REPORT FOR THE WEEK ENDING

Wednesday, 26 March 2003

Our Ref: MDBC:269 :ng:bwh

28 March, 2003



Further Rain Recorded

Further rain has been recorded across the upper Darling River catchment with falls of between 25 and 50 mm across the Condamine/Culgoa and Border River catchments in southern Queensland. Some light falls of up to 20 mm were recorded across the upper Murray, however, tributary inflows have shown little or no response.

System Update

Release from Dartmouth Dam was reduced to 2 500 ML/day during the week, and a further reduction will commence next week to 1 000 ML/day by Friday April 4 (*see Media Release attached*). Release from Hume Dam has been reduced from 13 000 to 11 000 ML/day in response to reduced irrigation diversions downstream. Release from Yarrawonga Weir has been reduced from 7 600 to 6 600 ML/day and will be reduced to about 6 000 ML/day next week. Due to the low irrigation allocations and declining irrigation demand, river levels between Yarrawonga and Echuca will continue to be low for this time of year.

Outlook for Murray Water Availability for 2003/04

In consultation with South Australia, Victoria and New South Wales water resource agencies, River Murray Water has made a preliminary assessment of the prospects for water availability along the River Murray for next season. If dry conditions continue next season, water availability to all three States would be low given that storage reserves in the River Murray system (currently 18% of active capacity) have been depleted this season. A brief summary of State allocation forecasts for 2003/04 is as follows:

Victoria – there are 3 chances in 4 that Victorian Murray resources will be sufficient to reach Water Right by the end of the 2003/04 season.

New South Wales – *near median inflows* (or an "average" season) are required for General Security allocation to reach 100% by the end of the 2003/04 season.

South Australia – *near median inflows* (or a near "average" season) are required for South Australia to receive full entitlement. Significantly, there are 4 chances in 10 that it would receive less than its full annual entitlement, but there are about 3 chances in 4 that it would receive 90% of entitlement or better. If flow to South Australia remains at or near entitlement, the level of the Lower Lakes would remain low with no flow through the Murray Mouth.

Successful Waterbird Breeding in Barmah Forest

High regulated flows were passed through the Barmah-Millewa Forest in late 2002 in order to transfer water to Lake Victoria to ensure the supply to New South Wales, Victoria and South Australia throughout the 2002/03 season. An outcome of this operation was the initiation of a waterbird breeding event in Barmah Forest. After the high river levels ended in late 2002, small flows through some forest regulators were maintained into early 2003 to assist with the completion of the bird breeding event (*see Media Release attached*).

DAVID DOLE General Manager

MEDIA RELEASE



Tuesday, 25 March 2003 Further Reduction in Release from Dartmouth Reservoir

River Murray Water announced today that a further reduction in release from Dartmouth Reservoir will be made commencing late this week to conserve water resources.

Release requirements from Dartmouth late in the season are sensitive to irrigation demand and river transmission losses downstream of Hume Dam. As forecast irrigation demand and losses have recently reduced, release from Dartmouth is being further reduced. In the event of extremely dry conditions are again experienced over the remainder of the irrigation season, it may be necessary to extend or increase release from Dartmouth during mid April to prevent storage levels in Hume Reservoir falling below target levels. On the other hand, if there is significant rainfall, release from Dartmouth will be reduced further.

Storage in Dartmouth is currently 1 158 GL (29.7% capacity). Commencing 8:00 am Friday 28 March, flow downstream of Dartmouth at Colemans will be gradually reduced from 2 500 ML/day (1.82 m gauge height) to 1 000 ML/day (1.41 m) by Friday 4 April. Further downstream at Tallandoon, the gauge height can be expected to fall from the current level of 2.0 m to about 1.55 m, without significant rain in tributaries downstream of Dartmouth. A very slow rate of reduction is being adopted to minimise the risk of bank erosion and slumping by allowing groundwater pressure levels more time to stabilise following the prolonged period of high flow in the Mitta River.

Storage in Hume Reservoir is currently 237 GL (7.8% capacity), and has been falling slowly since mid March as the rate of release has exceeded inflows from Dartmouth and from the Snowy Mountains Scheme. Storage in Hume is expected to continue falling slowly until the end of the irrigation season which may occur in early May, or earlier if there is rain. It is unlikely that the level in Hume will fall below the level experienced in late January.

Effects of Bushfire on Water Quality

Catchments of Dartmouth Reservoir and the Mitta Mitta River downstream of Dartmouth have been severely impacted by the recent bushfires. There is currently potential for heavy rain to produce significant inflows of ash and sediment from bushfire affected areas. Upstream of Dartmouth Dam, there is little that can be done to respond to such an event. However, if a significant influx of ash and sediment occurs downstream of Dartmouth, River Murray Water will consider making a temporary increase in release from Dartmouth to provide a small "flush" in order to reduce impacts in the Mitta Mitta River. Any action will need to be balanced against the need to conserve water for future use, and the scale of the impacts. Water quality will continue to be closely monitored to identify significant changes.

For further information contact: **Lawrie Kirk** Media Liaison Officer Phone: 02 6279 0100 E-mail: <u>lawrie.kirk@mdbc.gov.au</u> (Lawrie Kirk is *not* to be quoted as a spokesperson)





From River Murray Water; and the Department of Primary Industries

Thursday, 27 March 2003

Unusual and Successful Bird Breeding Event During Drought

River Murray Water and the Victorian Department of Primary Industries reported today that a successful waterbird breeding event, including a vulnerable species, was completed in early 2003 in the Barmah forest.

This environmental outcome was unusual because waterbird breeding events do not normally occur during a drought. It occurred on this occasion as a result of high regulated water levels in parts of the forest. Species which successfully completed their breeding cycle included:

- Sacred (white) Ibis
- Straw necked Ibis
- Royal spoonbill

Approximately 750 Ibis nests and 50 Spoonbill nests each raised over two young.

Of significance were Royal Spoonbill, being classified as a vulnerable species in Victoria, where upwards of 100 chicks successfully fledged. Many other wetland plant and animal species also benefited from the managed flows.

This outcome occurred because high regulated flows were passed through the Barmah forest in late 2002 in order to pass additional water resources to Lake Victoria to ensure that the three States of New South Wales, Victoria and South Australia could be supplied during the remainder of the 2002/03 irrigation season and the extended drought.

This mode of river operation was necessary due to the absence of MDBC water in Menindee Lakes, together with dry conditions along the River Murray. It included the transfer of additional water around the constraint of the Barmah 'choke'. Flow rates above normal channel capacity in the Barmah-Millewa Forest were required in order to achieve sufficient water in Lake Victoria before the peak of the irrigation season.

A side effect of this operation was that it provided a sustained period of increased water levels in the Barmah forest, which initiated a breeding event for several species of water birds. After the high river flows ended in mid December 2002, small flows through some forest regulators were maintained into early 2003 in order to provide suitable water levels to assist with completion of the breeding events.

Media Contacts: Keith Ward, Wetland Ecologist, DPI, Phone: 03 5833 5947 Lawrie Kirk, Media Liaison Officer, MDBC, Phone: 02 6279 0100

(Photographs are available for use by media organisations)









Sacred Ibis hatching from egg.

Approximately 750 Sacred Ibis nests were found to contain eggs or young chicks.

Sacred Ibis chicks await imminent hatching of sibling.

Most nests contained 3 eggs or downy young and most appeared in good health. Assuming that most could survive given continuing favourable conditions, then approximately 2,000 Sacred Ibis chicks are being attempted to be raised in Boals Deadwoods.

Young Royal Spoonbill chicks.

Approximately 33 nests, each containing 3-4 eggs or young, were found on Giant Rush platforms on the outer edge of the Ibis colonies.

Advanced Royal Spoonbill chicks.

Some of the nests contained near fully feathered Royal Spoonbill chicks. Being-listed as a 'Vulnerable' species in Victoria, the success of these chicks will remain a high priority for continued water management into Boals Deadwoods.

Photos by Keith Ward, Victorian Department of Primary Industries - January 2003

Murray Darling Rainfall Analysis (mm) Week Ending 26th March 2003 Product of the National Climate Centre



Issued: 26/03/2003

Commonwealth of Australia 2003, Bureau of Meteorology ID code: IDCRFXMD.2003032020030326.bm.img

Week ending Wednesday 26 Mar 2003

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	428.75	1 156	30%	80	1 076	-23
Hume Reservoir	192.00	3 038	169.24	234	8%	30	204	-16
Lake Victoria	27.00	680	24.04	365	54%	100	265	-36
Menindee Lakes		1 682 *		61**	4%	640 #	0	-5**
Total		9 306		1 816	20%	850	1 545	-80

* Menindee surcharge capacity 1999 GL

NSW Menindee Lakes Reserve

% of Total Active MDBC Storage = 18%

**Capacity tables used by RMW and DLWC are different and are currently under review.

Discrepancies exist between DLWC and RMW figures.

Major State Storages

Burrinjuck Reservoir	1 026	77	8%	3	74	-6
Blowering Reservoir	1 631	26	2%	24	2	-9
Eildon Reservoir	3 390	335	10%	100	235	-13

Snowy Mountains Scheme

Snowy diversions for week ending 25-Mar-2003

Storage (GL)	Current storage	Weekly change	Diversion	This week	From 1 May 2002
Lake Eucumbene - Total	2 389	-70	Snowy-Murray	+41	745
Snowy-Murray Component	1 127	-	Tooma-Tumut	+0	204
Target Storage	1 410		Nett Diversion	41.0	542
			Murray 1 Release	+42	963

Major Diversions from Murray and Lower Darling (GL)

New South Wales	This week	From 1 July 2002
Murray Irrig. Ltd (Net)	26.6	445.1
Wakool System loss	1.9	44.0
Western Murray Irrig.	0.5	26.2
Licensed Pumps	4.4	179.7
Lower Darling	1.3	116.1
TOTAL	34.7	811.1

Flow to South Australia (GL)

Victoria	This week	From 1 July 2002
Yarrawonga Main Channel (net)	9.5	433
Torrumbarry System + Nyah (net)	14.7	743
Sunraysia Pumped Districts	2.9	140
Licensed pumps - GMW (Nyah+u/s)	1.5	66
Licensed pumps - SRW	4.5	164
TOTAL	33.2	1 546

Entitlement this month	186]	
Flow this week	42.0	(6 000	ML/day)
Flow so far this month	156		
Flow last month	194		

Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last	Average since
	Current	week	1 August 2002
Swan Hill	60	70	80
Euston	130	120	120
Red Cliffs	130	120	130
Merbein	130	140	140
Burtundy (Darling)	1 400	1 410	1 130
Lock 9	110	120	170
Lake Victoria	280	270	300
Berri	240	260	330
Waikerie	360	370	410
Morgan	370	350	490
Mannum	400	400	590
Murray Bridge	470	470	660
Milang (Lake Alex.)	1 440	1 260	1 150
Poltalloch (Lake Alex.)	1 140	1 230	1 160
Meningie (Lake Alb.)	1 680	1 770	1 610
Goolwa Barrages	3 390	3 770	3 260



Week ending Wednesday 26 Mar 2003

River Levels and Flows

	Minor Flood stage	Gauge	e height	Flow	Trend	Average flow this week	Average flow last week
River Murray	(m)	local (m)	(m AHD)	(ML/day)		(ML/day)	(ML/day)
Khancoban	-	-	-	6 7 1 0	F	6 110	6 400
Jingellic	4.0	1.93	208.45	6 800	R	6 740	6 850
Tallandoon (Mitta Mitta River)	4.2	1.98	218.87	2 660	F	3 450	5 510
Heywoods	5.5	2.61	156.24	11 920	F	12 320	13 330
Doctors Point	5.5	2.74	151.21	10 800	F	11 700	12 710
Albury	4.3	1.72	149.16	-	-	-	-
Corowa	7.0	2.69	128.71	13 200	R	13 260	13 830
Yarrawonga Weir (d/s)	6.4	1.26	116.30	6 600	F	7 190	7 160
Tocumwal	6.4	1.80	105.64	7 110	F	7 290	7 100
Torrumbarry Weir (d/s)	7.3	1.51	80.06	4 020	R	3 590	3 270
Swan Hill	4.5	0.81	63.73	3 120	R	2 950	2 780
Wakool Junction	8.8	1.83	50.95	3 270	F	3 220	3 650
Euston Weir (d/s)	8.8	0.75	42.59	3 140	R	3 160	4 440
Mildura Weir (d/s)		-	30.82	2 510	F	3 010	5 140
Wentworth Weir (d/s)	7.3	2.74	27.50	1 540	F	2 160	4 220
Rufus Junction	-	3.29	20.22	5 500	R	5 490	5 570
Blanchetown (Lock 1 d/s)	-	-	-	3 510	S	3 370	3 250
Tributaries							
Kiewa at Bandiana	2.7	0.59	153.82	110	F	190	50
Ovens at Wangaratta	11.9	7.51	145.19	78	F	100	60
Goulburn at McCoys Bridge	9.0	1.22	92.64	476	S	440	410
Edward at Stevens Weir (d/s)	-	-	-	320	F	310	300
Edward at Liewah	-	0.48	55.86	190	F	250	420
Wakool at Stoney Crossing	-	0.39	54.88	275	S	300	430
Murrumbidgee at Balranald	5.0	0.54	56.50	221	R	200	210
Barwon at Mungindi	-	3.37	-	390	F	530	860
Darling at Bourke	-	4.58	-	4 220	F	4 930	2 250
Darling at Burtundy Rocks	-	-	-	94	R	80	100
Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme)					790	1 140	

790

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	-0.20	-	No. 7 Rufus River	22.10	+0.09	+0.97
No 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.01	+0.07
No. 15 Euston	47.60	-0.01	-	No. 5 Renmark	16.30	+0.03	+0.15
No. 11 Mildura	34.40	+0.03	+0.02	No. 4 Bookpurnong	13.20	+0.02	+0.58
No. 10 Wentworth	30.80	+0.01	+0.10	No.3 Overland Corner	9.80	+0.05	+0.19
No. 9 Kulnine	27.40	-0.02	-0.03	No. 2 Waikerie	6.10	+0.06	+0.14
No. 8 Wangumma	24.60	-0.01	+0.08	No 1. Blanchetown	3.20	+0.06	-0.34

Murrumbidgee	FSL	relation	d/s gauge ht.		Flow
	(m AHD)	to FSL	local (m)	(m AHD)	(ML/day)
No. 7 Maude	75.40	-0.50	0.65	70	345
No. 5 Redbank	66.90	-0.35	0.2	61.5	314

Barrages	FSL = 0.75 m AHD						
	Openings	Level	Status				
Goolwa	128 openings	0.40	All closed				
Mundoo	26 openings	0.41	All closed				
Boundary Creek	6 openings	-	All closed				
Ewe Island	111 gates	-	All closed				
Tauwitchere	322 gates	0.39	All closed				



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