



# RIVER MURRAY WEEKLY REPORT

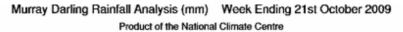
FOR THE WEEK ENDING WEDNESDAY, 21 OCTOBER 2009

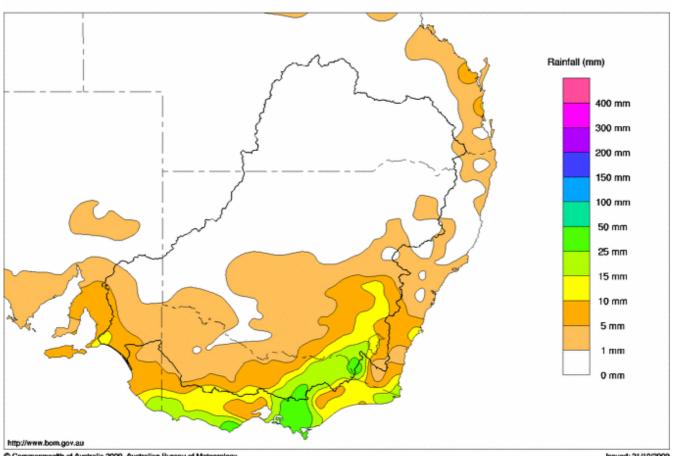
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## Rainfall and Inflows

During the past week the highest falls of rain (25-50 mm) were recorded in the Snowy Mountains of southern NSW and also in the upper reaches of the Goulburn River catchment in Victoria (see Map 1). Other regions across the southern Basin received light falls of rain (0 - 25 mm), while the northern Basin remained dry. Most of the rain fell early in the week (15<sup>th</sup> - 16<sup>th</sup> October), with a return to warm dry conditions in the second half of the week. In response, streamflows in the upper Murray and its tributaries are now steadily receding. For instance, at Hinnomunjie on the upper reaches of the Mitta Mitta River, the flow has receded from 4,240 to 2,540 ML/day. Similarly, at Jingellic on the Murray (upstream of Hume Reservoir) the flow has receded from 15,000 to 10,900 ML/day, and at Rocky Point on the Ovens River from 8,120 ML/day to 4,360 ML/day.

For the first 21 days of October, Murray System inflows have been 545 GL, which is already significantly above October inflows for the last 3 years (210 GL in 2008, 190 GL in 2007 and 80 GL in 2006). However, it is still well below the October long term average of 1,400 GL.





Commonwealth of Australia 2009, Australian Bureau of Meteorology

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## **River Operations**

MDBA active storage increased by 156 GL to 2,480 GL (or 29% capacity) and is expected to continue increasing over the coming week.

Storage in Dartmouth Reservoir increased by 44 GL to 1,075 GL (or 30 % capacity) and the release remains at the normal minimum of 200 ML/day. Storage in Hume Reservoir increased by 80 GL to 1,159 GL (39 % capacity) and the release is currently 2,700 ML/day.

The release from Yarrawonga Weir is 10,000 ML/day and is likely to remain fairly steady during the next few weeks to help meet downstream demands and also to transfer water to Lake Victoria. As the tributary inflows from the Kiewa and Ovens Rivers recede, the release from Hume Reservoir will be increased to maintain a steady flow downstream of Yarrawonga Weir.

At Stevens Weir on the Edward River, the release is currently about 1,400 ML/day and is likely to decrease slightly during the coming week while the weir pool is raised slightly. The weir pool raising will allow water to be delivered to the upper reaches of the Wakool River.

The diversion from Torrumbarry Weir into National Channel has been temporarily increased from 750 to 2,400 ML/day and is likely to remain at this rate for another one or two weeks while Goulburn-Murray Water fills Kow Swamp and other storages in the Torrumbarry Irrigation Area. As a result, the release from Torrumbarry Weir has reduced from 7,300 to 4,900 ML/day and will remain fairly steady during the coming week.

Further downstream, there is about 1,600 ML/day re-entering the Murray from the Edward-Wakool system, and a further 960 ML/day entering from the Murrumbidgee River.

After peaking earlier in the week at 10,500 ML/day, the release from Euston Weir has reduced slightly to 9,500 ML/day and is expected to reduce further during the coming week as the lower flows from Torrumbarry Weir arrive. The Euston Weir pool is currently at 47.48 m AHD (12 cm below Full Supply Level), and is likely to remain steady during the coming week. Both Mildura and Wentworth Weir pools are at Full Supply Level.

Storage in Menindee Lakes (which remains under NSW control) decreased by 5 GL to 202 GL (12 % capacity) and the Darling River upstream of Menindee has stopped flowing. The flow at Weir 32 on the lower Darling River (downstream of Menindee Lakes) is currently about 150 ML/day.

Storage in Lake Victoria increased by 32 GL to 345 GL (51 % capacity) and is expected to continue rising during the coming week. The flow to South Australia has been increased to 2,900 ML/day and further increases might be required during the coming week. The target flow past lock 1 is 1,200 ML/day.

The water level in Lake Alexandrina is steady at about -0.76 m AHD (or 1.51 m below FSL) and the water level in Lake Albert is -0.26 m AHD. The water level in Goolwa Channel (which is currently separated from Lake Alexandrina) has continued to rise (due to pumping and local inflows) and is now at +0.64 m AHD, which is close to the target water level of +0.7 m AHD.

For media inquiries contact: Sam Leone on 02 6279 0141

DAVID DREVERMAN Executive Director, River Murray





## Week ending Wednesday 21 Oct 2009

Water in Storage

| MDBA Storages       | Full    | Full    | Current |        |           | Dead    | MDBA    | Change in Total |
|---------------------|---------|---------|---------|--------|-----------|---------|---------|-----------------|
|                     | Supply  | Supply  | Storage | Currer | t Storage | Storage | Active  | Storage for the |
|                     | Level   | Volume  | Level   |        |           | Storage | Storage | week            |
|                     | (m AHD) | (GL)    | (m AHD) | (GL)   | %         | (GL)    | (GL)    | (GL)            |
| Dartmouth Reservoir | 486.00  | 3 906   | 428.72  | 1 155  | 30%       | 80      | 1 075   | +44             |
| Hume Reservoir      | 192.00  | 3 038   | 180.27  | 1 189  | 39%       | 30      | 1 159   | +80             |
| Lake Victoria       | 27.00   | 677     | 24.01   | 345    | 51%       | 100     | 245     | +32             |
| Menindee Lakes      |         | 1 731 * |         | 202    | 12%       | () #    | 0       | -5              |
| Total               |         | 9 352   |         | 2 891  | 31%       |         | 2 480   | +151            |

<sup>\*</sup> Menindee surcharge capacity 2050 GL

**Major State Storages** 

| Burrinjuck Reservoir | 1 026 | 437   | 43% | 3   | 434 | +11 |
|----------------------|-------|-------|-----|-----|-----|-----|
| Blowering Reservoir  | 1 631 | 648   | 40% | 24  | 624 | -4  |
| Eildon Reservoir     | 3 334 | 1 074 | 32% | 100 | 974 | +64 |

**Snowy Mountains Scheme** 

Snowy diversions for week ending 20-Oct-2009

|                        |         |        | · ·                   |       |            |
|------------------------|---------|--------|-----------------------|-------|------------|
|                        | Active  | Weekly |                       |       | From 1     |
| Storage                | storage | change | Diversion (GL) This w |       | May 2000   |
|                        | (GL)    | (GL)   |                       |       | IVIAY 2009 |
| Lake Eucumbene - Total | 1 187   | n/a    | Snowy-Murray          | +6    | 265        |
| Snowy-Murray Component | 577     | -      | Tooma-Tumut           | +18   | 199        |
| Target Storage         | 1 400   |        | Nett Diversion        | -12.3 | 66         |
|                        |         |        | Murray 1 Release      | +20   | 445        |

Major Diversions from Murray and Lower Darling (GL) \*

| New South<br>Wales      | This week | From 1<br>July 2009 |
|-------------------------|-----------|---------------------|
| Murray Irrig. Ltd (Net) | 5.7       | 52.2                |
| Wakool Sys Allowance    | 1.9       | 5.8                 |
| Western Murray Irrig.   | 0.4       | 3.0                 |
| Licensed Pumps          | 2.0       | 18.5                |
| Lower Darling           | 0.2       | 1.2                 |
| TOTAL                   | 10.2      | 80.9                |

| Victoria                        | This week | From 1 July<br>2009 |
|---------------------------------|-----------|---------------------|
| Yarrawonga Main Channel (net)   | 2.8       | 28                  |
| Torrumbarry System + Nyah (net) | 13.4      | 42                  |
| Sunraysia Pumped Districts      | 2.1       | 13                  |
| Licensed pumps - GMW (Nyah+u/s) | 0.1       | 1                   |
| Licensed pumps - LMW            | 6.3       | 41                  |
| TOTAL                           | 24.6      | 124                 |

<sup>\*</sup> Figures derived from Estimates and Monthly Data. Please note that not all data may have been available at the time of creating this report.

\*\* All Data is rounded to nearest 100 ML for the above\*\*

### Flow to South Australia (GL)

| Entitlement this month | 170 * |                |
|------------------------|-------|----------------|
| Flow this week         | 18.6  | (2 700 ML/day) |
| Flow so far this month | 51    |                |
| Flow last month        | 68    |                |
| *                      |       | <del>-</del> . |

<sup>\*</sup> Reduced to approx. 70 GL during October drought contingency operations

Salinity (EC) (microsiemens/cm @ 25° C)

|                        | Current | Average over the last | Average since |
|------------------------|---------|-----------------------|---------------|
|                        | Current | week                  | 1 August 2009 |
| Swan Hill              | 70      | 60                    | 70            |
| Euston                 | 70      | 70                    | 80            |
| Red Cliffs             | 80      | 80                    | 120           |
| Merbein                | 70      | 80                    | 110           |
| Burtundy (Darling)     | 630     | 620                   | 480           |
| Lock 9                 | 130     | 140                   | 160           |
| Lake Victoria          | 160     | 210                   | 220           |
| Berri                  | 420     | 440                   | 450           |
| Waikerie               | -       | =                     | 550           |
| Morgan                 | 680     | 680                   | 570           |
| Mannum                 | 590     | 590                   | 600           |
| Murray Bridge          | 710     | 700                   | 690           |
| Milang (Lake Alex.     | 5 260   | 4 990                 | 5 120         |
| Poltalloch (Lake Alex. | 4 940   | 4 940                 | 4 840         |
| Meningie (Lake Alb.    | 9 100   | 8 890                 | 9 170         |
| Goolwa Barrages        | 11 090  | 11 210                | 16 420        |

<sup>%</sup> of Total Active MDBA Storage = 29%

<sup>#</sup> NSW takes control of Menindee Lakes when storage falls below 480 GL, and control reverts to MDBA when storage next reaches 640 GL

<sup>\*\*</sup> All Data is rounded to nearest GL \*\*





## Week ending Wednesday 21 Oct 2009

#### **River Levels and Flows**

|                                  | Minor<br>Flood<br>stage | Gauge     | height  | Flow     | Trend | Average flow this week | Average flow last<br>week |
|----------------------------------|-------------------------|-----------|---------|----------|-------|------------------------|---------------------------|
| River Murray                     | (m)                     | local (m) | (m AHD) | (ML/day) |       | (ML/day)               | (ML/day)                  |
| Khancoban                        | -                       | -         | -       | 5 600    | F     | 5 850                  | 3 830                     |
| Jingellic                        | 4.0                     | 2.40      | 208.92  | 10 890   | F     | 12 390                 | 8 810                     |
| Tallandoon ( Mitta Mitta River ) | 4.2                     | 1.67      | 218.56  | 1 050    | F     | 1 240                  | 850                       |
| Heywoods                         | 5.5                     | 1.68      | 155.31  | 2 700    | R     | 2 270                  | 2 820                     |
| Doctors Point                    | 5.5                     | 2.15      | 150.62  | 5 500    | R     | 5 320                  | 5 260                     |
| Albury                           | 4.3                     | 1.18      | 148.62  | -        | -     | -                      | -                         |
| Corowa                           | 7.0                     | 1.40      | 127.42  | 5 020    | F     | 5 350                  | 4 230                     |
| Yarrawonga Weir (d/s)            | 6.4                     | 1.72      | 116.76  | 10 530   | S     | 9 980                  | 9 700                     |
| Tocumwal                         | 6.4                     | 2.24      | 106.08  | 10 150   | R     | 9 420                  | 9 500                     |
| Torrumbarry Weir (d/s)           | 7.3                     | 1.69      | 80.24   | 4 860    | R     | 5 610                  | 8 210                     |
| Swan Hill                        | 4.5                     | 1.15      | 64.07   | 5 480    | F     | 7 060                  | 8 160                     |
| Wakool Junction                  | 8.8                     | 2.87      | 51.99   | 7 670    | F     | 8 520                  | 7 970                     |
| Euston Weir (d/s)                | 8.8                     | 1.93      | 43.77   | 9 460    | F     | 10 170                 | 8 100                     |
| Mildura Weir (d/s)               |                         | -         | -       | 7 980    | F     | 7 900                  | 5 750                     |
| Wentworth Weir (d/s)             | 7.3                     | 3.17      | 27.93   | 7 720    | S     | 7 280                  | 4 850                     |
| Rufus Junction                   | -                       | 2.63      | 19.56   | 2 010    | R     | 2 060                  | 1 630                     |
| Blanchetown (Lock 1 d/s)         | -                       | -0.52     | -       | 1 150    | S     | 1 140                  | 1 070                     |
| Tributaries                      |                         |           |         |          |       |                        |                           |
| Kiewa at Bandiana                | 2.7                     | 2.46      | 155.69  | 3 590    | R     | 4 980                  | 2 500                     |
| Ovens at Wangaratta              | 11.9                    | 9.67      | 147.35  | 6 220    | F     | 7 920                  | 4 190                     |
| Goulburn at McCoys Bridge        | 9.0                     | 1.22      | 92.64   | 530      | R     | 400                    | 390                       |
| Edward at Stevens Weir (d/s)     | -                       | 1.55      | 81.32   | 1 370    | F     | 1 400                  | 1 520                     |
| Edward at Liewah                 | -                       | 2.17      | 57.55   | 1 510    | F     | 1 620                  | 1 300                     |
| Wakool at Stoney Crossing        | -                       | 1.08      | 54.57   | 40       | R     | 30                     | 30                        |
| Murrumbidgee at Balranald        | 5.0                     | 1.45      | 57.41   | 990      | F     | 950                    | 980                       |
| Barwon at Mungindi               | -                       | 2.82      | -       | 0        | F     | 0                      | 0                         |
| Darling at Bourke                | -                       | 3.76      | -       | 0        | F     | 0                      | 0                         |
| Darling at Burtundy Rocks        | -                       | 0.63      | -       | 10       | F     | 20                     | 30                        |

Natural Inflow to Hume (ie pre Dartmouth & Snowy Mountains scheme) 20 750 14 680

## Weirs and Locks

#### Pool levels above or below Full Supply Level (FSL)

| Murray            | FSL (mAHD) | u/s   | d/s   |                      | FSL (mAHD) | u/s   | d/s   |
|-------------------|------------|-------|-------|----------------------|------------|-------|-------|
| Yarrawonga        | 124.90     | -0.07 | -     | No. 7 Rufus River    | 22.10      | -0.03 | +0.34 |
| No 26 Torrumbarry | 86.05      | -0.01 | -     | No. 6 Murtho         | 19.25      | -0.06 | -0.03 |
| No. 15 Euston     | 47.60      | -0.12 | -     | No. 5 Renmark        | 16.30      | +0.01 | +0.05 |
| No. 11 Mildura    | 34.40      | +0.01 | +0.29 | No. 4 Bookpurnong    | 13.20      | -0.01 | +0.27 |
| No. 10 Wentworth  | 30.80      | +0.02 | +0.53 | No.3 Overland Corner | 9.80       | +0.05 | +0.08 |
| No. 9 Kulnine     | 27.40      | +0.05 | +0.05 | No. 2 Waikerie       | 6.10       | -0.01 | +0.09 |
| No. 8 Wangumma    | 24.60      | +0.08 | +0.19 | No 1. Blanchetown    | 3.20       | +0.04 | -1.27 |

| Murrumbidgee  | FSL     | relation | d/s gauge ht. |         | Flow     |
|---------------|---------|----------|---------------|---------|----------|
|               | (m AHD) | to FSL   | local (m)     | (m AHD) | (ML/day) |
| No. 7 Maude   | 75.40   | -0.21    | 1.255         | 70.605  | 1202     |
| No. 5 Redbank | 66.90   | +0.04    | 0.945         | 62.245  | 1153     |

### **Lower Lakes**

#### FSL = 0.75 m AHD

|  | (m AHD) |
|--|---------|
| Lake Alexandrina average level for the past 5 days | -0.76   |

**Barrages** 

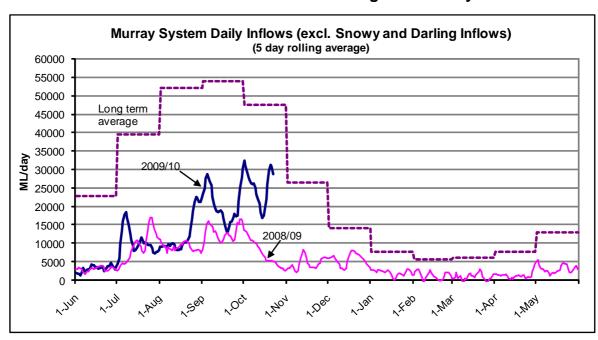
| Fishways @ Barrages |
|---------------------|
|---------------------|

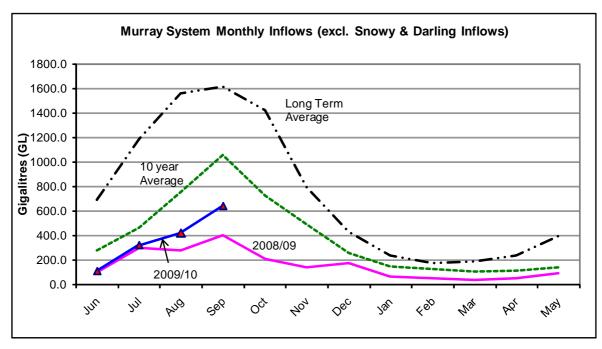
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|----------------|--------------|---------------|------------|-------------------|--------------|
| ·              | Openings     | Level (m AHD) | Status     | Rock Ramp         | Vertcal Slot |
| Goolwa         | 128 openings | 0.64          | All closed | -                 | Closed       |
| Mundoo         | 26 openings  | -0.70         | All closed | -                 | =            |
| Boundary Creek | 6 openings   | -             | All closed | -                 | =            |
| Ewe Island     | 111 gates    | -             | All closed | -                 | -            |
| Tauwitchere    | 322 gates    | -             | All closed | Closed            | Closed       |





## Week ending Wednesday 21st October 2009





#### State Allocations (as at 22nd October 2009)

| NSW - Murray Valley |     |
|---------------------|-----|
| High security       | 97% |
| General security    | 9%  |

| High security    | 95% |
|------------------|-----|
| General security | 11% |

High security

General security

| high reliability           | 3      |
|----------------------------|--------|
| South Australia - Murray V | 'alley |
|                            |        |

37%

Victoria - Murray Valley

high reliability

 $\begin{array}{lll} \textbf{NSW}: & \underline{\text{http://www.water.nsw.gov.au/About-us/Media-releases/media/default.aspx}} \\ \textbf{VIC}: & \underline{\text{http://www.g-mwater.com.au/water-resources/allocations/current.asp}} \\ \end{array}$ 

100%

SA: http://www.dwlbc.sa.gov.au/media.html