

REPORT FOR THE WEEK ENDING

Wednesday, 11 June 2003

Our Ref: MDBC:269 :ng:brc:bwh

13 June, 2003



Rainfall and System Inflows

Light falls of rain were recorded along the Great Dividing Range in Victoria and New South Wales. Whilst there have been some small increases in streamflows, the volumes remain low and are not yet sufficient to indicate an increase in water availability for the coming season.

Storage levels in upper Murray storages have shown only minor improvements. Total active MDBC storage increased by 44 GL to 19% of capacity, mainly as a result of inflows from the Snowy Scheme. This is the lowest total system storage at this time of the year in the post-Dartmouth period (i.e. since 1977).

Dartmouth Reservoir "Turns Over"

Dartmouth, like many deep reservoirs, remains stratified most of the time with colder and lower quality water at lower levels, and warmer and better quality water at higher levels. On the evening of 6 June, water layers in Dartmouth Reservoir 'turned over' or de-stratified, bringing water from the lower levels to the surface. This is only the second time this has occurred, with the previous event in 1998. Both this event and the 1998 event occurred following very strong winds and low air temperatures over the reservoir. Both events also featured relatively low storage volume (30% of capacity now and 43% in 1998), following a sustained period of high release rates in the previous season.

Water layers in the reservoir have partially mixed, and it is expected that it will take some time for the reservoir to re-stratify. The quality of water releases initially deteriorated, although not as much as in 1998, with increased odour, colour and turbidity being observed. However, water quality of the reservoir release is now improving.

River Salinity

Salinity of the River Murray upstream of Mildura remains low and ranges up to about 180 EC at Mildura. The salinity 'spike', which developed as a result of the drawdown of Mildura Weir pool in late May, passed Wentworth this week, where salinity rose from 200 EC to a peak of about 670 EC on 7 June before declining to 370 EC by the end of the week. This peak in salinity will be mitigated downstream of Lake Victoria by taking as much of the higher salinity water into the lake as possible. River salinity levels in South Australia have generally remained steady, however, at Lock 1 (Blanchetown) salinity has increased by 20 EC to 470 EC. With flow to South Australia continuing at 2 400 ML/day (or 80% of normal June entitlement), River Murray salinities in South Australia are forecast to gradually rise in coming weeks.

New Fishway and Navigable Pass for Locks 7 and 8

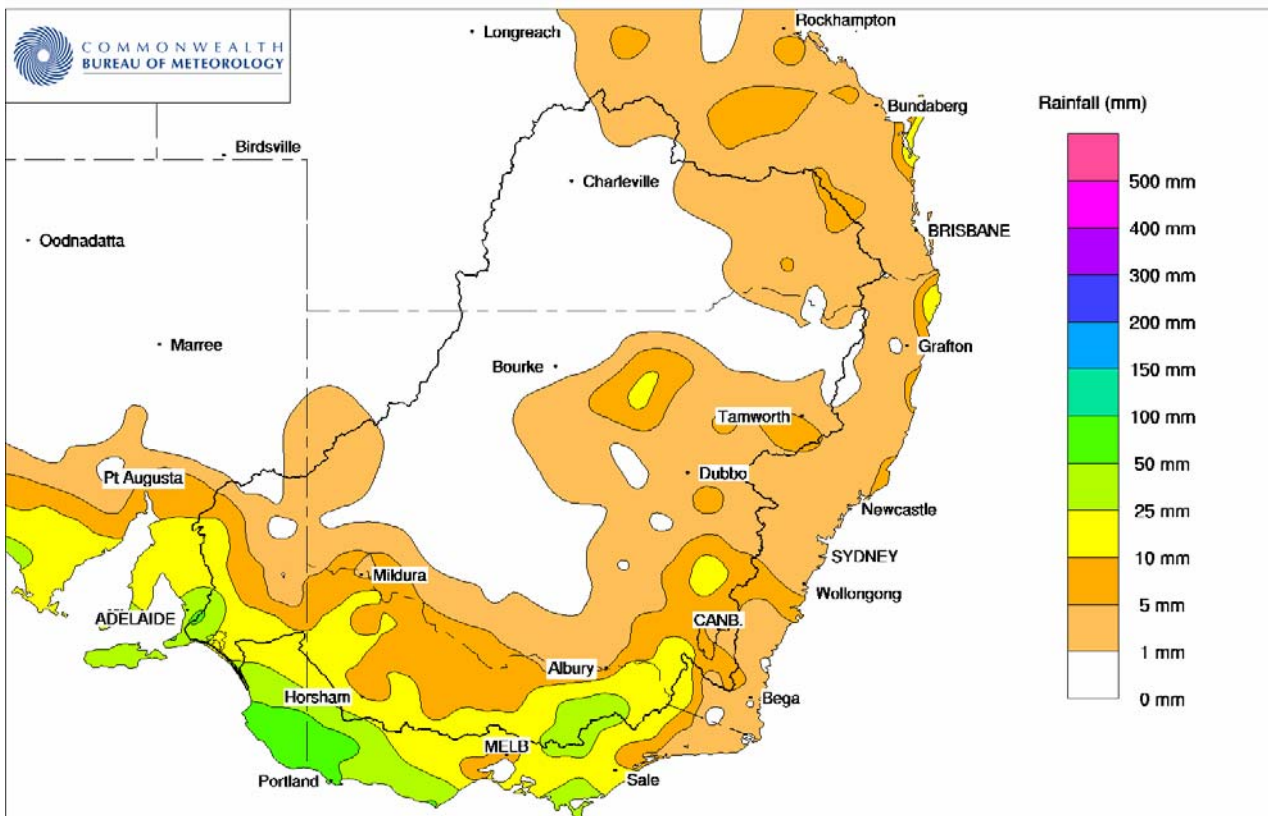
Fishways are currently being constructed at Lock 7 and Lock 8 as part of a program aimed at providing fish passage from the sea to Hume Dam. This work forms part of *The Living Murray* project's implementation program, which will include the installation or refurbishment of fish ladders at all of the locks and weirs downstream of Hume Dam. The attached photograph shows a concrete pour of the floor of the fishway at Lock 8. Other construction work aimed at upgrading the navigable pass section of the weir at these two structures is also underway. Works on the fishway and navigable pass are scheduled to be completed at Locks 7 and 8 in September 2003. Construction of similar modifications at Locks 9 and 10 will be carried out in 2004. Work at remaining locks and weirs will proceed over the following 3 years.

DAVID DOLE
General Manager



Construction of New Fishway at Lock 8 (Wangumma)

Murray Darling Rainfall Analysis (mm) Week Ending 11th June 2003
Product of the National Climate Centre



Week ending Wednesday 11 Jun 2003

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	428.64	1 153	30%	80	1 073	+8
Hume Reservoir	192.00	3 038	172.07	408	13%	30	378	+31
Lake Victoria	27.00	680	23.17	279	41%	100	179	+3
Menindee Lakes		1 682 *		70	4%	640 #	0	+3
Total		9 306		1 910	21%	850	1 630	+44

* Menindee surcharge capacity 1999 GL

% of Total Active MDBC Storage = 19%

NSW Menindee Lakes Reserve

Major State Storages

Burrinjuck Reservoir	1 026	62	6%	3	59	+3
Blowering Reservoir	1 631	87	5%	24	63	+22
Eildon Reservoir	3 390	319	9%	100	219	+15

Snowy Mountains Scheme

Snowy diversions for week ending 10-Jun-2003

Storage (GL)	Current storage	Weekly change	Diversion	This week	From 1 May 2003
Lake Eucumbene - Total	1 858	-40	Snowy-Murray	+22	167
Snowy-Murray Component	793	-18	Tooma-Tumut	+2	12
Target Storage	1 240		Nett Diversion	20.0	155
			Murray 1 Release	+25	178

Major Diversions from Murray and Lower Darling (GL)

New South Wales	This week	From 1 July 2002
Murray Irrig. Ltd (Net)	.0	522.7
Wakool System loss	0.1	55.7
Western Murray Irrig.	0.0	30.1
Licensed Pumps	1.6	205.3
Lower Darling	0.2	124.3
TOTAL	1.8	938.0

Victoria	This week	From 1 July 2002
Yarrawonga Main Channel (net)	.0	484
Torrumbarry System + Nyah (net)	0.0	794
Sunraysia Pumped Districts	0.0	161
Licensed pumps - GMW (Nyah+u/s)	0.0	78
Licensed pumps - SRW	1.8	193
TOTAL	1.8	1 710

Flow to South Australia (GL)

Entitlement this month	90	(2 400 ML/day)
Flow this week	16.9	
Flow so far this month	26	
Flow last month	93	

Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2002
Swan Hill	150	130	90
Euston	140	140	120
Red Cliffs	170	160	140
Merbein	150	190	160
Burtundy (Darling)	1 570	1 540	1 200
Lock 9	210	190	170
Lake Victoria	280	280	290
Berri	330	340	330
Waikerie	460	470	400
Morgan	460	450	470
Mannum	430	440	540
Murray Bridge	520	510	620
Milang (Lake Alex.)	1 090	1 050	1 150
Poltalloch (Lake Alex.)	1 210	1 080	1 150
Meningie (Lake Alb.)	1 540	1 410	1 620
Goolwa Barrages	3 870	4 880	3 320



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)				
River Murray							
Khancoban	-	-	-	3 910	F	3 770	4 250
Jingellic	4.0	1.72	208.24	5 040	F	4 750	5 490
Tallandoon (Mitta Mitta River)	4.2	1.24	218.13	440	F	470	440
Heywoods	5.5	1.26	154.89	800	R	800	960
Doctors Point	5.5	1.55	150.02	1 260	F	1 350	1 230
Albury	4.3	0.68	148.12	-	-	-	-
Corowa	7.0	0.63	126.65	1 380	R	1 290	1 230
Yarrowonga Weir (d/s)	6.4	0.46	115.50	2 190	S	2 210	2 330
Tocumwal	6.4	0.88	104.72	2 130	S	2 150	2 310
Torrumbarry Weir (d/s)	7.3	1.05	79.60	2 340	F	2 530	3 110
Swan Hill	4.5	0.74	63.66	2 670	F	2 920	3 770
Wakool Junction	8.8	1.88	51.00	3 670	F	4 060	4 790
Euston Weir (d/s)	8.8	1.01	42.85	4 410	F	4 430	4 920
Mildura Weir (d/s)	-	-	30.86	4 230	F	4 690	3 560
Wentworth Weir (d/s)	7.3	3.02	27.78	3 840	F	4 160	2 370
Rufus Junction	-	2.55	19.48	- 10	F	1 520	2 230
Blanchetown (Lock 1 d/s)	-	-	-	1 260	R	1 380	2 700
Tributaries							
Kiewa at Bandiana	2.7	0.99	154.22	610	F	720	490
Ovens at Wangaratta	11.9	8.22	145.90	1 352	F	1 020	750
Goulburn at McCoys Bridge	9.0	1.17	92.59	399	S	390	520
Edward at Stevens Weir (d/s)	-	-	-	180	F	220	210
Edward at Liewah	-	1.10	56.48	580	S	570	620
Wakool at Stoney Crossing	-	0.35	54.84	222	R	210	190
Murrumbidgee at Balranald	5.0	0.70	56.66	314	F	490	360
Barwon at Mungindi	-	3.22	-	90	S	110	150
Darling at Bourke	-	4.06	-	350	S	380	490
Darling at Burtundy Rocks	-	-	-	68	F	60	70

Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme)	3 320	2 740
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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	-0.18	-	No. 7 Rufus River	22.10	+0.14	+0.25
No 26 Torrumbarry	86.05	-0.01	-	No. 6 Murtho	19.25	-0.08	-0.07
No. 15 Euston	47.60	-0.01	-	No. 5 Renmark	16.30	+0.00	+0.07
No. 11 Mildura	34.40	+0.02	+0.06	No. 4 Bookpurnong	13.20	+0.03	+0.19
No. 10 Wentworth	30.80	+0.00	+0.38	No.3 Overland Corner	9.80	+0.02	+0.07
No. 9 Kulinine	27.40	+0.22	+0.06	No. 2 Waikerie	6.10	+0.01	+0.00
No. 8 Wangumma	24.60	+0.08	+0.14	No 1. Blanchetown	3.20	+0.01	-0.33

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-3.85	0.58	69.93	278
No. 5 Redbank	66.90	-2.81	0.15	61.45	269

Barrages

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	0.56	All closed
Mundoo	26 openings	0.54	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwichee	322 gates	0.55	All closed



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