

REPORT FOR THE WEEK ENDING

Wednesday, 18 December 2002

Our Ref: MDBC:269 :ng:bwh

19 December, 2002



Rainfall

Light falls of rain of up to 20 mm were received in the north of the Murray-Darling Basin, however, dry and warm to hot conditions prevailed elsewhere.

Headwater storage

Transfer of water from Dartmouth to Hume Reservoir is continuing at channel capacity rates. Under continuing dry conditions, storage in Dartmouth (currently at about 52% of capacity) is forecast to continue to fall to below 50% by the end of December. Release from Hume Reservoir is currently about 17 500 ML/day and, if conditions remain dry, is expected to be maintained between 16 000 and 18 000 ML/day until the end of December. Inflow to Hume Reservoir is currently about 12 000 ML/day, however, the 'natural' inflow – that which would occur without the existence of Dartmouth Reservoir and the Snowy Scheme – is currently estimated to be less than 1 000 ML/day.

Mid Murray operation

Flow downstream of Yarrawonga Weir has been gradually reduced during the week to regulated channel capacity of about 10 300 ML/day for the Barmah-Millewa Forest. Under continuing drought conditions, flow at Yarrawonga is expected to be maintained near this level until April 2003. Forest regulators that were previously opened to permit flows to pass through parts of the Barmah Forest to bypass the Barmah 'choke' are now being progressively closed. Flow in the River Murray at Barmah is now starting to gradually recede and is forecast to continue to recede over the remainder of December.

Flow at Euston has declined from 12 500 to 12 100 ML/day, and is forecast to fall to about 7 000 ML/day by early January as a result of the recent reduction in flow at Yarrawonga Weir. Storage in Lake Victoria increased by 13 GL to 554 GL (81% of capacity), and is forecast to begin to gradually decline in late December as the recession of flow in the River Murray upstream begins to take effect.

River Temperatures

River water temperatures generally increased by about 3 to 5° C this week along most of the River Murray in response to recent hot weather conditions, with water temperatures ranging from about 22° in the upper Murray to 27° in the lower Darling River. The temperature of water released from Dartmouth and Hume, however, remains fairly steady at about 11 and 18° respectively.

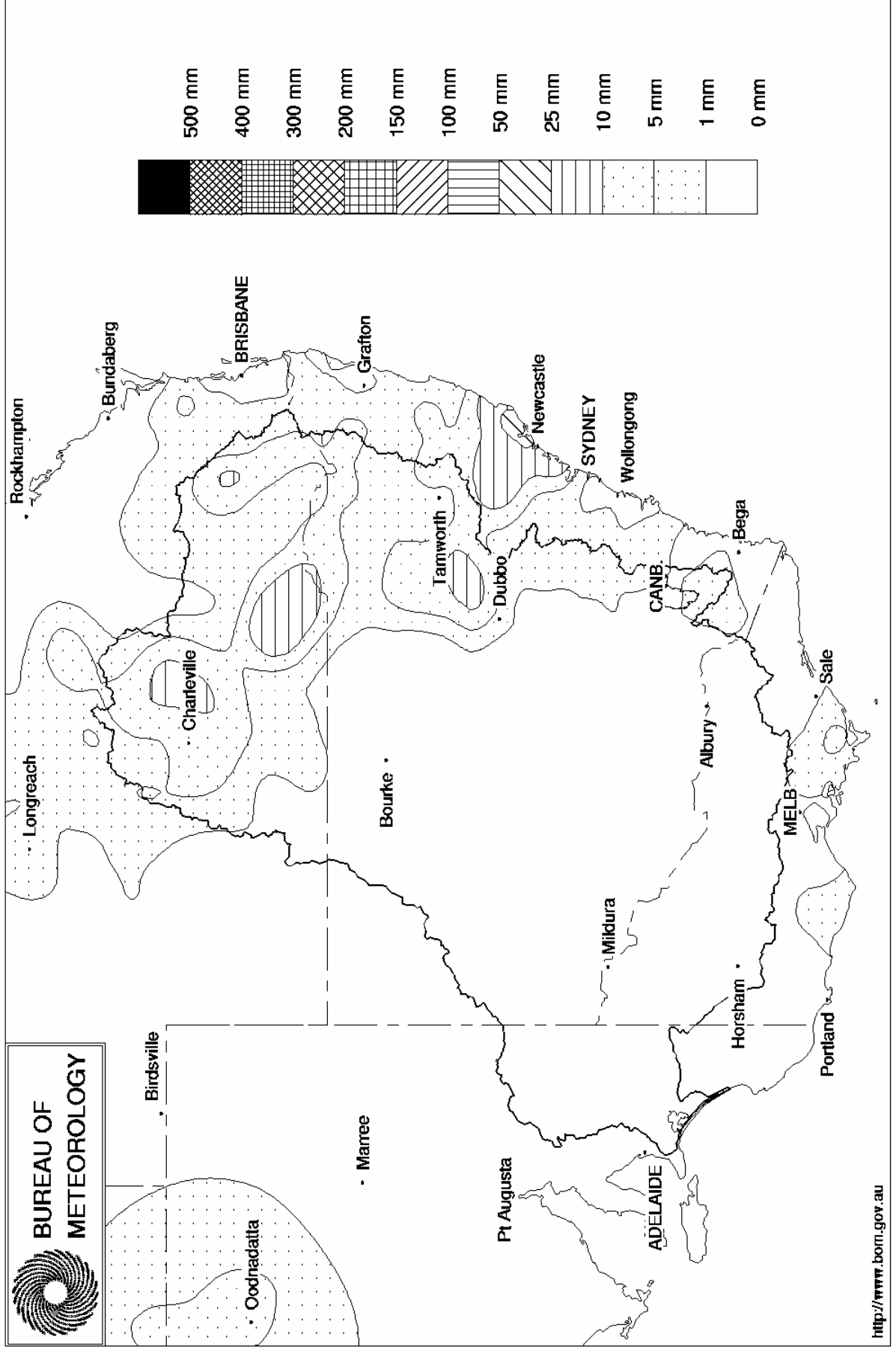
The Commission, River Murray Water and staff at the storages, weirs and barrages of the River Murray System wish you a safe and happy festive season.

Note: There will be no Weekly Report issued for the week ending 25 December 2001. The next Report will cover the two week period ending 1 January 2003.

DAVID DOLE
General Manager

Murray Darling Rainfall Analysis (mm) Week Ending 18th December 2002

Product of the National Climate Centre



Week ending Wednesday 18 Dec 2002

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 | 451.99 | 2 034 | 52% | 80 | 1 954 | -65 |
| Hume Reservoir | 192.00 | 3 038 | 170.84 | 324 | 11% | 30 | 294 | -40 |
| Lake Victoria | 27.00 | 680 | 25.86 | 554 | 82% | 100 | 454 | +13 |
| Menindee Lakes | | 1 682 * | | 148 | 9% | 640 # | 0 | -8 |
| Total | | 9 306 | | 3 060 | 33% | 850 | 2 703 | -99 |

* Menindee surcharge capacity 1999 GL

% of Total Active MDBC Storage = 32%

NSW Menindee Lakes Reserve

Major State Storages

| | | | | | | |
|----------------------|-------|-----|-----|-----|-----|-----|
| Burrinjuck Reservoir | 1 026 | 284 | 28% | 3 | 281 | -4 |
| Blowering Reservoir | 1 631 | 162 | 10% | 24 | 138 | -11 |
| Eildon Reservoir | 3 390 | 627 | 19% | 100 | 527 | -22 |

Snowy Mountains Scheme

Snowy diversions for week ending 17-Dec-2002

| Storage (GL) | Current storage | Weekly change | Diversion | This week | From 1 May 2002 |
|------------------------|-----------------|---------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | 3 097 | -27 | Snowy-Murray | +11 | 264 |
| Snowy-Murray Component | 1 558 | - | Tooma-Tumut | +0 | 180 |
| Target Storage | 1 510 | | Nett Diversion | 11.0 | 83 |
| | | | Murray 1 Release | +17 | 517 |

Major Diversions from Murray and Lower Darling (GL)

| New South Wales | This week | From 1 July 2002 |
|-------------------------|-------------|------------------|
| Murray Irrig. Ltd (Net) | 6.3 | 305.7 |
| Wakool System loss | 0.8 | 21.3 |
| Western Murray Irrig. | 1.3 | 12.9 |
| Licensed Pumps | 4.9 | 110.9 |
| Lower Darling | 0.5 | 84.6 |
| TOTAL | 13.8 | 535.5 |

| Victoria | This week | From 1 July 2002 |
|---------------------------------|-------------|------------------|
| Yarrawonga Main Channel (net) | 14.8 | 266 |
| Torrumbarry System + Nyah (net) | 20.9 | 496 |
| Sunraysia Pumped Districts | 7.6 | 74 |
| Licensed pumps - GMW (Nyah+u/s) | 1.8 | 31 |
| Licensed pumps - SRW | 6.4 | 88 |
| TOTAL | 51.5 | 956 |

Flow to South Australia (GL)

| | | |
|------------------------|------|----------------|
| Entitlement this month | 217 | (7 000 ML/day) |
| Flow this week | 49.3 | |
| Flow so far this month | 126 | |
| Flow last month | 181 | |

Salinity (EC)

(microsiemens/cm @ 25° C)

| | Current | Average over the last week | Average since 1 August 2002 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | 80 | 70 | 90 |
| Euston | 80 | 80 | 130 |
| Red Cliffs | 90 | 90 | 150 |
| Merbein | 90 | 80 | 160 |
| Burtundy (Darling) | 950 | 930 | 880 |
| Lock 9 | 100 | 100 | 200 |
| Lake Victoria | 230 | 250 | 330 |
| Berri | 250 | 250 | 370 |
| Waikerie | - | 410 | 530 |
| Morgan | 430 | 450 | 590 |
| Mannum | - | 610 | 650 |
| Murray Bridge | 670 | 670 | 720 |
| Milang (Lake Alex.) | 1 020 | 1 030 | 990 |
| Poltalloch (Lake Alex.) | 1 110 | 1 130 | 1 090 |
| Meningie (Lake Alb.) | 1 910 | 1 910 | 1 500 |
| Goolwa Barrages | 2 940 | 2 970 | 3 310 |



Week ending Wednesday 18 Dec 2002

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 | - | - | - | 4 380 | F | 1 720 | 2 060 |
| Jingellic | 4.0 | 1.65 | 208.17 | 4 510 | R | 2 010 | 3 120 |
| Tallandoon (Mitta Mitta River) | 4.2 | 3.19 | 220.08 | 9 960 | S | 9 930 | 10 040 |
| Heywoods | 5.5 | 3.21 | 156.84 | 17 530 | R | 16 180 | 20 600 |
| Doctors Point | 5.5 | 3.31 | 151.78 | 17 900 | S | 16 400 | 20 870 |
| Albury | 4.3 | 2.34 | 149.78 | - | - | - | - |
| Corowa | 7.0 | 3.29 | 129.31 | 17 600 | R | 17 870 | 22 360 |
| Yarrowonga Weir (d/s) | 6.4 | 1.79 | 116.83 | 10 300 | S | 11 540 | 14 990 |
| Tocumwal | 6.4 | 2.33 | 106.17 | 10 560 | F | 12 490 | 14 750 |
| Torrumbarry Weir (d/s) | 7.3 | 2.72 | 81.27 | 8 370 | F | 8 780 | 9 100 |
| Swan Hill | 4.5 | 1.59 | 64.51 | 8 140 | F | 8 260 | 8 440 |
| Wakool Junction | 8.8 | 3.85 | 52.97 | 11 490 | S | 11 670 | 11 850 |
| Euston Weir (d/s) | 8.8 | 2.30 | 44.14 | 12 120 | S | 12 410 | 12 430 |
| Mildura Weir (d/s) | - | - | 31.13 | 8 470 | F | 8 710 | 8 510 |
| Wentworth Weir (d/s) | 7.3 | 3.13 | 27.89 | 8 920 | S | 9 060 | 8 880 |
| Rufus Junction | - | 3.48 | 20.41 | 6 630 | R | 6 400 | 6 560 |
| Blanchetown (Lock 1 d/s) | - | - | - | 3 870 | F | 4 420 | 3 690 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 0.74 | 153.97 | 300 | R | 240 | 410 |
| Ovens at Wangaratta | 11.9 | 7.56 | 145.24 | 86 | F | 160 | 340 |
| Goulburn at McCoys Bridge | 9.0 | 1.12 | 92.54 | 315 | S | 350 | 390 |
| Edward at Stevens Weir (d/s) | - | - | - | 2 900 | F | 2 910 | 2 910 |
| Edward at Liewah | - | 2.99 | 58.37 | 2 720 | S | 2 740 | 2 800 |
| Wakool at Stoney Crossing | - | 0.89 | 55.38 | 1 660 | S | 1 660 | 1 670 |
| Murrumbidgee at Balranald | 5.0 | 0.57 | 56.53 | 238 | F | 290 | 370 |
| Barwon at Mungindi | - | 3.25 | - | 130 | R | 140 | 50 |
| Darling at Bourke | - | 3.46 | - | 0 | F | 0 | 0 |
| Darling at Burtundy Rocks | - | 0.67 | - | 60 | S | 40 | 0 |

| | | |
|---|-------|-------|
| Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme) | 1 020 | 1 480 |
|---|-------|-------|

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 | -0.20 | - | No. 7 Rufus River | 22.10 | +0.16 | +1.14 |
| No 26 Torrumbarry | 86.05 | +0.00 | - | No. 6 Murtho | 19.25 | +0.01 | +0.10 |
| No. 15 Euston | 47.60 | -0.02 | - | No. 5 Renmark | 16.30 | +0.02 | +0.16 |
| No. 11 Mildura | 34.40 | +0.03 | +0.33 | No. 4 Bookpurnong | 13.20 | +0.01 | +0.63 |
| No. 10 Wentworth | 30.80 | +0.02 | +0.49 | No.3 Overland Corner | 9.80 | +0.02 | +0.20 |
| No. 9 Kulnine | 27.40 | +0.03 | +0.06 | No. 2 Waikerie | 6.10 | +0.03 | +0.14 |
| No. 8 Wangumma | 24.60 | +0.01 | +0.28 | No 1. Blanchetown | 3.20 | +0.00 | +0.01 |

| Murrumbidgee | FSL (m AHD) | relation to FSL | d/s gauge ht. | | Flow (ML/day) |
|---------------|-------------|-----------------|---------------|---------|---------------|
| | | | local (m) | (m AHD) | |
| No. 7 Maude | 75.40 | -0.46 | 0.61 | 69.96 | 305 |
| No. 5 Redbank | 66.90 | -0.33 | 0.18 | 61.48 | 296 |

Barrages

FSL = 0.75 m AHD

| | Openings | Level | Status |
|----------------|--------------|-------|------------|
| Goolwa | 128 openings | 0.60 | All closed |
| Mundoo | 26 openings | 0.57 | All closed |
| Boundary Creek | 6 openings | - | All closed |
| Ewe Island | 111 gates | - | All closed |
| Tauwitchere | 322 gates | 0.53 | All closed |

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

