

# REPORT FOR THE WEEK ENDING

**Wednesday, 31 July 2002**

*Our Ref: MDBC:269 :ng:bwh*

**2 August, 2002**



Light falls of rain were recorded across much of the Murray-Darling Basin this week. Falls were generally between 1 and 5 mm, however, some heavier falls of up to 20 mm were recorded in southern Queensland and near the Murray Mouth in South Australia.

Streamflows in the upper Murray have continued to recede as a result of generally dry conditions. For example, Dartmouth Reservoir inflow declined from 1 700 to 1 600 ML/day whilst Hume Reservoir inflow fell from 16 000 to 13 500 ML/day. The calculated 'natural' inflow to Hume Reservoir for July (that is, what would have occurred without the presence of upstream storages at Dartmouth and the Snowy Mountains Scheme) is estimated as 290 GL – this level of inflow is relatively low, and is exceeded about 6 years in 10 over the long term.

Transfer from Dartmouth to Hume Reservoir is continuing at an average rate of 6 500 ML/day, and this will be reviewed over coming months according to inflows, storage and demand conditions. Release from Hume Dam has been increased from 8 000 to 11 000 ML/day at Albury/Wodonga to meet increasing diversion requirements and to commence the transfer of water to Lake Victoria. Without further significant rain, it is expected that flow at Albury/Wodonga will be further increased to about 14 000 ML/day next week to meet emerging requirements downstream and river losses.

Refilling of Lake Mulwala is continuing according to schedule with the water level being raised by 1.2 m this week, and the Lake is now about 1.2 m below normal operating range. Diversion to Yarrawonga Main Channel and Mulwala Canal is forecast to begin next week for the purposes of channel filling. Release from Yarrawonga Weir was increased from 4 500 to 7 000 ML/day as part of the program of transfer to Lake Victoria, and will be increased to about 10 300 ML/day (near to regulated channel capacity in Barmah-Millewa Forest) next week unless there is significant rain.

Combined flow to the Edward/Wakool System via the Edward River and Gulpa Creek offtakes increased from 250 to 550 ML/day and will be further increased to the regulated capacity of 1 950 ML/day next week. Refilling of the Stevens Weir pool commenced on 30 July, and will be assisted by the increased inflows to the Edward River.

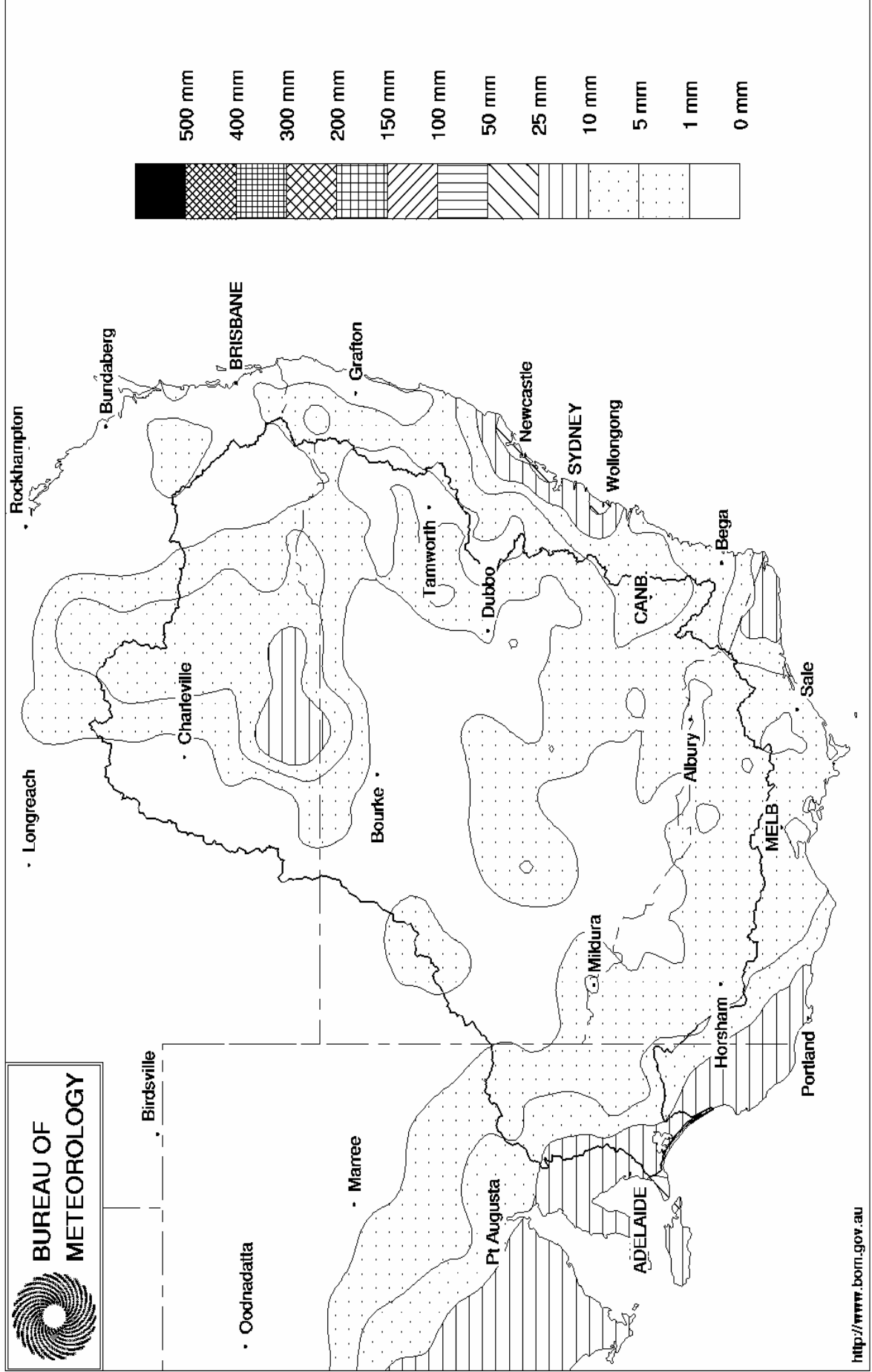
Diversion from Torrumbarry Weir pool to National Channel was increased from 2 000 to about 2 200 ML/day, and is expected to reach about 3 000 ML/day by the end of next week. Increasing irrigation pumping demand and losses have been observed between Torrumbarry and Euston Weirs. As a result, the river height at Swan Hill fell below target minimum level of 0.6 m for a short period during the week. However, by 1 August, the river height was 0.63 m and is expected to rise to about 0.75 m next week as increased flows in transit from Yarrawonga begin to arrive.

Salinity levels have remained steady at comparatively low levels along the River Murray with readings of 55 EC at Tocumwal, 110 EC at Torrumbarry, 180 EC at Euston, 220 EC at Wentworth, 400 EC at Renmark and 680 EC at Morgan. However, salinity in the lower Darling River at Burtundy is steady at about 830 EC, but the salt load entering the River Murray is low because the Darling flow is currently only 100 ML/day.

DAVID DOLE  
General Manager

# Murray Darling Rainfall Analysis (mm) Week Ending 31st July 2002

Product of the National Climate Centre



## Week ending Wednesday 31 Jul 2002

### Water in Storage

MDBC Storages	Full Supply Level	Full Supply Volume	Current Storage Level	Current Storage		Dead Storage	Active Storage	Change in Storage for the week
	(m AHD)	(GL)	(m AHD)	(GL)	%	(GL)	(GL)	(GL)
Dartmouth Reservoir	486.00	3 906	473.37	3 128	80%	80	3 048	-39
Hume Reservoir	192.00	3 038	177.87	922	30%	30	892	+40
Lake Victoria	27.00	680	24.76	438	64%	100	338	+13
Menindee Lakes		1 682 *		376	22%	640 #	0	-6
<b>Total</b>		<b>9 306</b>		<b>4 864</b>	<b>52%</b>	<b>850</b>	<b>4 278</b>	<b>+7</b>

\* Menindee surcharge capacity 1999 GL

% of Total Active MDBC Storage = **51%**

# NSW Menindee Lakes Reserve

### Major State Storages

Burrinjuck Reservoir	1 026		290	28%	3	287	+5
Blowering Reservoir	1 631		589	36%	24	565	+18
Eildon Reservoir	3 390		802	24%	100	702	+11

### Snowy Mountains Scheme

Snowy diversions for week ending 30-Jul-2002

Storage (GL)	Current storage	Weekly change	Diversion	This week	From 1 May 2002
Lake Eucumbene - Total	2 825	-23	Snowy-Murray	+23	143
Snowy-Murray Component	1 320	-	Tooma-Tumut	+4	67
Target Storage	1 170		Nett Diversion	18.2	76
			Murray 1 Release	+26	216

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

New South Wales	This week	From 1 July 2002
Murray Irrig. Ltd (Net)	.0	- 4.6
Wakool System loss	0.7	2.2
Western Murray Irrig.	0.3	.7
Licensed Pumps	0.8	4.2
Lower Darling	3.7	15.6
<b>TOTAL</b>	<b>5.4</b>	<b>18.1</b>

Victoria	This week	From 1 July 2002
Yarrawonga Main Channel (net)	.0	
Torrumbarry System + Nyah (net)	12.4	30
Sunraysia Pumped Districts	0.1	2
Licensed pumps - GMW (Nyah+u/s)	0.2	1
Licensed pumps - SRW	2.0	8
<b>TOTAL</b>	<b>14.7</b>	<b>41</b>

### Flow to South Australia (GL)

Entitlement this month	108.5	
Flow this week	24.9	(3 600 ML/day)
Flow so far this month	109	
Flow last month	90	

### Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2002
Swan Hill	290	263	184
Euston	190	183	203
Red Cliffs	210	210	263
Merbein	200	180	253
Burtundy	830	835	588
Lock 9	270	263	360
Lake Victoria	330	296	404
Berri	460	401	485
Waikerie	-	670	591
Morgan	680	684	605
Mannum	650	648	572
Murray Bridge	-	703	620
Meningie	1 390	1 410	1 274
Goolwa Barrages	4 800	4 770	2 119



**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	-	-	-	2 440	F	4 430	3 810
Jingellic	4.0	1.85	208.37	6 080	F	7 470	6 370
Tallandoon ( Mitta Mitta River )	4.2	2.75	219.64	7 040	F	7 610	7 030
Heywoods	5.5	2.59	156.22	10 690	S	9 270	3 360
Doctors Point	5.5	2.75	151.22	10 900	S	9 820	4 630
Albury	4.3	1.70	149.14	-	-	-	-
Corowa	7.0	2.45	128.47	11 500	R	9 620	3 260
Yarrowonga Weir (d/s)	6.4	1.34	116.38	7 100	R	5 590	4 260
Tocumwal	6.4	1.65	105.49	5 960	R	4 800	3 920
Torrumbarry Weir (d/s)	7.3	1.04	79.59	2 340	R	2 100	2 640
Swan Hill	4.5	0.59	63.51	1 820	R	1 740	3 800
Wakool Junction	8.8	1.33	50.45	2 130	F	2 710	4 710
Euston Weir (d/s)	8.8	0.82	42.66	3 480	S	4 570	6 220
Mildura Weir (d/s)	-	-	30.80	3 560	F	4 440	4 530
Wentworth Weir (d/s)	7.3	2.85	27.61	3 960	F	4 980	4 900
Rufus Junction	-	2.86	18.06	3 190	R	3 060	3 080
Blanchetown (Lock 1 d/s)	-	-	-	2 760	R	2 670	2 790
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	1.13	154.36	800	R	940	1 340
Ovens at Wangaratta	11.9	8.47	146.15	1 835	S	1 840	2 100
Goulburn at McCoys Bridge	9.0	1.19	92.61	433	R	410	400
Edward at Stevens Weir (d/s)	-	-	-	200	F	210	220
Edward at Liewah	-	0.66	56.04	280	F	430	520
Wakool at Stoney Crossing	-	0.22	54.71	102	F	110	130
Murrumbidgee at Balranald	5.0	1.39	57.35	1 080	F	1 320	1 390
Barwon at Mungindi	-	3.18	-	30	S	30	50
Darling at Bourke	-	4.01	-	190	S	190	190
Darling at Burtundy Rocks	-	0.69	-	90	F	100	100

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	5 810	6 170
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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	-1.58	-	No. 7 Rufus River	22.10	+0.12	+0.55
No 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.05	+0.00
No. 15 Euston	47.60	+0.00	-	No. 5 Renmark	16.30	+0.04	+0.08
No. 11 Mildura	34.40	+0.03	+0.00	No. 4 Bookpurnong	13.20	+0.02	+0.32
No. 10 Wentworth	30.80	-0.02	+0.21	No.3 Overland Corner	9.80	+0.04	+0.12
No. 9 Kulnine	27.40	+0.02	+0.06	No. 2 Waikerie	6.10	+0.03	+0.08
No. 8 Wangumma	24.60	+0.08	+0.14	No 1. Blanchetown	3.20	+0.03	-0.08

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-0.26	1.57	70.92	1950
No. 5 Redbank	66.90	+0.16	0.8	62.1	975

**Barrages**

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	0.80	All closed
Mundoo	26 openings	0.83	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwichee	322 gates	0.84	All closed

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

