REPORT FOR THE WEEK ENDING

Wednesday, 1 September 2004

Our Ref: RMW305/01/01/prs; jm; taj 3 September, 2004

Trim Ref:04/10097DO



Rainfall and Runoff

Heavy rain fell in the Hume catchment this week (up to 100 mm – see attached rain map) temporarily boosting streamflow. Storage in Hume Reservoir increased by 94 GL this week, however some of this rise was from the water being transferred from Dartmouth Reservoir. Flow at Jingellic reached minor flood level on Tuesday evening (31 August), and will produce further rises in storage in Hume Reservoir next week. The total volume of runoff from this event will not be very large due to its "flashy" nature (ie. the rise and fall in streamflow was rapid).

About 50 mm of rain fell in the Lower Darling area raising storage in Menindee Lakes by about 4 GL. Similarly, rain over the Lower Lakes near the Murray Mouth raised the lake level by about 0.01 m, representing about 10 GL.

Despite this widespread rain, the rate of transfer of water from Dartmouth to Hume Reservoir was increased slightly this week, to ensure that the combined water requirements of South Australia, Victoria and New South Wales can be met throughout the rest of the season.

System Operation

The Barrages were gradually closed during the week, in order to conserve water for the future. However, the new rock ramp fishway in the Tauwitchere Barrage will continue operating for some time. Monitoring has revealed significant numbers of small and large fish using the fishway.

The capacity of Lake Victoria has been revised following resurveying of the lake (about 3GL less at full supply level). The introduction of this revision will not significantly alter water availability to the States.

Seasonal Outlook

Analysis of River Murray System inflows shows that a dry winter, with low runoff, is generally followed by low system inflows for the remainder of the season, as follows:

- Inflows above the median level (ie. those that occur 10 years out of every 20 on average), will be reached much less frequently (about 3 years out of 20) following a dry winter; and
- Inflows below the level experienced in a bad drought (1 year out of every 10 on average), will occur more frequently (about 3 years out of 10) following a dry winter.

The relationship between dry winters and subsequent inflows has been observed over the last three years for the River Murray system. The inflows from June to August this year again indicate a high probability of receiving less than average inflows over the remainder of the season.

DAVID DREVERMAN General Manager

MEDIA RELEASE

Tuesday, 31 August 2004



Increase in Release from Dartmouth Reservoir

Trim Ref: 04/10096DO

River Murray Water (RMW) announced today that the rate of transfer of water from Dartmouth Reservoir to Hume Reservoir would be increased to further supplement storage in Hume in preparation for the coming irrigation and water supply season.

RMW General Manager, Mr David Dreverman said the increase is needed because of the low storage volume in Hume Reservoir.

"Storage in Hume is currently 26% of capacity, which is well below average for this time of year", Mr Dreverman said. He added that this is despite the recent rain and subsequent small rise in storage level in Hume. In addition, the early demand on Dartmouth is significant this season because there is currently no Commission storage available in Menindee Lakes.

"A substantial volume of water is likely to be transferred from Dartmouth to Hume to meet downstream requirements over the remainder of 2004-05". Under very dry conditions, the volume required to be transferred may be up to about 1 800 GL, whereas under median conditions, the volume would be much less at about 600 GL. Under dry conditions, storage in Dartmouth and Hume would be drawn down to low levels by the end of the season.

Because of limited channel capacity in the Mitta Mitta River, it is often necessary to transfer water to Hume well in advance of periods of high water use along the River Murray.

This is to ensure that the combined requirements of South Australia, Victoria and New South Wales can be met throughout the irrigation season.

Mr Dreverman said the release from Dartmouth was currently at about 4 500 ML/day or about 2.15 m on the Colemans gauge in the Mitta Mitta River.

Beginning on the morning of Thursday 2 September, release is to be increased to about 5 500 ML/day (2.3 m gauge height) by noon on 2 September. Further downstream at Tallandoon, it is expected that the river level (currently about 2.7 m) will initially rise to about 2.8 m gauge height, and then vary between about 2.75 and 2.85 m gauge height.

However, greater variation in river level at Tallandoon might occur in response to significant rain and increased flows in tributaries of the Mitta River.

"In coming weeks, if conditions indicate that a prolonged period of transfer is required, it is expected that release from Dartmouth will be varied to mimic to some extent the variability of river levels seen under natural conditions," Mr Dreverman said.

"This mode of operation aims at providing environmental benefits including reduced impact on stream banks of the Mitta Mitta River."

The rate of transfer will continue to be kept under close review by River Murray Water in the light of conditions across the River Murray System. If there is a return to dry conditions, the rate of transfer would need to be further increased. However, significant improvements in inflow conditions across the River Murray System would reduce the volume of transfer required.

River Murray Water will provide further updates throughout the season on the program of release from Dartmouth Reservoir, particularly when significant changes are required.

For further information contact:

Lawrie Kirk

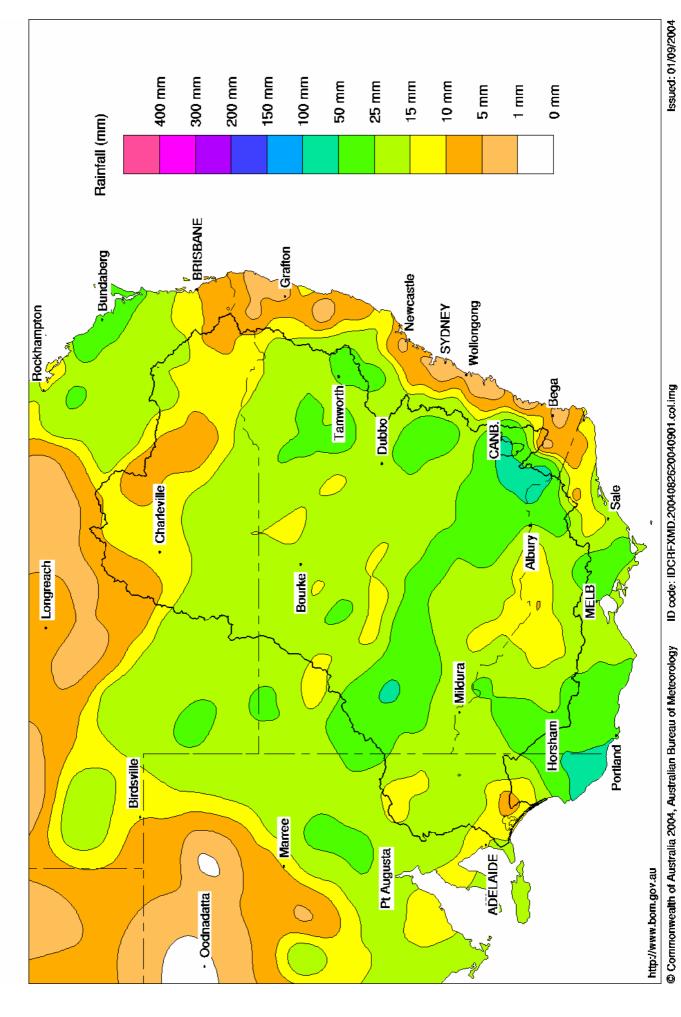
Manager Communication

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(Lawrie Kirk is not to be quoted as a spokesperson)

Murray Darling Rainfall Analysis (mm) Week Ending 1st September 2004 Product of the National Climate Centre



Week ending Wednesday 01 Sep 2004

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 | 448.61 | 1 887 | 48% | 80 | 1 807 | -12 |
| Hume Reservoir | 192.00 | 3 038 | 176.80 | 812 | 27% | 30 | 782 | +94 |
| Lake Victoria | 27.00 | 677 | 25.84 | 552 | 82% | 100 | 452 | +28 |
| Menindee Lakes | | 1 603 * | | 316 | 20% | 640 # | 0 | +2 |
| Total | • | 9 224 | | 3 568 | 39% | 850 | 3 042 | +112 |

^{*} Menindee surcharge capacity 1916 GL

% of Total Active MDBC Storage = 36

NSW Menindee Lakes Reserve

Note: The Lake Victoria capacity has changed from 680 GL to 677 GL (at full supply level) following a resurvey of the lake.

Major State Storages

| Burrinjuck Reservoir | 1 026 | 371 | 36% | 3 | 368 | -12 |
|----------------------|-------|-------|-----|-----|-------|-----|
| Blowering Reservoir | 1 631 | 294 | 18% | 24 | 270 | +0 |
| Eildon Reservoir | 3 390 | 1 109 | 33% | 100 | 1 009 | +31 |

Snowy Mountains Scheme

Snowy diversions for week ending 31-Aug-2004

| | Active | Weekly | | | From 1 | |
|------------------------|-------------------------------|--------|------------------|----------|----------|--|
| Storage | storage change Diversion (GL) | | This week | May 2004 | | |
| _ | (GL) | (GL) | | | May 2004 | |
| Lake Eucumbene - Total | 1 995 | +65 | Snowy-Murray | +5 | 239 | |
| Snowy-Murray Component | 840 | +28 | Tooma-Tumut | +10 | 77 | |
| Target Storage | 1 240 | | Nett Diversion | -4.6 | 162 | |
| | | | Murray 1 Release | +19 | 311 | |

Major Diversions from Murray and Lower Darling (GL)

| New South Wales | This week | From 1 July 2004 |
|-------------------------|-----------|---------------------|
| Murray Irrig. Ltd (Net) | 5.5 | 35.4 |
| Wakool System loss | 1.0 | 5.5 |
| Western Murray Irrig. | 0.2 | 1.5 |
| Licensed Pumps | 3.5 | 14.1 |
| Lower Darling | 0.2 | 1.0 |
| TOTAL | 10.5 | 57.6 |

| Victoria | This week | From 1 July 2004 |
|---------------------------------|-----------|------------------|
| Yarrawonga Main Channel (net) | 3.2 | 9 |
| Torrumbarry System + Nyah (net) | 21.3 | 50 |
| Sunraysia Pumped Districts | 1.4 | 5 |
| Licensed pumps - GMW (Nyah+u/s) | 0.4 | 1 |
| Licensed pumps - SRW | 2.8 | 19 |
| TOTAL | 29.2 | 84 |

Flow to South Australia (GL)

| Entitlement this month | 135 | |
|------------------------|------|----------------|
| Flow this week | 28.5 | (4 100 ML/day) |
| Flow so far this month | 4 | |
| Flow last month | 124 | |

Salinity (EC)

(microsiemens/cm @ 25° C)

| | Current | Average over the last | Average since |
|-------------------------|---------|-----------------------|---------------|
| | Current | week | 1 August 2004 |
| Swan Hill | 100 | 120 | 110 |
| Euston | 140 | 120 | 100 |
| Red Cliffs | 70 | 70 | 60 |
| Merbein | 80 | 80 | 60 |
| Burtundy (Darling) | 380 | 370 | 360 |
| Lock 9 | 110 | 110 | 120 |
| Lake Victoria | 180 | 150 | 190 |
| Berri | 270 | 270 | 300 |
| Waikerie | - | 480 | 480 |
| Morgan | 530 | 510 | 480 |
| Mannum | 560 | 540 | 510 |
| Murray Bridge | 490 | 490 | 520 |
| Milang (Lake Alex.) | 1 250 | 1 220 | 1 030 |
| Poltalloch (Lake Alex.) | 1 090 | 920 | 1 020 |
| Meningie (Lake Alb.) | 1 710 | 1 960 | 1 990 |
| Goolwa Barrages | 1 660 | 1 640 | 2 370 |



Week ending Wednesday 01 Sep 2004

River Levels and Flows

| Triver Levels and Flows | Minor | | | | | Average | Average flow last |
|----------------------------------|-------|-----------|---------|----------|-------|-----------|-------------------|
| | Flood | Gauge | height | Flow | Trend | flow this | week |
| | stage | | | | | week | |
| River Murray | (m) | local (m) | (m AHD) | (ML/day) | | (ML/day) | (ML/day) |
| Khancoban | - | - | - | 9 020 | F | 5 840 | 3 400 |
| Jingellic | 4.0 | 3.28 | 209.80 | 21 390 | R | 9 740 | 7 780 |
| Tallandoon (Mitta Mitta River) | 4.2 | 2.64 | 219.53 | 6 300 | F | 6 180 | 6 240 |
| Heywoods | 5.5 | 1.29 | 154.92 | 920 | F | 1 510 | 600 |
| Doctors Point | 5.5 | 2.03 | 150.50 | 4 220 | F | 3 620 | 2 340 |
| Albury | 4.3 | 1.07 | 148.51 | - | - | - | - |
| Corowa | 7.0 | 1.47 | 127.49 | 4 960 | R | 3 160 | 2 840 |
| Yarrawonga Weir (d/s) | 6.4 | 1.33 | 116.37 | 7 040 | S | 7 360 | 10 210 |
| Tocumwal | 6.4 | 1.83 | 105.67 | 7 500 | F | 8 390 | 11 270 |
| Torrumbarry Weir (d/s) | 7.3 | 1.48 | 80.03 | 3 900 | F | 5 420 | 6 420 |
| Swan Hill | 4.5 | 1.19 | 64.11 | 5 580 | F | 5 670 | 6 110 |
| Wakool Junction | 8.8 | 3.22 | 52.34 | 9 050 | R | 8 740 | 9 930 |
| Euston Weir (d/s) | 8.8 | 1.75 | 43.59 | 8 520 | R | 8 420 | 9 960 |
| Mildura Weir (d/s) | | - | 31.08 | 8 720 | F | 9 300 | 13 500 |
| Wentworth Weir (d/s) | 7.3 | 3.06 | 27.82 | 8 010 | S | 8 250 | 9 520 |
| Rufus Junction | - | 3.06 | 19.99 | 4 130 | R | 3 630 | 3 550 |
| Blanchetown (Lock 1 d/s) | - | - | - | 3 560 | R | 2 670 | 2 720 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 2.43 | 155.66 | 3 960 | R | 2 330 | 2 000 |
| Ovens at Wangaratta | 11.9 | 9.73 | 147.41 | 6 059 | R | 4 890 | 6 660 |
| Goulburn at McCoys Bridge | 9.0 | 1.23 | 92.65 | 490 | F | 520 | 780 |
| Edward at Stevens Weir (d/s) | - | - | - | 1 890 | F | 1 890 | 2 790 |
| Edward at Liewah | - | 2.86 | 58.24 | 2 490 | F | 2 590 | 2 600 |
| Wakool at Stoney Crossing | - | 0.60 | 55.09 | 700 | S | 680 | 490 |
| Murrumbidgee at Balranald | 5.0 | 0.49 | 56.45 | 224 | F | 220 | |
| Barwon at Mungindi | - | 3.19 | - | 40 | S | 30 | |
| Darling at Bourke | - | 3.99 | - | 92 | S | 80 | 80 |
| Darling at Burtundy Rocks | - | 0.66 | - | 26 | R | 20 | 20 |

| Natural Inflow to Hume (ie pre Dartmouth & Snowy M | Mountains scheme) 13 320 | 11 960 |
|--|--------------------------|--------|

Weirs and Locks

Pool levels above or below design level

| 110110 and 2 00 | Tonio dila Econo della d | | | | | | |
|------------------------|--|-------|-------|----------------------|-------------|-------|-------|
| Murray | FSL (m AHD) | u/s | d/s | | FSL (m AHD) | u/s | d/s |
| Yarrawonga | 124.90 | -0.12 | - | No. 7 Rufus River | 22.10 | +0.07 | +0.76 |
| No 26 Torrumbarry | 86.05 | -0.01 | - | No. 6 Murtho | 19.25 | +0.10 | +0.05 |
| No. 15 Euston | 47.60 | +0.00 | - | No. 5 Renmark | 16.30 | +0.05 | +0.14 |
| No. 11 Mildura | 34.40 | +0.03 | +0.28 | No. 4 Bookpurnong | 13.20 | +0.05 | +0.47 |
| No. 10 Wentworth | 30.80 | +0.03 | +0.42 | No.3 Overland Corner | 9.80 | +0.04 | +0.21 |
| No. 9 Kulnine | 27.40 | +0.01 | +0.04 | No. 2 Waikerie | 6.10 | +0.08 | +0.11 |
| No. 8 Wangumma | 24.60 | +0.04 | +0.12 | No 1. Blanchetown | 3.20 | +0.05 | +0.13 |

| Murrumbidgee | FSL | relation | d/s gauge ht. | | Flow |
|---------------|---------|----------|---------------|---------|----------|
| | (m AHD) | to FSL | local (m) | (m AHD) | (ML/day) |
| No. 7 Maude | 75.40 | -1.82 | 0.47 | 69.82 | 189 |
| No. 5 Redbank | 66.90 | -0.49 | 0.11 | 61.41 | 236 |

Barrages FSL = 0.75 m AHD

| | Openings | Level | Status |
|----------------|--------------|-------|------------|
| Goolwa | 128 openings | 0.90 | All closed |
| Mundoo | 26 openings | 0.88 | All closed |
| Boundary Creek | 6 openings | - | All closed |
| Ewe Island | 111 gates | - | All closed |
| Tauwitchere | 322 gates | 0.88 | All closed |



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