REPORT FOR THE WEEK ENDING

Wednesday, 27 March 2002

Our Ref : MDBC:269 :dc:bwh **28 March, 2002**

River Murray Water
A Business Unit of MDBC

Irrigation restrictions along the mid-Murray were lifted early this week as a result of falling demands and a small improvement in conditions. On 25 March, an end to irrigation restrictions for private diversions and diversions at major offtakes was announced by New South Wales and Victoria, in consultation with River Murray Water. After the end of the 10 day period of restrictions, there was widespread rain along the River Murray on 25-26 March, which resulted in a sharp reduction in demand for irrigation water.

Following the completion of a Southern Hydro entitlement release from Dartmouth Power Station, specifically for the purposes of electricity generation, flow at Colemans was reduced from 1 800 to 600 ML/day, and release will be maintained at 600 ML/day next week unless additional water is released for electricity generation. It is now very unlikely that transfer of irrigation water from Dartmouth to Hume will be required over the remainder of this irrigation season.

In response to the reduction in irrigation demand following the rain, release from Hume Reservoir has been progressively reduced since 25 March. As a result, flow at Albury/Wodonga has declined from 24 700 to 21 400 ML/day. Further reductions will be made next week.

Total diversion from Lake Mulwala significantly reduced from 13 100 ML/day (close to maximum capacity) to 5 300 ML/day (about 40 % of capacity). As a result of this 'rain rejection' of irrigation orders, it has been necessary to increase release from Yarrawonga Weir from maximum regulated flow (10 400 ML/day) to 15 000 ML/day, and the level of Lake Mulwala is being temporarily surcharged to conserve water resources, and to minimise unseasonal flow to Barmah-Millewa Forest. A further small increase in release from Yarrawonga Weir may be required next week. This flow will necessitate the opening of some forest regulators to prevent uncontrolled overbank flow into the Forest. In addition, flow from the Murray through the Edward River Offtake will be increased to about 2 100 ML/day.

In the Edward/Wakool System, releases from irrigation canal "escapes" have been increased to capacity to maximise the transfer of water from Mulwala Canal to the Edward and Wakool Rivers. The escapes are being used to reduce the unseasonal flow entering Barmah-Millewa Forest in this 'rain rejection' event. Release from Stevens Weir is expected to be increased from the current rate of 2 100 ML/day to about 3 000 ML/day over the coming week.

Following the recent improvements in conditions, and reduced river losses, increased inflows are now in transit upstream of Euston Weir pool. Consequently, release from Euston Weir has been increased from 2 200 to 3 000 ML/day. The weir pool level (currently 15 cm below full supply level (FSL)), is continuing to be drawn down so that downstream flows are increased in the short term. Current forecasts indicate that, without further rainfall, the pool water level will be further drawn down to about 30 cm below FSL by early April before refilled by about 8 April. As a result of the recent rainfall, the Mildura Weir pool has now been refilled. Currently, flow downstream of Mildura Weir is 1 700 ML/day, and further increases are expected over the coming week.

Counts of blue-green algae in Menindee Lakes and the lower Darling River at Weir 32 have increased to high alert levels (*see attached Media Release*).

DAVID DOLE
General Manager

NSW Department of Land and Water Conservation, Murray Region

MEDIA RELEASE

26 March 2002

BLUE - GREEN ALGAE IN THE MENINDEE LAKES

Concentrations of potentially toxic blue-green algae had been increasing in parts of the Menindee Lakes and Darling River. **High Alert levels** were confirmed today for samples from Lake Wetherell, Lake Menindee and the Darling River at Weir 32.

NSW Department of Land and Water Conservation, Manager, Resource Analysis, Mr Alastair Buchan advised that local residents and visitors should exercise caution when using the lakes and river, avoiding any areas that appear bright green, where obvious green scums are present or a distinctive odour is noticed.

The species of blue-green algae identified are potentially toxic and may cause gastroenteritis and liver damage in humans if consumed and skin and eye irritations after contact. Blue-green algae are also known to cause stock illness or even death.

Cooking with contaminated water should be avoided. Boiling will not reduce the potential hazards of blue-green algae toxins. Filtration using activated carbon is the only practical and effective short-term treatment.

Landholders should find alternative water for livestock where ever possible.

Recreational and water users should avoid drinking or contact with affected water, which may appear discoloured or exhibit a distinctive odour. Shellfish and yabbies should not be eaten and fin fish should be well gutted and cleaned in unaffected water. Dogs are particularly sensitive.

Mr Buchan further advised that the results of recent monitoring had shown that the blue-green algal levels detected in Lakes Pamamaroo and Cawndilla, Copi Hollow and the Darling River adjacent to the Menindee Township are low. These areas are suitable for recreational use, however people should be cautious as algal concentrations can increase rapidly.

Monitoring undertaken by the Department of Land and Water Conservation and Australian Inland Energy and Water at the Menindee Pump Station has detected blue-green algae at levels that do not pose a threat for domestic, stock and recreational use.

Algal blooms are most common in water with a combination of high nutrient concentrations, slow flowing water, high sunlight and warm water temperatures. Low lake levels and the recent warm weather have combined to provide ideal conditions for the development of blue-green algae. Mr Buchan said that although nobody wished bloom development, conditions within the lakes are such that the current incidence of high algal concentrations is not surprising.

Sampling in the Menindee area has been increased and the Regional Algal Co-ordinating Committee will closely monitor algal levels and issue appropriate warnings in accordance with the Regional Algal Contingency Strategy.

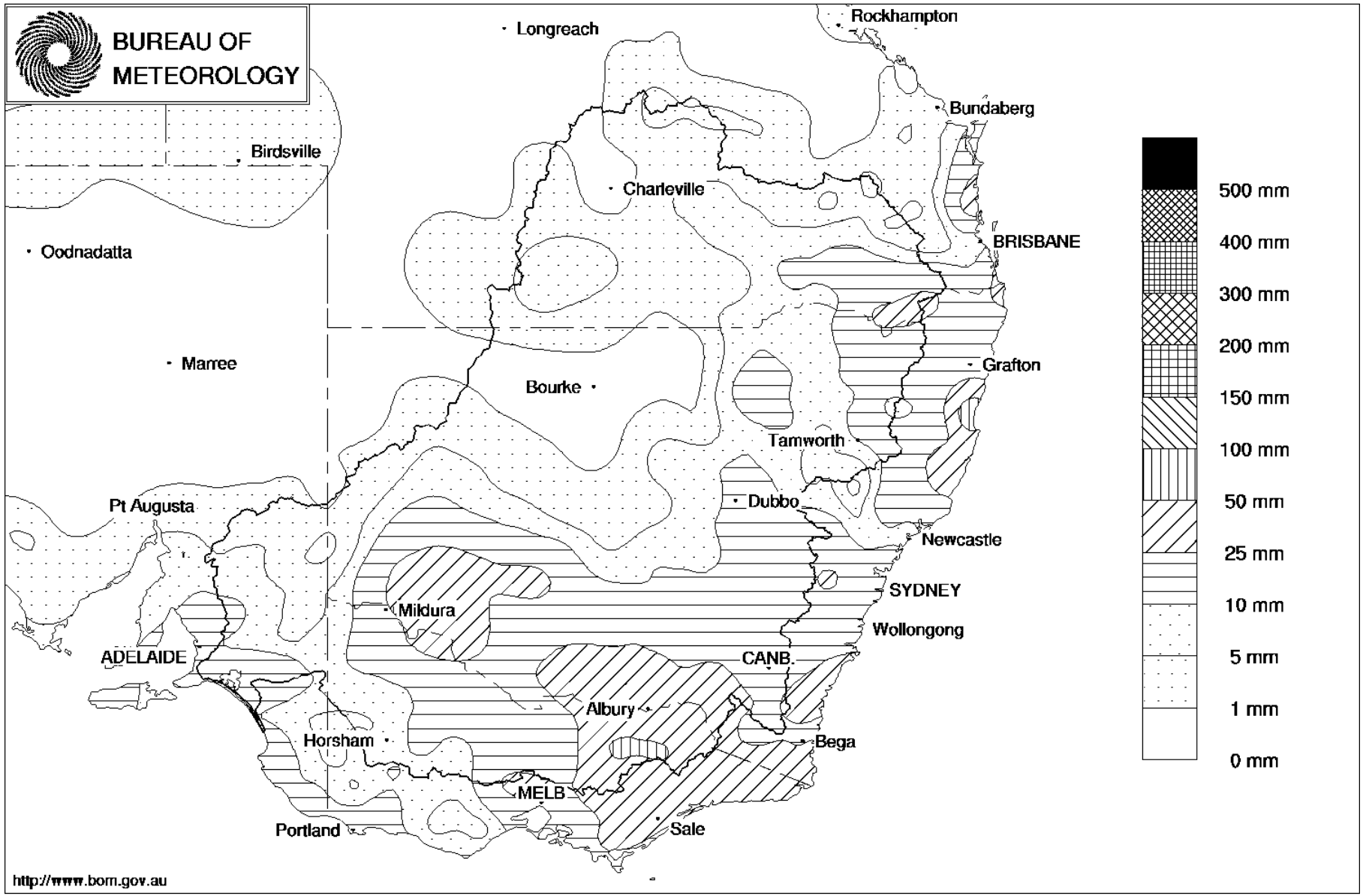
Landholders and water users are requested to report any new sightings of suspected algal blooms to the State Water Office in Menindee or the NSW Department of Land and Water Conservation, Buronga office.

For further information, contact the above offices or phone the toll-free hotline on 1800 088 510.

Technical Information
Alastair Buchan 0429 908 055

Murray Darling Rainfall Analysis (mm) Week Ending 27th March 2002

Product of the National Climate Centre



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Week ending Wednesday 27 Mar 2002

Water in Storage

MDBC Storages	Full Supply Level (m AHD)	Full Supply Volume (GL)	Current Storage Level (m AHD)	Current Storage (GL)	Current Storage %	Dead storage (GL)	Active storage (GL)	Change for the week (GL)
Dartmouth Reservoir	486.00	3 906	476.70	3 324	85%	80	3 244	-4
Hume Reservoir	192.00	3 038	174.18	574	19%	30	544	-139
Lake Victoria	27.00	680	23.48	309	45%	100	209	-47
Menindee Lakes		1 682 *		449	27%	640 #	- 191	-22
Total		**9 306**		**4 656**	**50%**	**690**	**3 806**	**-211**

* Menindee surcharge capacity 1999 GL

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

\# NSW Menindee Lakes Reserve

Major State Storages

Burrinjuck Reservoir	1 026		242	24%	3	239	-8
Blowering Reservoir	1 631		210	13%	24	186	-43
Eildon Reservoir	3 390		782	23%	100	682	-44

Snowy Mountains Scheme

Snowy diversions for week ending 26-Mar-2002

Storage (GL)	Current storage	Weekly change	Diversion	This week	From 1 May 2001
Lake Eucumbene - Total	2 944	-17	Snowy-Murray	+0	739
Snowy-Murray Component	1 312	-	Tooma-Tumut	+0	221
Target Storage	1 410		Nett Diversion	0.0	518
			Murray 1 Release	+1	1 049

Major Diversions from Murray and Lower Darling (GL)

New South Wales	This week	From 1 July 2001
Murray Irrig. Ltd (Net)	51.3	1 403.4
Wakool System loss	1.6	33.1
Western Murray Irrig.	0.9	26.4
Licensed Pumps	20.2	348.0
Lower Darling	0.2	112.6
TOTAL	**74.1**	**1 923.4**

Victoria	This week	From 1 July 2001
Yarrawonga Main Channel (net)	18.8	471
Torrumbarry System + Nyah (net)	28.2	715
Sunraysia Pumped Districts	3.3	141
Licensed pumps - GMW (Nyah+u/s)	1.6	65
Licensed pumps - SRW	4.3	162
TOTAL	**56.3**	**1 553**

Flow to South Australia (GL)

Entitlement this month	186	
Flow this week	42.6	(6 100 ML/day)
Flow so far this month	163	
Flow last month	198	

Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2001
Swan Hill	170	134	192
Euston	140	158	221
Red Cliffs	250	230	290
Merbein	230	220	284
Burtundy	710	723	477
Lock 9	380	371	405
Lake Victoria	460	464	403
Berri	540	533	469
Waikerie	-	-	555
Morgan	620	624	552
Mannum	610	607	542
Murray Bridge	770	752	587
Meningie	-	-	1 223
Goolwa Barrages	1 800	1 558	1 436

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River Levels and Flows

River Murray	Minor Flood stage (m)	Gauge height local (m)	Gauge height (m AHD)	Flow (ML/day)	Trend	Average flow this week (ML/day)	Average flow last week (ML/day)
Khancoban	-	-	-	650	F	820	1 430
Jingellic	4.0	1.27	207.79	1 740	R	1 560	2 070
Tallandoon (Mitta Mitta River)	4.2	-	-	880	F	1 180	1 410
Heywoods	5.5	3.48	157.11	20 870	F	23 780	23 770
Doctors Point	5.5	3.59	152.06	21 400	F	23 600	23 960
Albury	4.3	2.69	150.13	-	-	-	-
Corowa	7.0	4.22	130.24	25 000	S	24 610	23 970
Yarrawonga Weir (d/s)	6.4	2.07	117.11	12 700	R	10 730	10 400
Tocumwal	6.4	2.35	106.19	10 180	R	9 860	9 810
Torrumbarry Weir (d/s)	7.3	1.44	79.99	3 650	R	3 500	3 350
Swan Hill	4.5	0.72	63.64	2 460	R	2 330	1 840
Wakool Junction	8.8	1.75	50.87	3 150	R	2 840	2 640
Euston Weir (d/s)	8.8	0.80	42.64	2 980	R	2 320	2 340
Mildura Weir (d/s)		-	30.84	1 670	F	1 610	1 520
Wentworth Weir (d/s)	7.3	2.82	27.58	1 720	R	1 590	1 480
Rufus Junction	-	3.30	7.93	5 400	F	5 510	5 680
Blanchetown (Lock 1 d/s)	-	-	-	3 520	R	3 380	3 320
Tributaries							
Kiewa at Bandiana	2.7	-	-	528	R	500	560
Ovens at Wangaratta	11.9	7.77	145.45	331	R	230	210
Goulburn at McCoys Bridge	9.0	1.26	92.68	535	S	500	430
Edward at Stevens Weir (d/s)	-	-	-	2 090	F	1 660	1 280
Edward at Liewah	-	1.46	56.84	870	R	830	1 010
Wakool at Stoney Crossing	-	0.30	54.79	175	R	140	150
Murrumbidgee at Balranald	5.0	0.43	56.39	180	S	200	440
Barwon at Mungindi	-	3.20	-	60	S	80	160
Darling at Bourke	-	4.15	-	690	S	810	1 030
Darling at Burtundy Rocks	-	0.84	-	470	R	450	480

Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme)	1 950	570

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
Yarrawonga	124.90	+0.07	-	No. 7 Rufus River	22.10	+0.15	+1.00
No 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.01	+0.08
No. 15 Euston	47.60	-0.15	-	No. 5 Renmark	16.30	+0.02	+0.15
No. 11 Mildura	34.40	+0.00	+0.04	No. 4 Bookpurnong	13.20	+0.00	+0.60
No. 10 Wentworth	30.80	+0.03	+0.18	No.3 Overland Corner	9.80	+0.03	+0.23
No. 9 Kulnine	27.40	+0.00	-0.02	No. 2 Waikerie	6.10	+0.08	+0.16
No. 8 Wangumma	24.60	+0.00	+0.16	No 1. Blanchetown	3.20	+0.06	+0.00

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht. local (m)	d/s gauge ht. (m AHD)	Flow (ML/day)
No. 7 Maude	75.40	-1.33	0.79	70.14	507
No. 5 Redbank	66.90	-1.77	0.14	61.44	261

Barrages

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	0.47	All closed
Mundoo	26 openings	0.47	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwitchere	322 gates	0.46	All closed

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

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