

# REPORT FOR THE WEEK ENDING

Wednesday, 9 October 2002

Our Ref : MDBC:269 :brc

11 October, 2002



## *Update on El Niño Event*

The Bureau of Meteorology has reported that there has recently been little change in *El Niño* indicators. In the central Pacific Ocean, sea surface temperatures are currently about 1 to 1.5°C above average, a common feature of *El Niño* events. The Southern Oscillation Index result for September was -8, compared with -15 in August. *El Niño* events are often, but not always, associated with below average rainfall across parts of eastern and northern Australia, particularly during winter, spring and early summer. The Bureau is predicting that the current *El Niño* event is likely to continue until late this year or early next year. The historical record shows that *El Niño* events tend to break down in late summer or autumn. Refer to the Bureau's Internet site [www.bom.gov.au/climate/enso/](http://www.bom.gov.au/climate/enso/) for more information about the current *El Niño* event.

## *Little Change in the River Murray System*

Rainfall was confined to southern areas of the Basin this week, although totals were generally low. Totals of 15 mm or less fell on the upper slopes of the upper Murray catchment, which failed to produce significant streamflow response. Inflows to the River Murray system so far during October are close to the minimum inflow level used for planning purposes to estimate water availability.

With demand for irrigation water steady this week at all major diversion offtakes, release from Hume Reservoir has been maintained at about 20 000 ML/day, and is likely to be maintained near this flow next week. Further downstream, flows were generally steady at all locations, with 14 000 ML/day downstream of Yarrawonga Weir, 6 600 ML/day downstream of Torrumbarry Weir, and 9 700 ML/day downstream of Euston Weir. Release from Stevens Weir on the Edward River has been maintained at 2 900 ML/day. Flows at all of these locations are likely to remain relatively steady over the next several weeks unless there is a significant change in conditions.

Storage in Lake Victoria increased by 16 GL to 426 GL (63% of capacity) as a result of continued transfer of water from Hume Reservoir. Overall storage in the major storages is now about 700 GL less than it was at the same time in 1982, as shown below (gross storage (GL) and % of capacity).

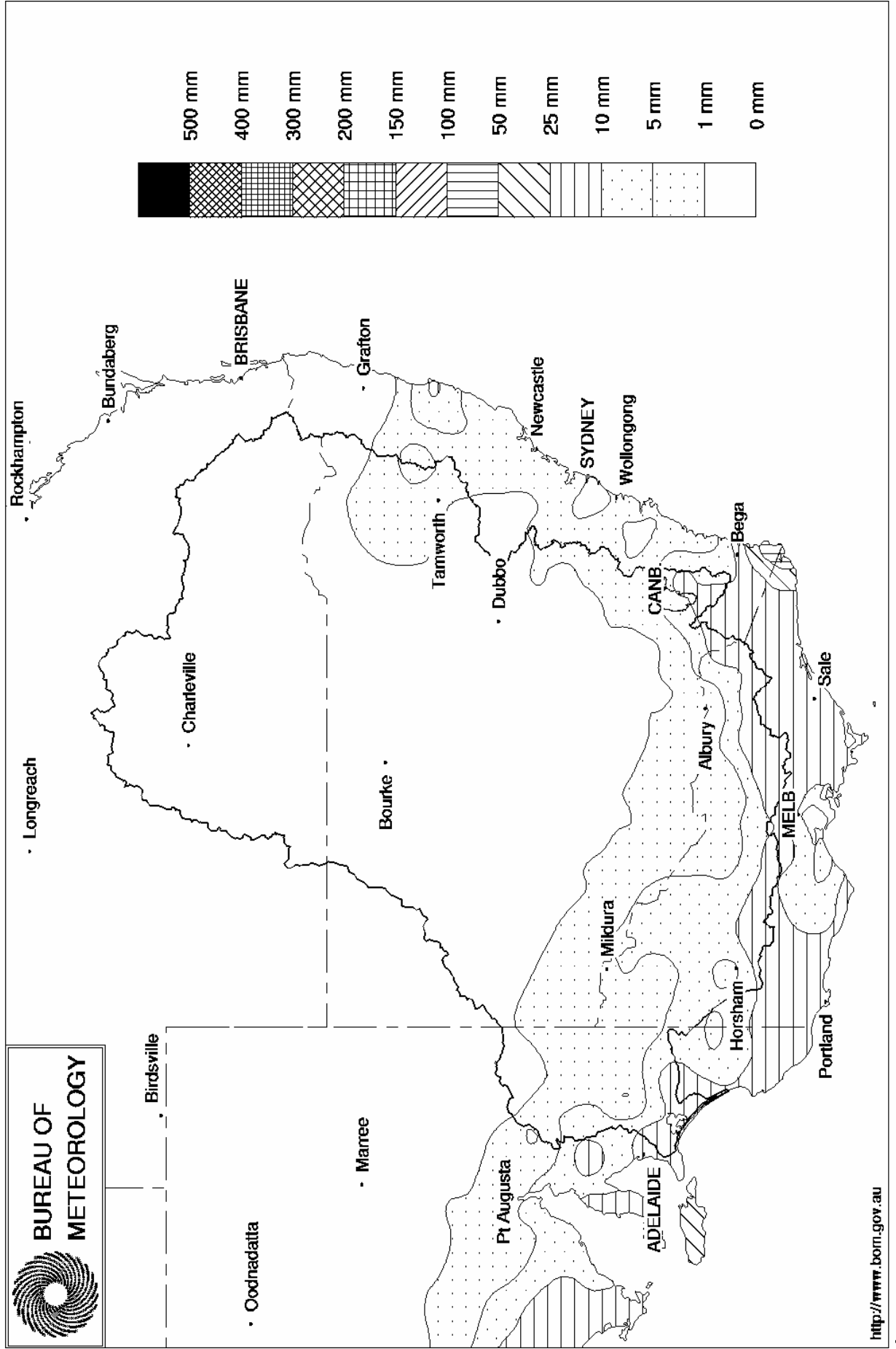
Storage	9 October 2002		9 October 1982		Difference in Volume (2002 minus 1982)
Dartmouth	2 668 GL	68%	2 336 GL	60%	332 GL
Hume	831 GL	27%	648 GL	21%	183 GL
Lake Victoria	426 GL	63%	505 GL	74%	-79 GL
Menindee Lakes *	311 GL	16%	1 438 GL	72%	-1 127 GL
<b>Total *</b>	<b>4 236 GL</b>	<b>44%</b>	<b>4 927 GL</b>	<b>51%</b>	<b>-691 GL</b>

\* For Menindee Lakes: storage capacity includes 480 GL NSW reserve, and percentage of capacity refers to surcharge capacity 1 999 GL.

DAVID DOLE  
General Manager

# Murray Darling Rainfall Analysis (mm) Week Ending 9th October 2002

Product of the National Climate Centre



## Week ending Wednesday 09 Oct 2002

### 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	465.03	2 668	68%	80	2 588	-52
Hume Reservoir	192.00	3 038	176.99	831	27%	30	801	-28
Lake Victoria	27.00	680	24.64	426	63%	100	326	+16
Menindee Lakes		1 682 *		311	18%	640 #	0	-7
<b>Total</b>		<b>9 306</b>		<b>4 236</b>	<b>46%</b>	<b>850</b>	<b>3 715</b>	<b>-71</b>

\* Menindee surcharge capacity 1999 GL

% of Total Active MDBC Storage = **44%**

# NSW Menindee Lakes Reserve

### Major State Storages

Burrinjuck Reservoir	1 026	344	34%	3	341	-2
Blowering Reservoir	1 631	414	25%	24	390	-38
Eildon Reservoir	3 390	786	23%	100	686	-13

### Snowy Mountains Scheme

Snowy diversions for week ending 08-Oct-2002

Storage (GL)	Current storage	Weekly change	Diversion	This week	From 1 May 2002
Lake Eucumbene - Total	3 173	+31	Snowy-Murray	+0	182
Snowy-Murray Component	1 510	-	Tooma-Tumut	+8	161
Target Storage	1 400		Nett Diversion	-7.6	21
			Murray 1 Release	+14	383

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

New South Wales	This week	From 1 July 2002
Murray Irrig. Ltd (Net)	21.3	231.3
Wakool System loss	2.1	13.6
Western Murray Irrig.	0.5	4.5
Licensed Pumps	6.9	66.0
Lower Darling	0.8	51.3
<b>TOTAL</b>	<b>31.6</b>	<b>366.7</b>

Victoria	This week	From 1 July 2002
Yarrawonga Main Channel (net)	14.9	120
Torrumbarry System + Nyah (net)	24.6	298
Sunraysia Pumped Districts	2.8	24
Licensed pumps - GMW (Nyah+u/s)	4.1	15
Licensed pumps - SRW	3.6	35
<b>TOTAL</b>	<b>49.9</b>	<b>492</b>

### Flow to South Australia (GL)

Entitlement this month	170	(5 400 ML/day)
Flow this week	38.1	
Flow so far this month	49	
Flow last month	136	

### Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2002
Swan Hill	100	86	109
Euston	140	153	182
Red Cliffs	110	180	206
Merbein	170	230	216
Burtundy	980	918	831
Lock 9	110	149	263
Lake Victoria	360	390	363
Berri	400	411	419
Waikerie	-	560	577
Morgan	610	606	625
Mannum	-	665	660
Murray Bridge	740	746	732
Meningie	1 510	1 500	1 450
Goolwa Barrages	3 310	3 736	3 865



**River Levels and Flows**

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	-	-	-	3 190	F	2 510	4 180
Jingellic	4.0	1.82	208.34	5 810	S	5 480	8 360
Tallandoon ( Mitta Mitta River )	4.2	3.20	220.09	10 020	S	10 020	9 940
Heywoods	5.5	3.23	156.86	18 260	S	18 690	18 110
Doctors Point	5.5	3.42	151.89	19 300	R	19 730	19 860
Albury	4.3	2.46	149.90	-	-	-	-
Corowa	7.0	3.67	129.69	20 500	F	21 090	19 010
Yarrowonga Weir (d/s)	6.4	2.24	117.28	14 000	S	14 030	13 990
Tocumwal	6.4	2.77	106.61	13 750	S	13 770	13 750
Torrumbarry Weir (d/s)	7.3	2.33	80.88	6 940	R	6 630	6 460
Swan Hill	4.5	1.30	64.22	6 250	R	5 910	6 130
Wakool Junction	8.8	3.42	52.54	9 470	R	9 300	9 930
Euston Weir (d/s)	8.8	1.88	43.72	9 330	F	9 750	10 600
Mildura Weir (d/s)	-	-	31.10	7 670	F	7 750	8 260
Wentworth Weir (d/s)	7.3	3.08	27.84	8 330	R	8 390	8 790
Rufus Junction	-	3.10	18.33	4 450	S	4 770	4 620
Blanchetown (Lock 1 d/s)	-	-	-	3 530	R	2 960	2 910
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	1.40	154.63	1 220	R	1 340	2 030
Ovens at Wangaratta	11.9	8.45	146.13	1 780	R	1 770	2 530
Goulburn at McCoys Bridge	9.0	1.20	92.62	450	F	460	450
Edward at Stevens Weir (d/s)	-	-	-	2 900	F	2 900	2 900
Edward at Liewah	-	3.06	58.44	2 830	S	2 780	2 810
Wakool at Stoney Crossing	-	0.83	55.32	1 520	F	1 620	1 800
Murrumbidgee at Balranald	5.0	0.55	56.51	270	S	290	380
Barwon at Mungindi	-	3.15	-	10	F	90	50
Darling at Bourke	-	4.00	-	170	S	180	210
Darling at Burtundy Rocks	-	0.63	-	7	S	10	0

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	9 380	12 960
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**Weirs and Locks**

**Pool levels above or below design level**

Murray	FSL (m AHD)	u/s	d/s		FSL (m AHD)	u/s	d/s
Yarrowonga	124.90	-0.17	-	No. 7 Rufus River	22.10	+0.17	+0.79
No 26 Torrumbarry	86.05	-0.01	-	No. 6 Murtho	19.25	+0.00	+0.05
No. 15 Euston	47.60	+0.02	-	No. 5 Renmark	16.30	+0.03	+0.15
No. 11 Mildura	34.40	+0.02	+0.30	No. 4 Bookpurnong	13.20	+0.07	+0.54
No. 10 Wentworth	30.80	+0.05	+0.44	No.3 Overland Corner	9.80	+0.06	+0.20
No. 9 Kulnine	27.40	+0.02	+0.06	No. 2 Waikerie	6.10	+0.05	+0.10
No. 8 Wangumma	24.60	+0.04	+0.25	No 1. Blanchetown	3.20	-0.01	-0.01

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-1.47	0.56	69.91	260
No. 5 Redbank	66.90	-0.51	0.12	61.42	244

**Barrages**

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	0.76	All closed
Mundoo	26 openings	0.77	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwichee	322 gates	0.76	All closed



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