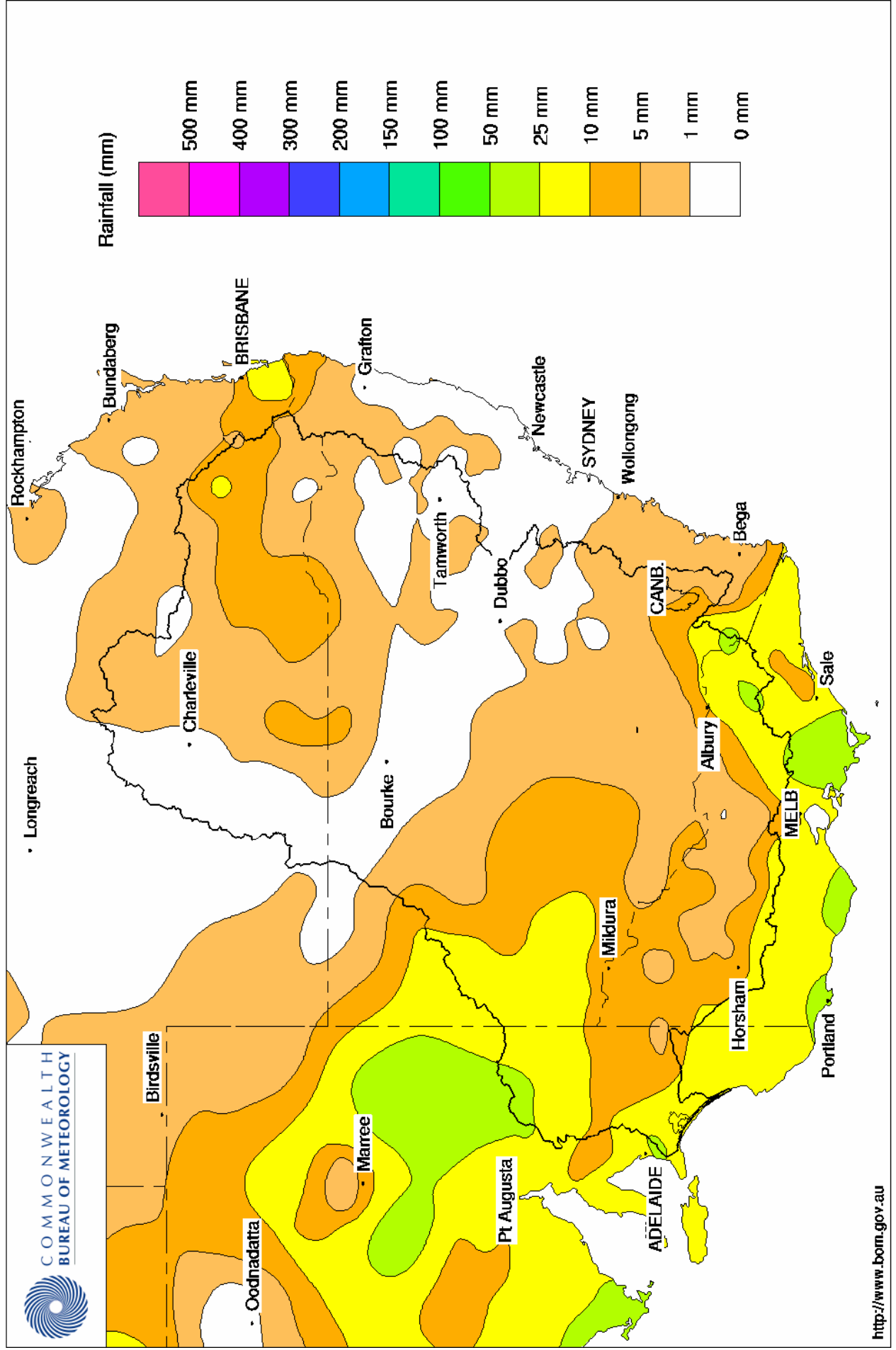
Inflows to the Lower Lakes are also receding. Tauwitchere Barrage has now been closed owing to receding inflows and relatively high tailwater levels downstream of Tauwitchere Barrage. Goolwa Barrage is currently open; however the barrage has been temporarily closed on several occasions during the week as strong winds caused potential for back-flow of saline water from downstream. Releases from Goolwa Barrage will be slowly reduced over the coming week as inflows recede, however a small flow is expected to continue for several weeks, and will increase if inflows increase in response to rainfall.

As is typical for this time of year, windy conditions are causing large variations in water level across the Lower Lakes. However the average level in Lake Alexandrina is now at the surcharge target of 0.85 m and will be maintained at about this level until inflows are insufficient to offset evaporation losses.

DAVID DOLE  
General Manager

# Murray Darling Rainfall Analysis (mm) Week Ending 1st October 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	441.44	1 597	41%	80	1 517	+45
Hume Reservoir	192.00	3 038	185.92	1 957	64%	30	1 927	+139
Lake Victoria	27.00	680	26.72	649	95%	100	549	+18
Menindee Lakes		1 603 *		61	4%	640 #	0	-5
<b>Total</b>		<b>9 227</b>		<b>4 264</b>	<b>46%</b>	<b>850</b>	<b>3 993</b>	<b>+197</b>

\* Menindee surcharge capacity 1916 GL

% of Total Active MDBC Storage = **48%**

# NSW Menindee Lakes Reserve

**Major State Storages**

Burrinjuck Reservoir	1 026	366	36%	3	363	+37
Blowering Reservoir	1 631	839	51%	24	815	+2
Eildon Reservoir	3 390	1 244	37%	100	1 144	+54

**Snowy Mountains Scheme**

Snowy diversions for week ending 30-Sep-2003

Storage	Active storage (GL)	Weekly change (GL)	Diversion (GL)	This week	From 1 May 2003
Lake Eucumbene - Total	1 744	+73	Snowy-Murray	+2	491
Snowy-Murray Component	799	-	Tooma-Tumut	+13	147
Target Storage	1 400		Nett Diversion	-10.4	344
			Murray 1 Release	+35	675

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

New South Wales	This week	From 1 July 2003
Murray Irrig. Ltd (Net)	20.6	82.8
Wakool System loss	0.0	1.2
Western Murray Irrig.	0.4	1.8
Licensed Pumps	6.1	25.4
Lower Darling	0.2	1.0
<b>TOTAL</b>	<b>27.2</b>	<b>112.1</b>

Victoria	This week	From 1 July 2003
Yarrowonga Main Channel (net)	7.3	14
Torrumbarry System + Nyah (net)	17.4	69
Sunraysia Pumped Districts	4.2	9
Licensed pumps - GMW (Nyah+u/s)	0.4	1
Licensed pumps - SRW	4.1	38
<b>TOTAL</b>	<b>33.4</b>	<b>131</b>

**Flow to South Australia (GL)**

Entitlement this month	170	(9 900 ML/day)
Flow this week	69.5	
Flow so far this month	7	
Flow last month	299	

**Salinity (EC)**

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2003
Swan Hill	110	110	130
Euston	110	100	140
Red Cliffs	110	130	130
Merbein	120	150	130
Burtundy (Darling)	1 730	1 730	1 670
Lock 9	190	190	180
Lake Victoria	220	230	230
Berri	210	200	310
Waikerie	240	240	540
Morgan	260	280	510
Mannum	540	540	540
Murray Bridge	560	560	570
Milang (Lake Alex.)	780	820	1 030
Poltalloch (Lake Alex.)	1 220	1 140	1 100
Meningie (Lake Alb.)	1 480	1 470	1 430
Goolwa Barrages	1 630	2 580	3 380



**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	-	-	-	4 630	F	8 120	6 980
Jingellic	4.0	2.39	208.91	11 090	F	16 310	14 720
Tallandoon ( Mitta Mitta River )	4.2	1.73	218.62	1 700	F	1 880	2 000
Heywoods	5.5	1.15	154.78	600	S	600	600
Doctors Point	5.5	2.14	150.61	4 910	F	5 340	4 850
Albury	4.3	1.14	148.58	-	-	-	-
Corowa	7.0	1.64	127.66	6 370	S	5 910	5 210
Yarrowonga Weir (d/s)	6.4	1.88	116.92	11 000	S	12 490	16 210
Tocumwal	6.4	2.43	106.27	11 720	F	14 400	15 420
Torrumbarry Weir (d/s)	7.3	3.16	81.71	10 160	F	10 680	9 660
Swan Hill	4.5	1.74	64.66	9 250	R	8 800	9 240
Wakool Junction	8.8	3.79	52.91	11 940	F	12 430	16 720
Euston Weir (d/s)	8.8	2.17	44.01	11 160	R	12 290	17 070
Mildura Weir (d/s)	-	-	31.22	-	F	-	17 150
Wentworth Weir (d/s)	7.3	3.20	27.96	10 530	F	13 160	16 940
Rufus Junction	-	3.48	20.41	6 630	F	9 770	12 590
Blanchetown (Lock 1 d/s)	-	-	-	7 890	F	10 960	12 840
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	2.47	155.70	4 610	F	4 760	4 730
Ovens at Wangaratta	11.9	9.76	147.44	6 179	F	7 620	13 350
Goulburn at McCoys Bridge	9.0	1.90	93.32	1 650	F	2 880	3 110
Edward at Stevens Weir (d/s)	-	-	-	860	F	470	1 410
Edward at Liewah	-	2.18	57.56	1 560	F	2 150	3 470
Wakool at Stoney Crossing	-	0.74	55.23	1 090	F	1 470	2 720
Murrumbidgee at Balranald	5.0	0.50	56.46	198	R	170	200
Barwon at Mungindi	-	3.21	-	70	F	40	40
Darling at Bourke	-	3.97	-	100	S	120	180
Darling at Burtundy Rocks	-	0.64	-	0	F	0	0

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	27 170	26 460
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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	+0.05	-	No. 7 Rufus River	22.10	+0.06	+1.19
No 26 Torrumbarry	86.05	-0.01	-	No. 6 Murtho	19.25	+0.07	+0.18
No. 15 Euston	47.60	+0.00	-	No. 5 Renmark	16.30	+0.05	+0.24
No. 11 Mildura	34.40	+0.05	+0.42	No. 4 Bookpurnong	13.20	+0.02	+0.86
No. 10 Wentworth	30.80	+0.02	+0.56	No.3 Overland Corner	9.80	+0.04	+0.32
No. 9 Kulnine	27.40	+0.06	+0.02	No. 2 Waikerie	6.10	+0.03	+0.32
No. 8 Wangumma	24.60	+0.00	+0.14	No 1. Blanchetown	3.20	+0.07	+0.13

<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	0.63	69.98	325
No. 5 Redbank	66.90	-0.07	0.22	61.52	333

**Barrages**

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	1.08	All closed *
Mundoo	26 openings	1.00	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwicheere	322 gates	1.01	All closed

\* Temporarily closed owing to windy conditions

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

