

# REPORT FOR THE WEEK ENDING

**Wednesday, 7 August 2002**

*Our Ref: MDBC:269 :djc:bwh*

**8 August, 2002**



Light to moderate falls were recorded across most of the Murray-Darling Basin this week with the heaviest falls between 25 and 50 mm occurring in the upper Murray, Kiewa and Ovens catchments. However, there have been only slight increases in tributary inflows to the River Murray.

Storage in Dartmouth Reservoir fell by 29 GL this week to 3 099 GL or 79 % of capacity as a result of continuing transfer of water to Hume Reservoir. Over the past month release from Dartmouth has been maintained at an average rate of 6 500 ML/day with a cycle of variation between 5 500 and 7 500 ML/day for environmental objectives. In view of dry conditions over recent weeks, however, it is now necessary to increase the rate of transfer to Hume, and release from Dartmouth is currently being maintained at 7 500 ML/day. The rate of transfer to Hume is being regularly monitored, and if dry conditions continue, it is expected that further increases in Dartmouth release will be required.

Storage in Hume Reservoir increased by 16 GL this week to 937 GL or 31 % of capacity. Release from Hume is currently being made to target a flow of about 13 000 ML/day at Albury/Wodonga to meet downstream requirements including assisting with refilling of Lake Mulwala, and providing for transfer of water to Lake Victoria. Without significant rain, it is expected that flow at Albury/Wodonga will be increased to about 15 000 ML/day next week.

Gradual refilling of Lake Mulwala has continued, and the lake is now 0.7 m below normal operating range. Refilling of major irrigation systems supplied from Lake Mulwala via the Yarrawonga Main Channel and Mulwala Canal commenced this week with diversion rates from the Lake now at 500 ML/day (16% of capacity) and 1 000 ML/day (10% of capacity) respectively. Release from Yarrawonga Weir has been increased from 7 100 to 10 000 ML/day (near channel capacity through the Barmah-Millewa Forest) to increase the rate of transfer from Hume Reservoir to Lake Victoria.

Combined flow from the River Murray to the Edward River System via the Edward River and Gulpa Creek offtakes has been increased to regulated capacity (1 950 ML/day). Some of this water is being used to refill the Stevens Weir pool which is currently about 1.8 m below full supply level. The remaining flow will continue to be released from Stevens Weir (current flow is 1 100 ML/day) to assist with transfer of water to Lake Victoria.

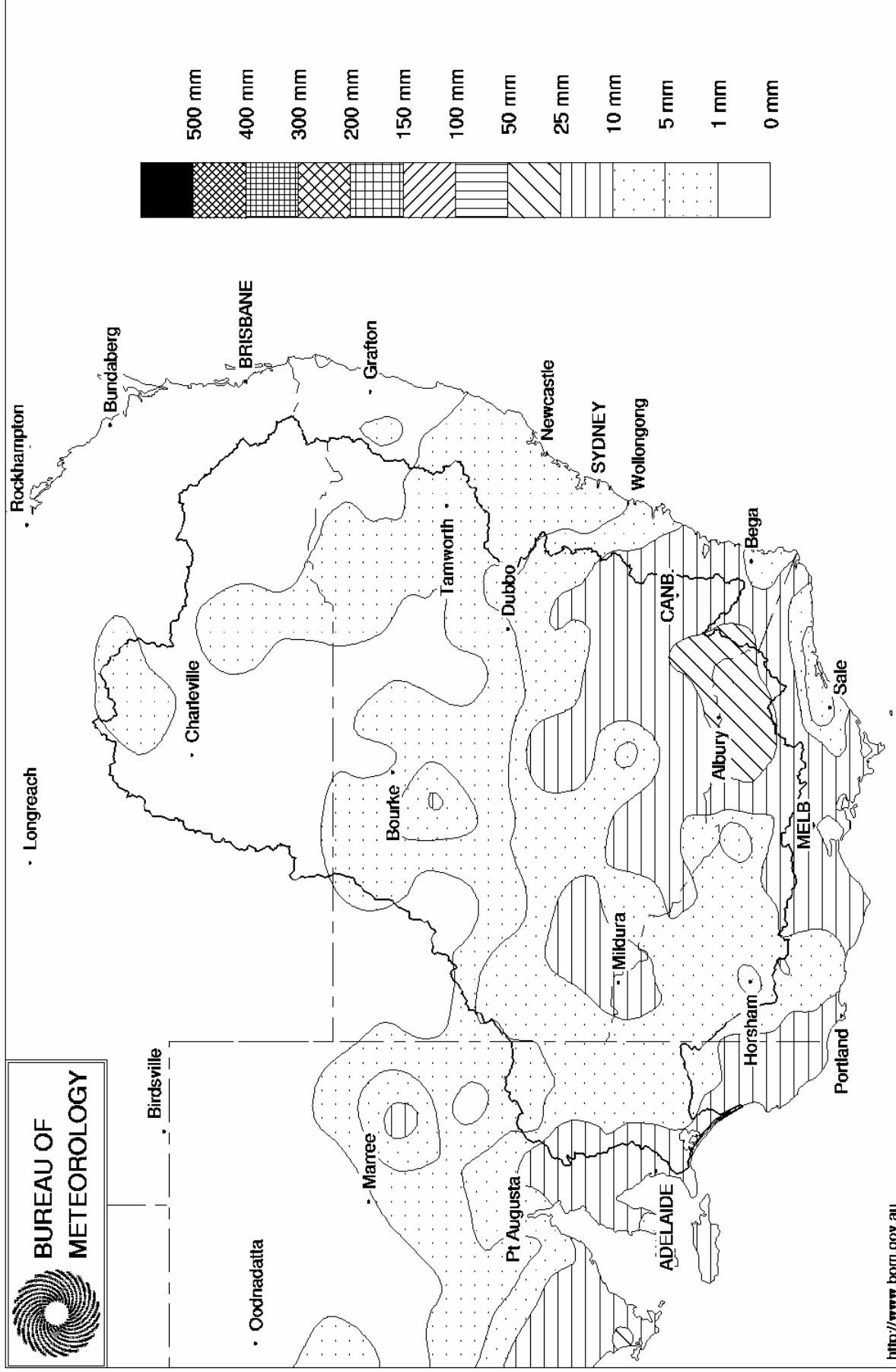
Arrangements are underway for flow through the Edward, Wakool and Yallakool escapes to be gradually increased to capacity over the next two weeks to escape water into both the Edward and Wakool River systems from Mulwala Canal. This operation will provide an additional transfer of about 2 500 ML/day through the Edward/Wakool system to assist with the transfer of resources from Hume Reservoir to Lake Victoria.

Diversion from Torrumbarry Weir pool to National Channel was increased from 2 200 to about 3 000 ML/day this week, with a further increase to 3 500 ML/day (85% of capacity) expected early next week. Release from Torrumbarry Weir is currently 3 900 ML/day, and is forecast to rise to about 4 500 ML/day by mid August.

DAVID DOLE  
General Manager

# Murray Darling Rainfall Analysis (mm) Week Ending 7th August 2002

Product of the National Climate Centre



## Week ending Wednesday 07 Aug 2002

### Water in Storage

| MDBC Storages       | Full Supply Level<br>(m AHD) | Full Supply Volume<br>(GL) | Current Storage Level<br>(m AHD) | Current Storage |            | Dead Storage<br>(GL) | Active Storage<br>(GL) | Change in Storage for the week<br>(GL) |
|---------------------|------------------------------|----------------------------|----------------------------------|-----------------|------------|----------------------|------------------------|--|
|                     |                              |                            |                                  | (GL)            | %          |                      |                        |  |
| Dartmouth Reservoir | 486.00                       | 3 906                      | 472.87                           | 3 099           | 79%        | 80                   | 3 019                  | -29                                    |
| Hume Reservoir      | 192.00                       | 3 038                      | 178.02                           | 937             | 31%        | 30                   | 907                    | +16                                    |
| Lake Victoria       | 27.00                        | 680                        | 24.66                            | 428             | 63%        | 100                  | 328                    | -10                                    |
| Menindee Lakes      |                              | 1 682 *                    |                                  | 374             | 22%        | 640 #                | 0                      | -2                                     |
| <b>Total</b>        |                              | <b>9 306</b>               |                                  | <b>4 838</b>    | <b>52%</b> | <b>850</b>           | <b>4 254</b>           | <b>-26</b>                             |

\* Menindee surcharge capacity 1999 GL

% of Total Active MDBC Storage = **50%**

# NSW Menindee Lakes Reserve

### Major State Storages

|                      |       |     |     |     |     |     |
|----------------------|-------|-----|-----|-----|-----|-----|
| Burrinjuck Reservoir | 1 026 | 296 | 29% | 3   | 293 | +7  |
| Blowering Reservoir  | 1 631 | 586 | 36% | 24  | 562 | -3  |
| Eildon Reservoir     | 3 390 | 817 | 24% | 100 | 717 | +15 |

### Snowy Mountains Scheme

Snowy diversions for week ending 06-Aug-2002

| Storage (GL)           | Current storage | Weekly change | Diversion        | This week | From 1 May 2002 |
|------------------------|-----------------|---------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | 2 847           | +22           | Snowy-Murray     | +8        | 151             |
| Snowy-Murray Component | 1 323           | -             | Tooma-Tumut      | +7        | 73              |
| Target Storage         | 1 190           |               | Nett Diversion   | 1.1       | 77              |
|                        |                 |               | Murray 1 Release | +11       | 227             |

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

| New South Wales         | This week  | From 1 July 2002 |
|-------------------------|------------|------------------|
| Murray Irrig. Ltd (Net) | 1.9        | - 2.7            |
| Wakool System loss      | 0.4        | 2.7              |
| Western Murray Irrig.   | 0.1        | .9               |
| Licensed Pumps          | 2.3        | 6.5              |
| Lower Darling           | 3.7        | 19.2             |
| <b>TOTAL</b>            | <b>8.3</b> | <b>26.5</b>      |

| Victoria                        | This week   | From 1 July 2002 |
|---------------------------------|-------------|------------------|
| Yarrawonga Main Channel (net)   | 2.5         | 3                |
| Torrumbarry System + Nyah (net) | 15.2        | 55               |
| Sunraysia Pumped Districts      | 1.5         | 3                |
| Licensed pumps - GMW (Nyah+u/s) | 0.8         | 2                |
| Licensed pumps - SRW            | 2.0         | 10               |
| <b>TOTAL</b>                    | <b>22.0</b> | <b>73</b>        |

### Flow to South Australia (GL)

|                        |      |                |
|------------------------|------|----------------|
| Entitlement this month | 124  | (3 900 ML/day) |
| Flow this week         | 27.6 |                |
| Flow so far this month | 28   |                |
| Flow last month        | 109  |                |

### Salinity (EC)

(microsiemens/cm @ 25° C)

|                 | Current | Average over the last week | Average since 1 August 2002 |
|-----------------|---------|----------------------------|-----------------------------|
| Swan Hill       | 130     | 236                        | 236                         |
| Euston          | 180     | 184                        | 184                         |
| Red Cliffs      | 210     | 200                        | 205                         |
| Merbein         | 220     | 210                        | 211                         |
| Burtundy        | 840     | 833                        | 833                         |
| Lock 9          | 260     | 267                        | 267                         |
| Lake Victoria   | 360     | 348                        | 348                         |
| Berri           | 450     | 468                        | 468                         |
| Waikerie        | -       | -                          | - 9                         |
| Morgan          | 660     | 677                        | 677                         |
| Mannum          | 660     | 654                        | 654                         |
| Murray Bridge   | 720     | 716                        | 716                         |
| Meningie        | 1 440   | 1 420                      | 1 420                       |
| Goolwa Barrages | 4 670   | 4 708                      | 4 708                       |



Week ending Wednesday 07 Aug 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                        | -                     | -            | -       | 1 640         | R     | 1 850                           | 4 430                           |
| Jingellic                        | 4.0                   | 1.87         | 208.39  | 6 250         | F     | 6 800                           | 7 470                           |
| Tallandoon ( Mitta Mitta River ) | 4.2                   | 2.96         | 219.85  | 8 510         | R     | 7 160                           | 7 610                           |
| Heywoods                         | 5.5                   | 2.74         | 156.37  | 12 190        | S     | 12 150                          | 9 270                           |
| Doctors Point                    | 5.5                   | 2.91         | 151.38  | 12 700        | S     | 12 760                          | 9 820                           |
| Albury                           | 4.3                   | 1.88         | 149.32  | -             | -     | -                               | -                               |
| Corowa                           | 7.0                   | 2.81         | 128.83  | 14 000        | F     | 13 340                          | 9 620                           |
| Yarrowonga Weir (d/s)            | 6.4                   | 1.77         | 116.81  | 10 100        | R     | 9 630                           | 5 590                           |
| Tocumwal                         | 6.4                   | 2.24         | 106.08  | 9 810         | S     | 8 780                           | 4 800                           |
| Torrumbarry Weir (d/s)           | 7.3                   | 1.46         | 80.01   | 3 860         | F     | 3 400                           | 2 100                           |
| Swan Hill                        | 4.5                   | 0.79         | 63.71   | 3 050         | R     | 2 440                           | 1 740                           |
| Wakool Junction                  | 8.8                   | 1.62         | 50.74   | 2 660         | R     | 2 180                           | 2 490                           |
| Euston Weir (d/s)                | 8.8                   | 0.73         | 42.57   | 3 040         | R     | 2 990                           | 4 570                           |
| Mildura Weir (d/s)               | -                     | -            | 30.86   | 2 270         | F     | 2 470                           | 4 440                           |
| Wentworth Weir (d/s)             | 7.3                   | 2.84         | 27.60   | 2 470         | S     | 2 610                           | 4 980                           |
| Rufus Junction                   | -                     | 2.95         | 18.16   | 3 660         | F     | 3 490                           | 3 060                           |
| Blanchetown (Lock 1 d/s)         | -                     | -            | -       | 3 890         | S     | 3 410                           | 2 670                           |
| <b>Tributaries</b>               |                       |              |         |               |       |                                 |                                 |
| Kiewa at Bandiana                | 2.7                   | 1.23         | 154.46  | 940           | F     | 1 040                           | 940                             |
| Ovens at Wangaratta              | 11.9                  | 8.67         | 146.35  | 2 396         | F     | 2 280                           | 1 840                           |
| Goulburn at McCoys Bridge        | 9.0                   | 1.21         | 92.63   | 450           | R     | 420                             | 410                             |
| Edward at Stevens Weir (d/s)     | -                     | -            | -       | 180           | F     | 430                             | 210                             |
| Edward at Liewah                 | -                     | 0.62         | 56.00   | 260           | S     | 240                             | 430                             |
| Wakool at Stoney Crossing        | -                     | 0.17         | 54.66   | 70            | F     | 90                              | 110                             |
| Murrumbidgee at Balranald        | 5.0                   | 1.34         | 57.30   | 1 020         | R     | 1 020                           | 1 320                           |
| Barwon at Mungindi               | -                     | 3.19         | -       | 40            | S     | 40                              | 30                              |
| Darling at Bourke                | -                     | 4.01         | -       | 190           | S     | 190                             | 190                             |
| Darling at Burtundy Rocks        | -                     | 0.70         | -       | 110           | S     | 100                             | 100                             |

|   |       |       |
|---|-------|-------|
| <b>Natural Inflow to Hume</b> (ie pre Dartmouth & Snowy Mountains scheme) | 9 360 | 5 810 |
|---|-------|-------|

### 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      | -0.81 | -     | No. 7 Rufus River    | 22.10       | +0.08 | +0.62 |
| No 26 Torrumbarry | 86.05       | +0.00 | -     | No. 6 Murtho         | 19.25       | +0.03 | +0.00 |
| No. 15 Euston     | 47.60       | +0.00 | -     | No. 5 Renmark        | 16.30       | +0.03 | +0.10 |
| No. 11 Mildura    | 34.40       | +0.01 | +0.06 | No. 4 Bookpurnong    | 13.20       | +0.02 | +0.39 |
| No. 10 Wentworth  | 30.80       | +0.04 | +0.20 | No.3 Overland Corner | 9.80        | +0.02 | +0.14 |
| No. 9 Kulnine     | 27.40       | +0.05 | +0.05 | No. 2 Waikerie       | 6.10        | +0.02 | +0.13 |
| No. 8 Wangumma    | 24.60       | +0.07 | +0.11 | No 1. Blanchetown    | 3.20        | +0.03 | -0.05 |

| Murrumbidgee  | FSL (m AHD) | relation to FSL | d/s gauge ht. |         | Flow (ML/day) |
|---------------|-------------|-----------------|---------------|---------|---------------|
|               |             |                 | local (m)     | (m AHD) |               |
| No. 7 Maude   | 75.40       | -0.26           | 0.96          | 70.31   | 749           |
| No. 5 Redbank | 66.90       | -0.03           | 0.8           | 62.1    | 975           |

### Barrages

FSL = 0.75 m AHD

|                | Openings     | Level | Status     |
|----------------|--------------|-------|------------|
| Goolwa         | 128 openings | 0.68  | All closed |
| Mundoo         | 26 openings  | 0.72  | All closed |
| Boundary Creek | 6 openings   | -     | All closed |
| Ewe Island     | 111 gates    | -     | All closed |
| Tauwitchere    | 322 gates    | 0.75  | All closed |

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

