

REPORT FOR THE WEEK ENDING

Wednesday, 3 November 2004

Our Ref : RMW305/01/01/prs
Trim Ref : 04/11829DO

5 November, 2004



October Summary

The month of October saw below average rainfall in the southern and north-western parts of the Basin (*see map*). This has resulted in a very low October inflow to the River Murray System of about 470 GL, which is a level expected to be exceeded about 9 years in 10. The low inflows, coupled with increasing irrigation diversions, have resulted in total MDBC storage falling by 27 GL over the past month. Over a longer timeframe (10 months from January to October 2004), the Bureau of Meteorology reports serious to severe rainfall deficiencies for the ACT and parts of southern NSW.

| Storage | Dartmouth | Hume | Lake Victoria | Menindee Lakes | Total MDBC storage |
|------------------------------|---------------------------|---------------------------|--------------------------|--------------------------|---------------------------|
| Storage Volume (end October) | 1832 GL (47% of capacity) | 1469 GL (48% of capacity) | 633 GL (94% of capacity) | 280 GL (17% of capacity) | 4214 GL (46% of capacity) |
| Change for month | -119 GL | +95 GL | +23 GL | -26 GL | -27 GL |

Rainfall and inflows

Over the past week the majority of the Basin received some rain, however substantial rainfall was restricted to west of Bourke, near Charleville and along the Great Dividing Range in the south east. The rainfall in the southern NSW and northern Victoria was very patchy and insufficient to generate significant runoff into Hume and Dartmouth Reservoirs. In addition, there was also a reduction of tributary inflow to the River Murray from the Kiewa and the Ovens Rivers. All MDBC storages are now falling and will be at very low levels by the end of the 2004/05 season unless sustained heavy rain is received.

System Operation

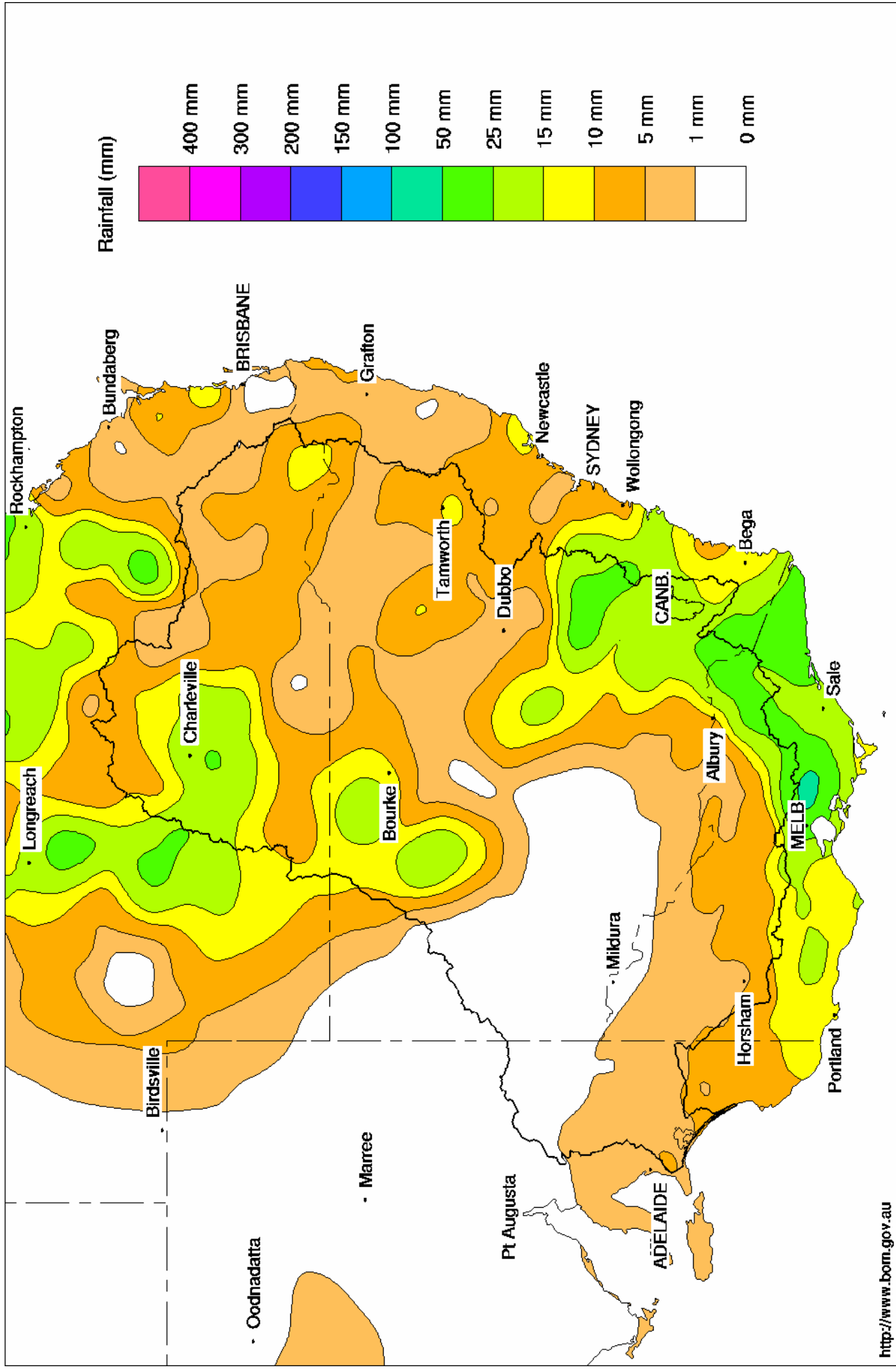
The transfer of water from Dartmouth to Hume Reservoir has continued at a rate of between 6 000 and 7 000 ML/day. This transfer is required to ensure sufficient water is available in Hume Reservoir to meet irrigation and water supply requirements for the remainder of the 2004/05 season, and will continue to be carefully reviewed over the coming months.

The volume in storage at Lake Victoria has fallen to 626 GL (92% of capacity). The transfer of water to Lake Victoria is continuing at maximum rates through the Barmah-Millewa Forest and along the Mulwala Canal. Whilst the relatively high flow rates may appear 'out of kilter' to irrigators in NSW and Victoria, who currently have very low allocations, a key reason for the transfers is the lack of water in Menindee Lakes.

DAVID DREVERMAN
General Manager

Murray Darling Rainfall Analysis (mm) Week Ending 3rd November 2004

Product of the National Climate Centre

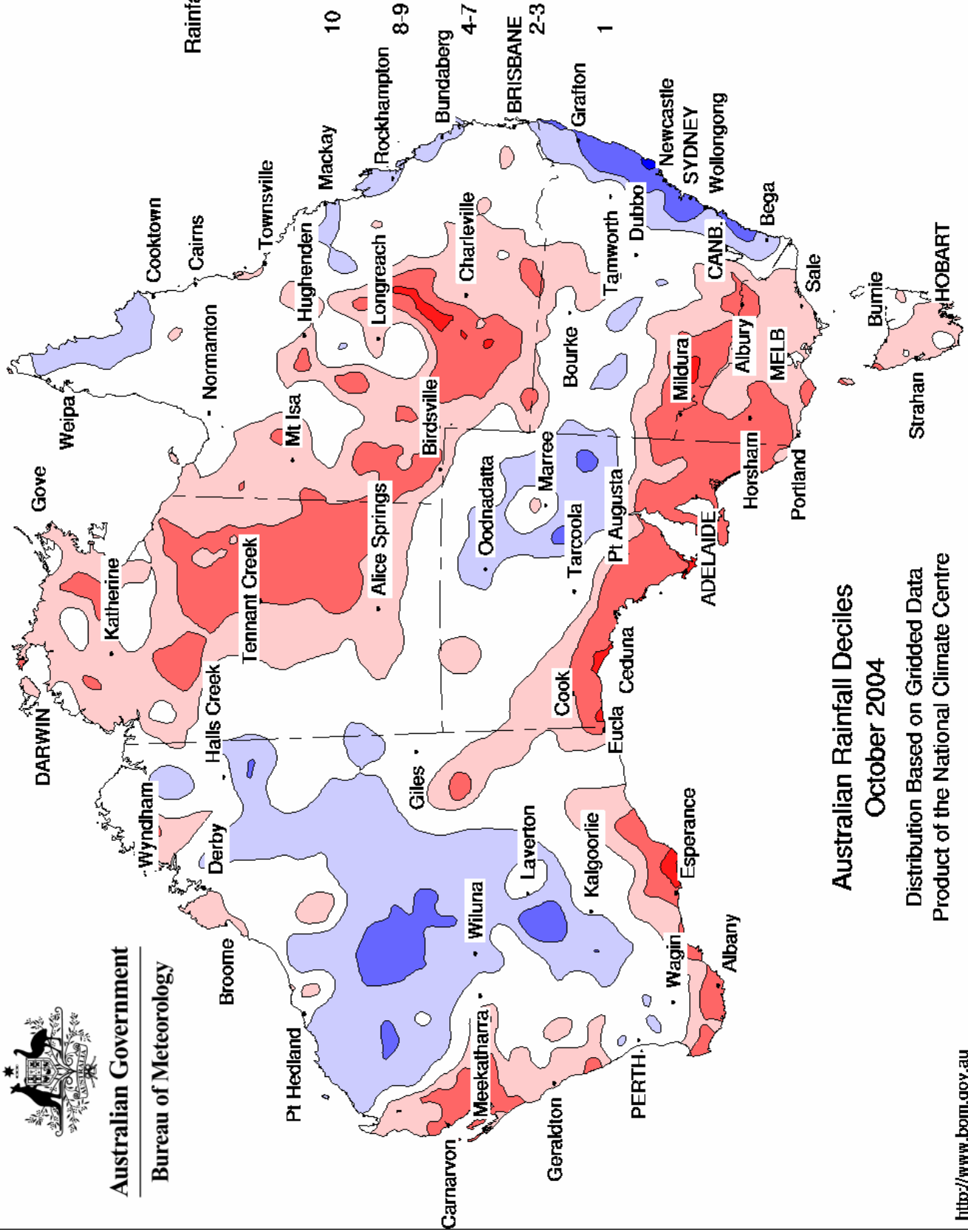
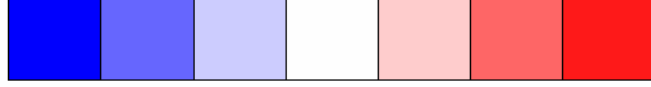




Australian Government

Bureau of Meteorology

Rainfall Decile Ranges



Australian Rainfall Deciles

October 2004

Distribution Based on Gridded Data
Product of the National Climate Centre

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 | 446.91 | 1 816 | 46% | 80 | 1 736 | -36 |
| Hume Reservoir | 192.00 | 3 038 | 182.42 | 1 458 | 48% | 30 | 1 428 | -15 |
| Lake Victoria | 27.00 | 677 | 26.58 | 626 | 92% | 100 | 526 | -12 |
| Menindee Lakes | | 1 603 * | | 275 | 17% | 640 # | 0 | -8 |
| Total | | 9 224 | | 4 175 | 45% | 850 | 3 690 | -70 |

* Menindee surcharge capacity 1916 GL

% of Total Active MDBC Storage = **44%**

NSW Menindee Lakes Reserve

Major State Storages

| | | | | | | |
|----------------------|-------|-------|-----|-----|-------|-----|
| Burrinjuck Reservoir | 1 026 | 175 | 17% | 3 | 172 | -31 |
| Blowering Reservoir | 1 631 | 513 | 31% | 24 | 489 | +2 |
| Eildon Reservoir | 3 390 | 1 373 | 40% | 100 | 1 273 | -1 |

Snowy Mountains Scheme

Snowy diversions for week ending 02-Nov-2004

| Storage | Active storage (GL) | Weekly change (GL) | Diversion (GL) | This week | From 1 May 2004 |
|------------------------|------------------------|-----------------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | N/A | N/A | Snowy-Murray | N/A | N/A |
| Snowy-Murray Component | N/A | N/A | Tooma-Tumut | N/A | N/A |
| Target Storage | N/A | N/A | Nett Diversion | N/A | N/A |
| | | | Murray 1 Release | N/A | N/A |

Major Diversions from Murray and Lower Darling (GL)

| New South Wales | This week | From 1 July 2004 |
|-------------------------|-------------|------------------|
| Murray Irrig. Ltd (Net) | 26.4 | 247.9 |
| Wakool System loss | -0.9 | 4.0 |
| Western Murray Irrig. | 0.8 | 6.8 |
| Licensed Pumps | 8.0 | 74.1 |
| Lower Darling | 0.4 | 6.1 |
| TOTAL | 34.7 | 338.9 |

| Victoria | This week | From 1 July 2004 |
|---------------------------------|-------------|------------------|
| Yarrawonga Main Channel (net) | 11.9 | 91 |
| Torrumbarry System + Nyah (net) | 17.2 | 203 |
| Sunraysia Pumped Districts | 5.3 | 35 |
| Licensed pumps - GMW (Nyah+u/s) | 1.5 | 6 |
| Licensed pumps - SRW | 35.0 | 89 |
| TOTAL | 70.9 | 425 |

Flow to South Australia (GL)

| | | |
|------------------------|------|----------------|
| Entitlement this month | 180 | (5 700 ML/day) |
| Flow this week | 39.8 | |
| Flow so far this month | 18 | |
| Flow last month | 171 | |

Salinity (EC)

(microsiemens/cm @ 25° C)

| | Current | Average over the last week | Average since 1 August 2004 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | 90 | 80 | 100 |
| Euston | 90 | 100 | 120 |
| Red Cliffs | 90 | 110 | 100 |
| Merbein | 140 | 150 | 110 |
| Burtundy (Darling) | 490 | 480 | 430 |
| Lock 9 | 150 | 150 | 130 |
| Lake Victoria | 180 | 180 | 180 |
| Berri | 250 | 250 | 260 |
| Waikerie | - | - | 430 |
| Morgan | 380 | 390 | 450 |
| Mannum | 530 | 540 | 530 |
| Murray Bridge | 600 | 590 | 550 |
| Milang (Lake Alex.) | 1 330 | 1 340 | 1 230 |
| Poltalloch (Lake Alex.) | - | - | 1 030 |
| Meningie (Lake Alb.) | 2 090 | 2 210 | 2 090 |
| Goolwa Barrages | 1 620 | 1 600 | 1 860 |

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 | - | - | - | - | F | 5 510 | 6 560 |
| Jingellic | 4.0 | 1.94 | 208.46 | 6 890 | R | 6 810 | 9 110 |
| Tallandoon (Mitta Mitta River) | 4.2 | 2.76 | 219.65 | 7 150 | R | 7 780 | 8 390 |
| Heywoods | 5.5 | 2.80 | 156.43 | 13 580 | F | 15 190 | 14 870 |
| Doctors Point | 5.5 | 3.00 | 151.47 | 14 000 | F | 15 930 | 16 360 |
| Albury | 4.3 | 2.01 | 149.45 | - | - | - | - |
| Corowa | 7.0 | 3.23 | 129.25 | 17 200 | F | 17 170 | 16 910 |
| Yarrowonga Weir (d/s) | 6.4 | 1.80 | 116.84 | 10 300 | S | 10 300 | 10 300 |
| Tocumwal | 6.4 | 2.33 | 106.17 | 10 650 | S | 10 570 | 10 580 |
| Torrumbarry Weir (d/s) | 7.3 | 1.91 | 80.46 | 5 450 | R | 5 230 | 5 190 |
| Swan Hill | 4.5 | 1.05 | 63.97 | 4 690 | R | 4 650 | 4 570 |
| Wakool Junction | 8.8 | 2.82 | 51.94 | 7 300 | R | 7 330 | 7 290 |
| Euston Weir (d/s) | 8.8 | 1.45 | 43.29 | 6 760 | S | 6 790 | 6 820 |
| Mildura Weir (d/s) | - | - | 30.93 | - | F | 5 210 | 6 190 |
| Wentworth Weir (d/s) | 7.3 | 2.91 | 27.67 | 5 260 | R | 4 990 | 5 430 |
| Rufus Junction | - | 3.30 | 20.23 | 5 560 | F | 5 300 | 5 160 |
| Blanchetown (Lock 1 d/s) | - | - | - | 2 660 | F | 3 210 | 3 420 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 1.29 | 154.52 | 1 040 | R | 1 200 | 1 980 |
| Ovens at Wangaratta | 11.9 | 8.37 | 146.05 | 1 752 | R | 1 710 | 1 800 |
| Goulburn at McCoys Bridge | 9.0 | 1.20 | 92.62 | 450 | F | 440 | 390 |
| Edward at Stevens Weir (d/s) | - | - | - | 2 900 | F | 2 910 | 2 890 |
| Edward at Liewah | - | 2.91 | 58.29 | 2 570 | S | 2 540 | 2 530 |
| Wakool at Stoney Crossing | - | 0.54 | 55.03 | 552 | R | 520 | 600 |
| Murrumbidgee at Balranald | 5.0 | 0.48 | 56.44 | 217 | F | 220 | 220 |
| Barwon at Mungindi | - | 3.19 | - | 40 | S | 30 | 50 |
| Darling at Bourke | - | 4.02 | - | 151 | F | 200 | 370 |
| Darling at Burtundy Rocks | - | 0.68 | - | 48 | F | 40 | 40 |

| | | |
|---|-------|-------|
| Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme) | 7 870 | 7 520 |
|---|-------|-------|

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 | -0.06 | - | No. 7 Rufus River | 22.10 | +0.08 | +0.89 |
| No 26 Torrumbarry | 86.05 | +0.00 | - | No. 6 Murtho | 19.25 | +0.08 | +0.07 |
| No. 15 Euston | 47.60 | +0.00 | - | No. 5 Renmark | 16.30 | -0.01 | +0.18 |
| No. 11 Mildura | 34.40 | +0.02 | +0.13 | No. 4 Bookpurnong | 13.20 | +0.06 | +0.56 |
| No. 10 Wentworth | 30.80 | +0.01 | +0.27 | No.3 Overland Corner | 9.80 | -0.01 | +0.15 |
| No. 9 Kulnine | 27.40 | +0.03 | +0.04 | No. 2 Waikerie | 6.10 | +0.01 | +0.06 |
| No. 8 Wangumma | 24.60 | +0.04 | +0.16 | No 1. Blanchetown | 3.20 | +0.01 | +0.11 |

| Murrumbidgee | FSL (m AHD) | relation to FSL | d/s gauge ht. | | Flow (ML/day) |
|---------------|-------------|-----------------|---------------|---------|---------------|
| | | | local (m) | (m AHD) | |
| No. 7 Maude | 75.40 | -0.10 | 1.28 | 70.63 | 1360 |
| No. 5 Redbank | 66.90 | +0.05 | 0.35 | 61.65 | 469 |

Barrages

FSL = 0.75 m AHD

| | Openings | Level | Status |
|----------------|--------------|-------|------------|
| Goolwa | 128 openings | 0.82 | All closed |
| Mundoo | 26 openings | 0.82 | All closed |
| Boundary Creek | 6 openings | - | All closed |
| Ewe Island | 111 gates | - | All closed |
| Tauwichee | 322 gates | 0.81 | All closed |

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

