

# REPORT FOR THE WEEK ENDING

Wednesday, 2 April 2003

Our Ref: MDBC:269 :ng:bwh

4 April, 2003



## ***Record low March inflows***

Total River Murray system inflow for March 2003 (including regulated inflows from all tributaries but excluding release from the Snowy Mountains Scheme) has remained extremely low. It is the lowest in the statistical record derived assuming the current level of irrigation development along the River Murray system. On this basis, inflows in January and February 2003 were also the lowest on the modelled record.

Despite March total system inflows being statistically the lowest on record, there was a moderate increase over February inflows in response to the near-average March rainfall received across the upper Murray catchment. By comparison, the calculated 'natural' inflow for Hume Reservoir in March 2003 was at a level of 88% exceedance (i.e. a level which is exceeded about 9 years out of 10 over the long term). March rainfall elsewhere in the Murray-Darling Basin ranged from average to above average in the north with large areas of western NSW receiving extremely low falls (*see attached diagram*).

## ***System Operation***

Total River Murray system active storage fell by 66 GL during the week to 1 480 GL (18% of active capacity), and 72% of this water (1 060 GL) is currently stored in Dartmouth Reservoir. Operation of the River Murray system is continuing with the aim of retaining as much resource as possible in Dartmouth at the end of the irrigation season whilst supplying downstream requirements. This operation is aimed at maximising the conservation of resources during the remainder of 2002/03 and through 2003/2004.

The pulse of water currently making its way down the Darling River peaked at Tilpa on 29 March at about 4 100 ML/day. Flow is currently reaching Wilcannia and is expected to peak at about 3 700 ML/day early next week.

Commencing on 1 April, flow to South Australia was gradually reduced from the March entitlement rate of 6 000 ML/day to the April entitlement of 4 500 ML/day.

## ***River Salinity***

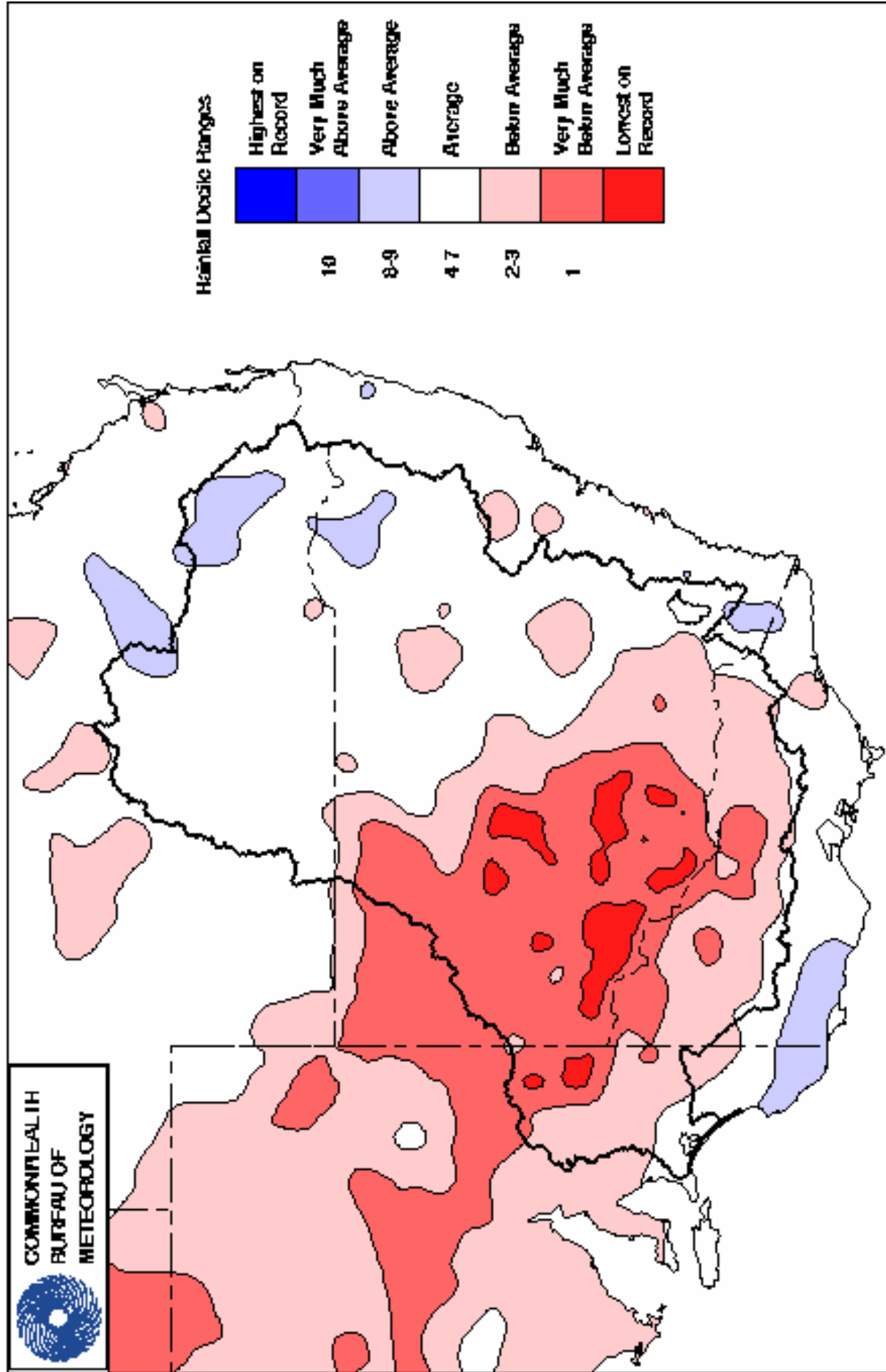
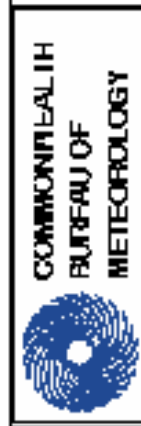
With low flows and low saline input from tributaries, salinity of the River Murray has remained very low between Swan Hill and Mildura, ranging from 70 to 150 EC. River salinities in the lower Darling remain steady with about 1 350 EC currently being recorded at Burtundy, however there is very little saline input to the Murray because flow in the lower Darling is extremely low.

Salinity levels in South Australia are progressively higher from Berri (260 EC) to Murray Bridge (460 EC), but these salinities are significantly below the average for this time of year. Readings in the lower lakes in South Australia range from 1 100 to 1 850 EC.

DAVID DOLE  
General Manager

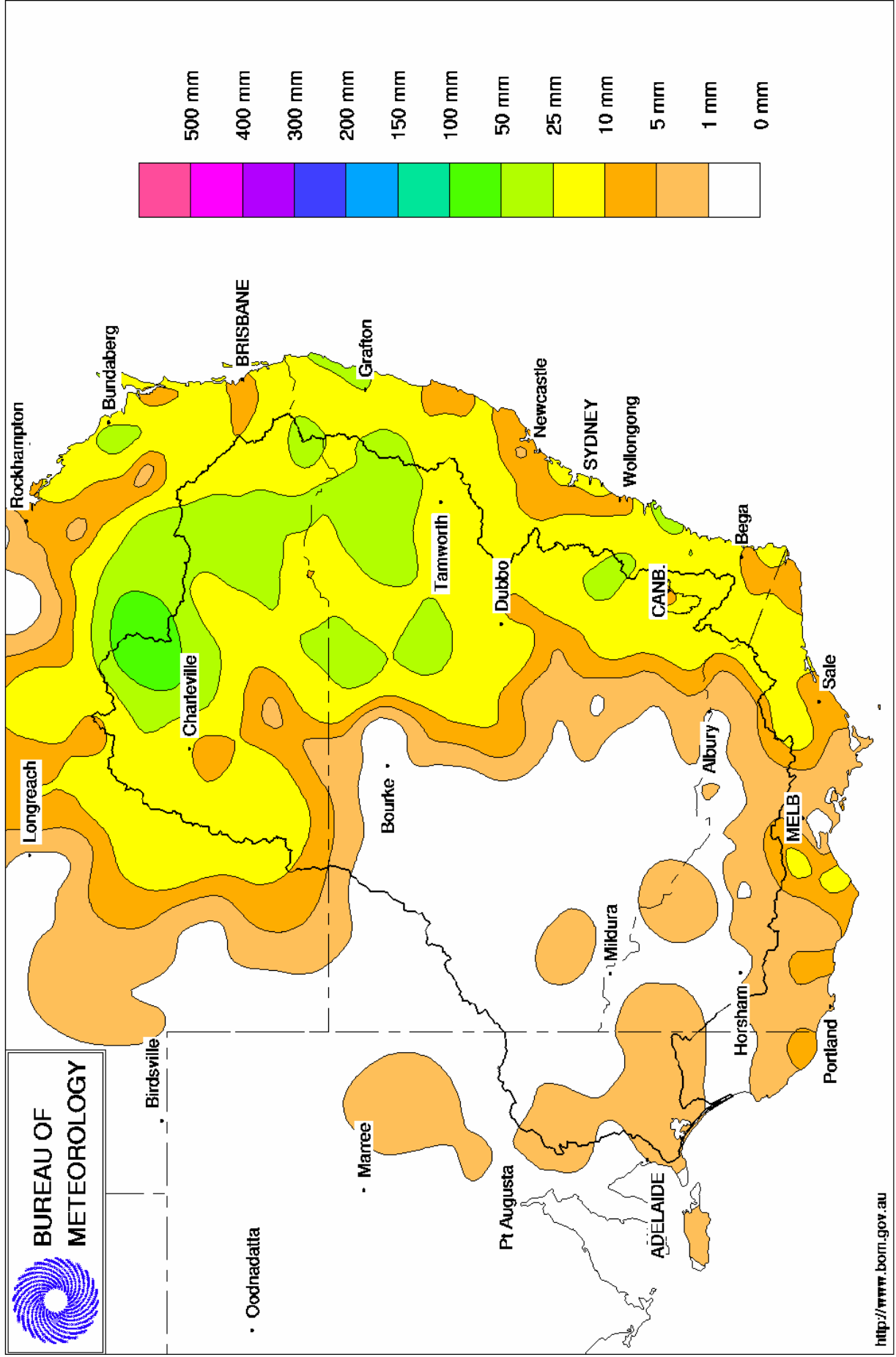
# Murray Darling Rainfall Deciles March 2003

Distribution Based on Gridded Data  
Product of the National Climate Centre



# Murray Darling Rainfall Analysis (mm) Week Ending 3rd April 2003

Product of the National Climate Centre



## Week ending Wednesday 02 Apr 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	428.36	1 144	29%	80	1 064	-12
Hume Reservoir	192.00	3 038	168.79	212	7%	30	182	-22
Lake Victoria	27.00	680	23.76	337	50%	100	237	-28
Menindee Lakes		1 682 *		57	3%	640 #	0	-4
<b>Total</b>		<b>9 306</b>		<b>1 750</b>	<b>19%</b>	<b>850</b>	<b>1 483</b>	<b>-66</b>

\* Menindee surcharge capacity 1999 GL

% of Total Active MDBC Storage = **18%**

# NSW Menindee Lakes Reserve

### Major State Storages

Burrinjuck Reservoir	1 026	52	5%	3	49	-25
Blowering Reservoir	1 631	44	3%	24	20	+18
Eildon Reservoir	3 390	321	9%	100	221	-14

### Snowy Mountains Scheme

Snowy diversions for week ending 01-Apr-2003

Storage (GL)	Current storage	Weekly change	Diversion	This week	From 1 May 2002
Lake Eucumbene - Total	2 326	-63	Snowy-Murray	+41	787
Snowy-Murray Component	1 082	-40	Tooma-Tumut	+1	204
Target Storage	1 340		Nett Diversion	40.5	582
			Murray 1 Release	+42	1 005

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

New South Wales	This week	From 1 July 2002
Murray Irrig. Ltd (Net)	26.4	471.5
Wakool System loss	1.8	46.2
Western Murray Irrig.	0.5	26.8
Licensed Pumps	4.9	184.6
Lower Darling	1.3	117.3
<b>TOTAL</b>	<b>34.9</b>	<b>846.5</b>

Victoria	This week	From 1 July 2002
Yarrowonga Main Channel (net)	10.0	443
Torrumbarry System + Nyah (net)	12.7	755
Sunraysia Pumped Districts	2.4	143
Licensed pumps - GMW (Nyah+u/s)	1.4	67
Licensed pumps - SRW	3.4	167
<b>TOTAL</b>	<b>29.8</b>	<b>1 575</b>

### Flow to South Australia (GL)

Entitlement this month	135	(5 700 ML/day)
Flow this week	39.6	
Flow so far this month	9	
Flow last month	186	

### Salinity (EC)

(microsiemens/cm @ 25° C)

	Current	Average over the last week	Average since 1 August 2002
Swan Hill	70	70	80
Euston	130	130	120
Red Cliffs	160	150	130
Merbein	150	140	140
Burtundy (Darling)	1 340	1 350	1 140
Lock 9	120	120	170
Lake Victoria	280	280	300
Berri	260	240	330
Waikerie	360	370	410
Morgan	390	380	490
Mannum	400	400	580
Murray Bridge	450	460	660
Milang (Lake Alex.)	1 200	1 250	1 150
Poltalloch (Lake Alex.)	1 250	1 250	1 160
Meningie (Lake Alb.)	1 880	1 840	1 620
Goolwa Barrages	3 130	3 270	3 260



Week ending Wednesday 02 Apr 2003

### 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	-	-	-	6 230	R	5 750	6 280
Jingellic	4.0	1.85	208.37	6 080	R	6 230	6 740
Tallandoon ( Mitta Mitta River )	4.2	1.69	218.58	1 570	F	2 160	3 450
Heywoods	5.5	2.56	156.19	11 060	F	11 750	12 320
Doctors Point	5.5	2.69	151.16	10 200	F	10 810	11 700
Albury	4.3	1.67	149.11	-	-	-	-
Corowa	7.0	2.54	128.56	12 100	S	12 190	13 260
Yarrowonga Weir (d/s)	6.4	1.14	116.18	5 890	R	5 980	7 190
Tocumwal	6.4	1.59	105.43	5 840	F	6 160	7 290
Torrumbarry Weir (d/s)	7.3	1.32	79.87	3 310	F	3 710	3 590
Swan Hill	4.5	0.84	63.76	3 310	F	3 320	2 950
Wakool Junction	8.8	1.91	51.03	3 510	R	3 380	3 220
Euston Weir (d/s)	8.8	0.80	42.64	3 390	R	3 250	3 160
Mildura Weir (d/s)	-	-	30.78	2 810	F	2 640	3 010
Wentworth Weir (d/s)	7.3	2.92	27.68	1 980	R	1 930	2 160
Rufus Junction	-	3.02	19.95	4 050	F	5 390	5 490
Blanchetown (Lock 1 d/s)	-	-	-	3 780	S	3 680	3 370
<b>Tributaries</b>							
Kiewa at Bandiana	2.7	0.55	153.78	80	R	70	190
Ovens at Wangaratta	11.9	7.46	145.14	47	R	50	100
Goulburn at McCoys Bridge	9.0	1.18	92.60	399	F	440	440
Edward at Stevens Weir (d/s)	-	-	-	150	F	270	310
Edward at Liewah	-	0.48	55.86	190	S	170	250
Wakool at Stoney Crossing	-	0.37	54.86	234	S	240	300
Murrumbidgee at Balranald	5.0	0.49	56.45	192	F	200	200
Barwon at Mungindi	-	3.42	-	530	F	550	530
Darling at Bourke	-	4.29	-	1 590	F	2 610	4 930
Darling at Burtundy Rocks	-	0.69	-	90	R	80	80

<b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme)	1 590	910
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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	+0.04	+0.71
No 26 Torrumbarry	86.05	+0.00	-	No. 6 Murtho	19.25	+0.00	+0.05
No. 15 Euston	47.60	+0.01	-	No. 5 Renmark	16.30	+0.04	+0.14
No. 11 Mildura	34.40	-0.01	-0.02	No. 4 Bookpurnong	13.20	+0.04	+0.51
No. 10 Wentworth	30.80	-0.02	+0.28	No.3 Overland Corner	9.80	+0.05	+0.21
No. 9 Kulnine	27.40	+0.16	+0.04	No. 2 Waikerie	6.10	+0.08	+0.17
No. 8 Wangumma	24.60	+0.07	+0.04	No 1. Blanchetown	3.20	+0.08	-0.35

Murrumbidgee	FSL (m AHD)	relation to FSL	d/s gauge ht.		Flow (ML/day)
			local (m)	(m AHD)	
No. 7 Maude	75.40	-0.74	0.66	70.01	355
No. 5 Redbank	66.90	-0.46	0.2	61.5	314

### Barrages

FSL = 0.75 m AHD

	Openings	Level	Status
Goolwa	128 openings	0.38	All closed
Mundoo	26 openings	0.40	All closed
Boundary Creek	6 openings	-	All closed
Ewe Island	111 gates	-	All closed
Tauwichee	322 gates	0.36	All closed

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

