



RIVER MURRAY WEEKLY REPORT

FOR THE WEEKS ENDING WEDNESDAY, 25TH DECEMBER 2013 & 1ST JANUARY 2014

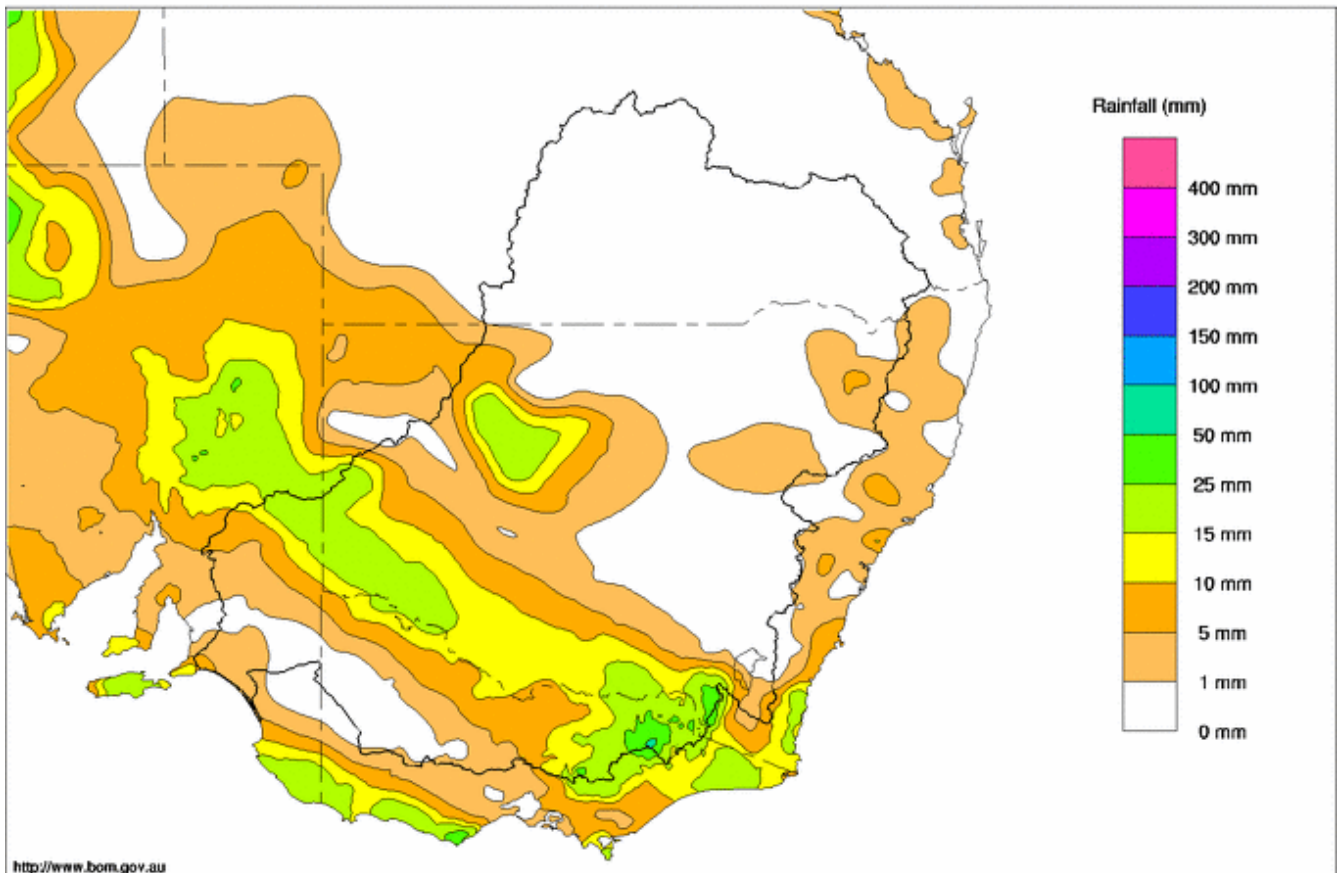
Trim Ref: D14/53

Rainfall and Inflows

Very hot conditions were experienced in the first half of the week ending 25 December 2013. Later in the week, cooler conditions prevailed in the south as a trough and associated cloud band produced widespread showers and some moderate falls along the NSW – Victorian border region and in northeast Victoria. Highest totals were recorded in the southeast ranges (Map 1).

In Victoria, 43 mm was recorded at Mount Hotham AWS, 42 mm at Rocky Valley, and 36 mm at Falls Creek AWS in the upper northeast. In the lower northeast 26 mm was recorded at Tallangatta, 25 mm at Mount Wombat and 24 mm at Lake Dartmouth, while in the northern Mallee 17 mm was recorded at Mildura and Redcliffs. In NSW, 34 mm was recorded at Charlotte Pass, Perisher Valley and Thredbo AWS in the southern tablelands, while on the southwest slopes 23 mm was recorded at Cabramurra AWS, 22 mm at Tumbarumba and 21 mm at Hume Reservoir and Khancoban AWS. In the Riverina 18 mm was recorded at Moulamein, while further west 25 mm was recorded at Burta, 21 mm at Tilpa, 20 mm at Willow Point and 19 mm at Broken Hill, Burtundy Station, Langwell and Wamberra.

Murray-Darling Rainfall Totals (mm) Week Ending 25th December 2013
Product of the National Climate Centre



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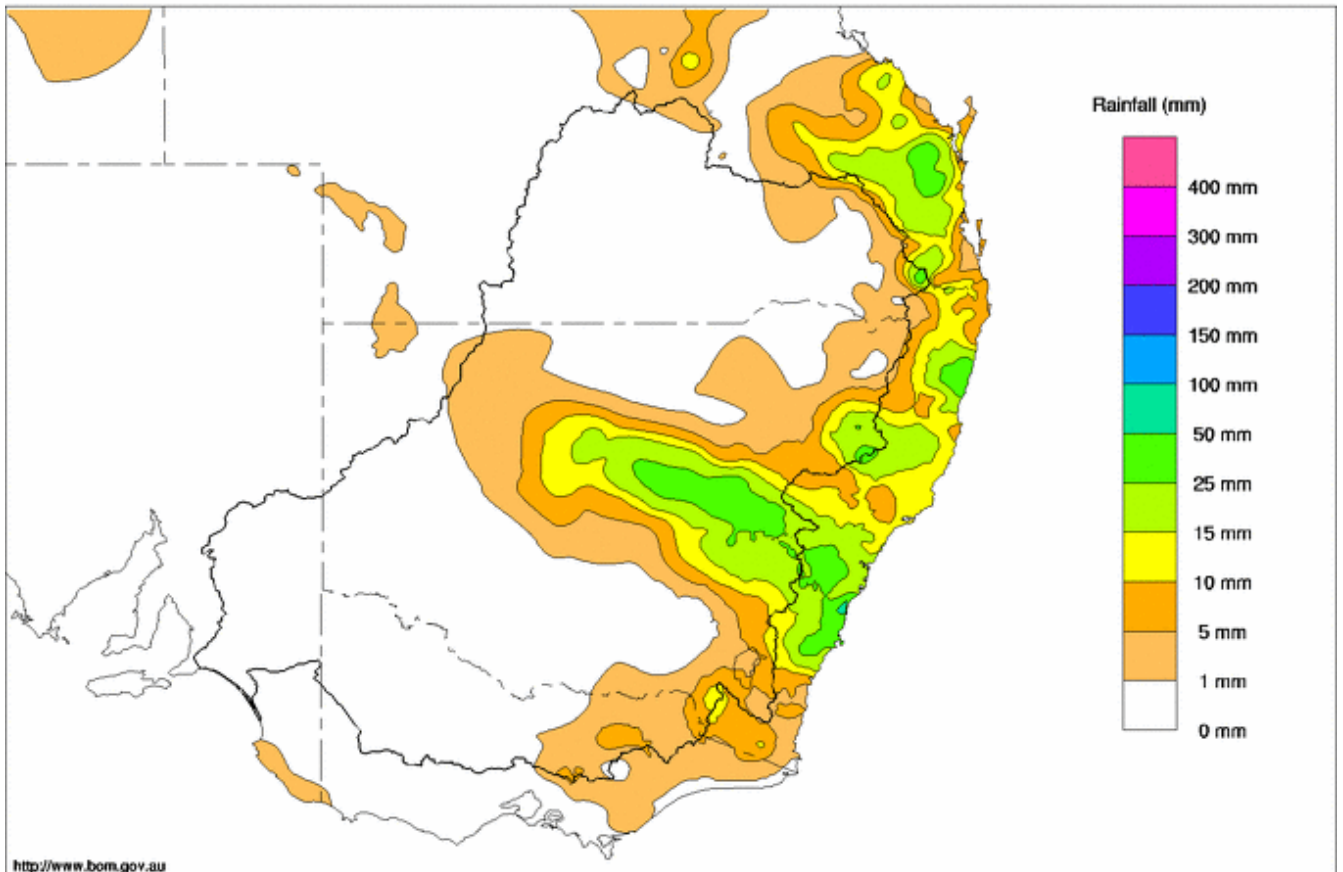
Issued: 25/12/2013

Map 1 - Murray-Darling Basin rainfall for the week ending 25 December 2013 (Source: Bureau of Meteorology)



In the following week (ending 1 January 2014), rainfall was recorded predominantly in central NSW with lesser falls along the eastern edge of the Basin (Map 2). In NSW, notable totals include 42 mm at Geurie PO, 40 mm at Dubbo AP AWS and 36 mm at Wellington on the central western slopes; 34 mm at Hill End, 31 mm at Mudgee AP AWS and 24 mm at Bathurst AP AWS on the central tablelands; and 31 mm at Mudall, 25 mm at Trangie AWS and 24 mm at Nyngan on the central western plains.

Murray-Darling Rainfall Totals (mm) Week Ending 1st January 2014
Product of the National Climate Centre



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Issued: 01/01/2014

Map 2 - Murray-Darling Basin rainfall for the week ending 1 January 2014 (Source: Bureau of Meteorology)

The upper Murray tributaries responded briefly to the rainfall prior to Christmas and have been receding since. On the Mitta Mitta River, the flow at Hinnomunjie Bridge peaked around 1,100 ML/day and is currently 300 ML/day. On the upper Murray, the flow at Biggara reached 1,000 ML/day and is currently around 600 ML/day. On the Ovens River the flow at Rocky Point peaked around 950 ML/day and is currently 450 ML/day.

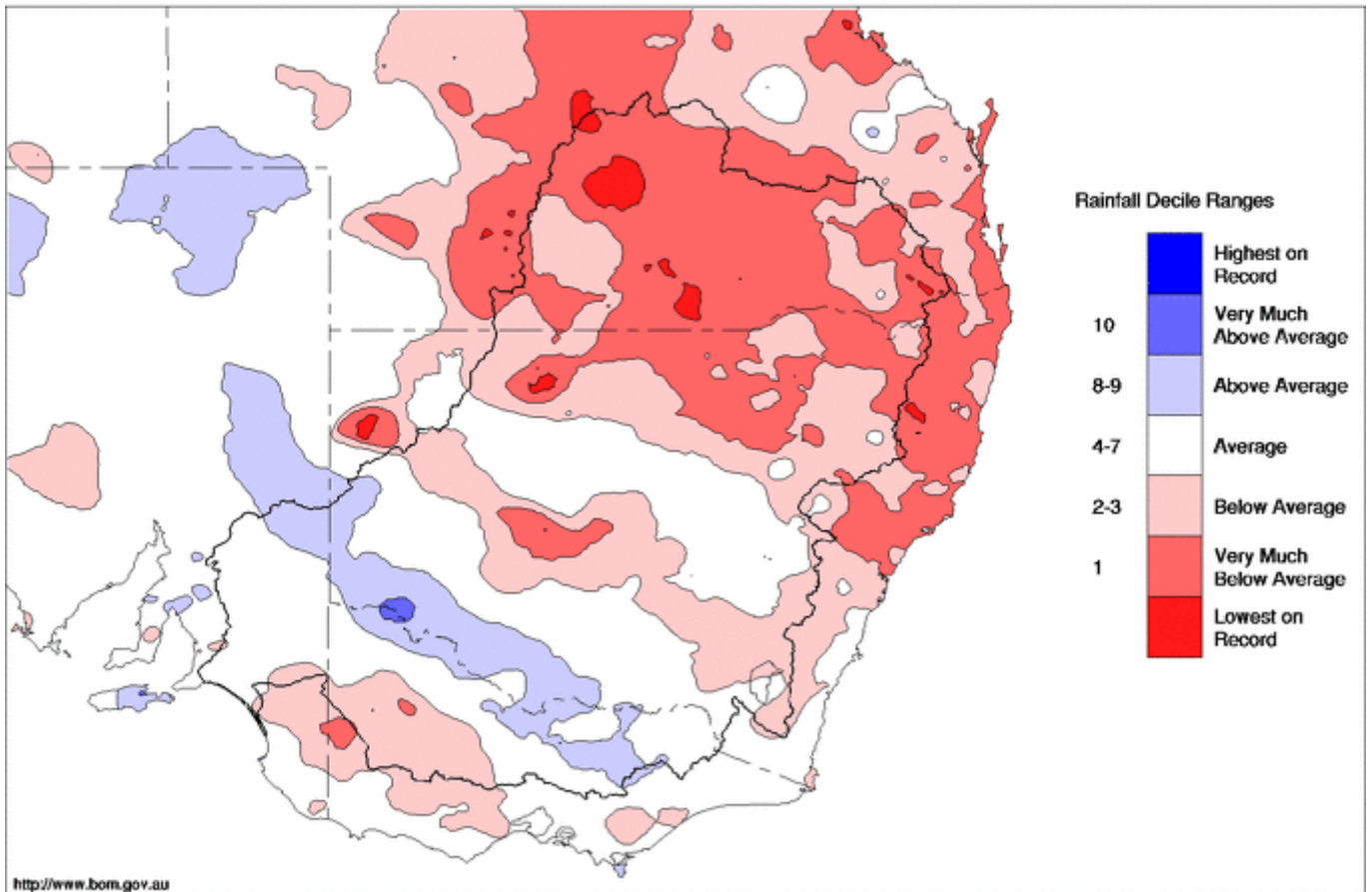
December 2013 Summary

December was relatively dry across most of the Murray-Darling Basin, except for a narrow band of above-average rainfall centred along the River Murray (see Map 3). Wentworth, at the junction of the Murray and Darling Rivers, received about 56 mm rain in December compared with its long-term average of 22 mm.



Murray-Darling Rainfall Deciles December 2013

Distribution Based on Gridded Data
Product of the National Climate Centre



<http://www.bom.gov.au>

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Issued: 31/12/2013

Map 3 - Murray-Darling Basin rainfall deciles for December 2013 (Source: Bureau of Meteorology)

Some areas in the west and north of the basin received almost no rainfall at all during December, including Charleville (1.6 mm), Augathella (1.4 mm), Wilcannia (0.5 mm) and Wanaaring, Thargomindah and Quilpie (all 0 mm).

Maximum temperatures across the basin in December were 1–3 degrees Celsius above the long-term monthly average, while minimum temperatures were closer to average.

The total Murray system inflow for December 2013 (excluding Darling and Snowy inflows, and tributary inflows of trade and environmental water) was about 180 GL, compared with an estimated 165 GL last year and a long-term average of about 450 GL.

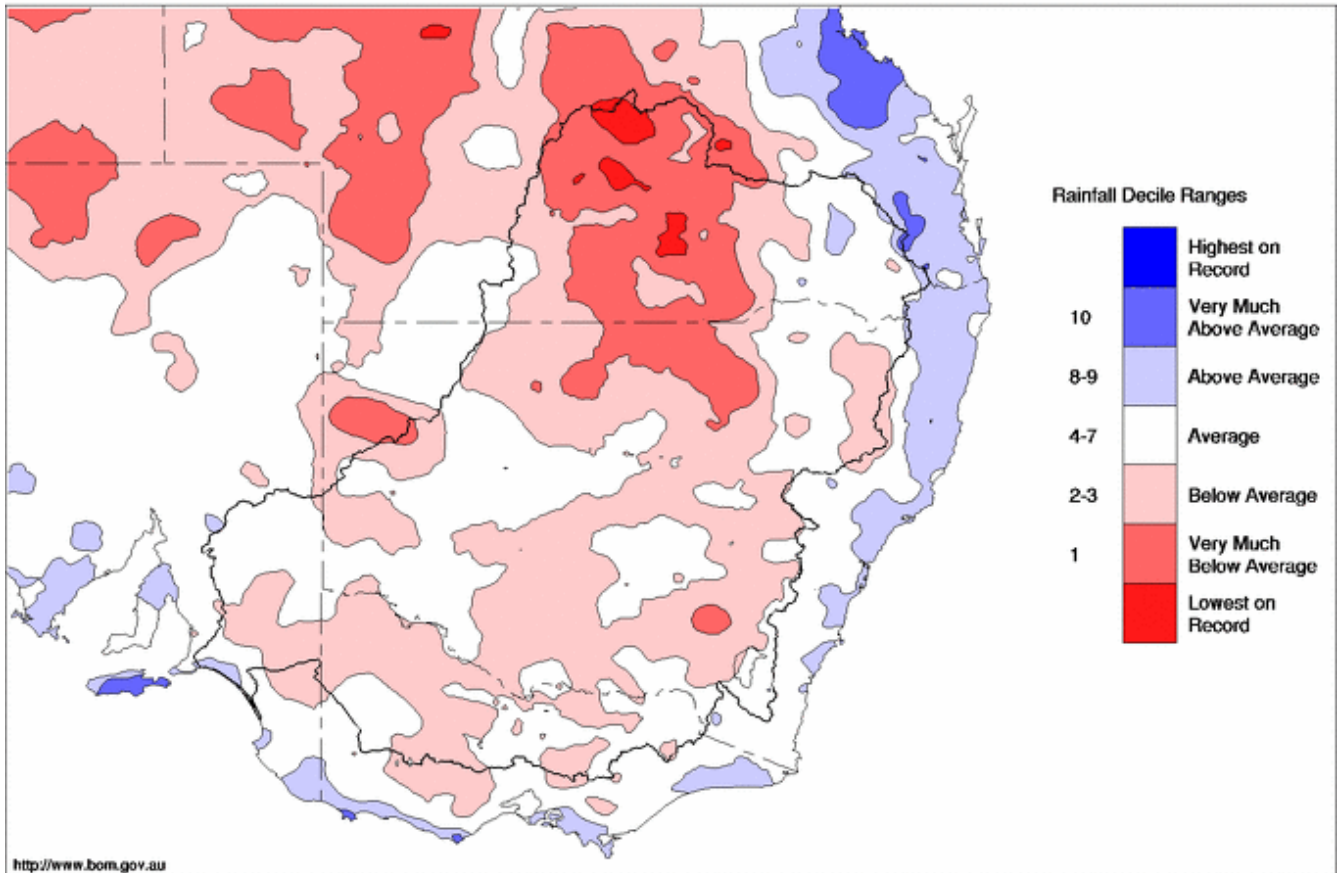
2013 Rainfall Summary

Rainfall during 2013, Australia's hottest year on record, was average to very much below average across large swathes of the Murray-Darling Basin (see Map 4). Some areas in western Queensland recorded their lowest rainfall on record, while a few small areas in the Darling Downs in Queensland, and around the Lower Lakes in South Australia, recorded above average rainfall.



Murray-Darling Rainfall Deciles 1 January to 31 December 2013

Distribution Based on Gridded Data
Product of the National Climate Centre



<http://www.bom.gov.au>

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Issued: 31/12/2013

Map 4 - Murray-Darling Basin rainfall deciles for 1 January to 31 December 2013 (Source: Bureau of Meteorology)

Despite the generally dry conditions, there were some notable rainfall events during 2013, including:

- In late January, Tropical Cyclone Oswald dumped heavy rain in south-east Queensland and northern NSW, with falls in excess of 150 mm along the crest of the Great Divide and around Goondiwindi (Queensland) and Pallamallawa (NSW). This rain contributed to high flows and areas of flooding along several Barwon-Darling River tributaries.
- Most of the Murray-Darling Basin recorded at least 25 mm rain in early March, with wide-ranging locations such as Goondiwindi, Khancoban (southern NSW), and Tamworth (northern NSW) recording more than 100 mm.
- More than 100 mm rain was also recorded in the Victorian Alps in late March. The Victorian Alps again received more than 100 mm rain in early June, along with parts of the Snowy Mountains. These areas continued to record average to above average rainfall during July and August.
- The Mount Lofty Ranges in South Australia recorded good falls of rain June and July.
- November brought some welcome rain to the ACT and surrounds, with 88 mm recorded at Gungahlin. A couple of weeks later, the northern tablelands and slopes of NSW had some good falls of rain with 96 mm recorded at Barraba.

River Operations

MDBA active storage decreased by 303 GL over the past two weeks and is currently 6,454 GL (75% capacity). Dartmouth Reservoir is currently holding 3,683 GL (96% capacity) which is a decrease of 45 GL in the last two weeks. The release from the reservoir has been steady at 4,000 ML/day at Colemans gauge. On Monday morning, 6 January, the release will be increased to 6,000 ML/day to continue “harmony” transfers to Hume Reservoir. These “harmony” transfers reduce the risk of Dartmouth Reservoir spilling in the coming winter-spring and improve summer water levels in Hume



Reservoir while still ensuring the security of future water supplies. Releases of between 4,000–6,000 ML/day from Dartmouth Reservoir are likely to continue throughout January.

At Hume Reservoir, the storage volume reduced by 159 GL to 2,148 GL (71% capacity). At Doctors Point, the flow has varied between 16,000 and 20,500 ML/day during the last 2 weeks, depending on forecast demand for irrigation diversions from Lake Mulwala. The flow at Doctors Point is currently 16,500 ML/day (2 January) and is likely to increase in the next few days.

At Yarrawonga Weir, the pool level has been above 124.8 m AHD for most of the last 2 weeks, and reached a high of 124.97 m AHD on 28 December. At this time of year, a pool level between 124.75–124.9 m AHD is targeted to ensure that irrigation diversions can be supplied whilst also meeting, but not exceeding, downstream demand. Release from Yarrawonga Weir has been steady for the last two weeks at 10,300 ML/day but is expected to be reduced towards 9,700 ML/day over the next few days.

Flow into the Edward River system, through the Edward River and Gulpa Creek offtakes, has reduced from 2,600 ML/day two weeks ago to a current total of 2,300 ML/day. For the next few weeks, the flow through Edward River offtake is expected to remain close to the normal summer maximum of 1,600 ML/day while a flow of 600 ML/day is being targeted for Gulpa Creek to supply environmental water to the Reed Beds wetland for maintenance of bird breeding.

At Toonalook, flow in the Edward River has been gradually receding and is currently 2,400 ML/day. Diversions to the Wakool River are about 130 ML/day with about 450 ML/day flowing into Yallakool Creek. Wakool Main Canal diversions have been gradually increasing and are now 1,500 ML/day. The flow downstream of Stevens Weir reached a high of 2,450 ML/day on 27 December but is expected to recede to about 1,200 ML/day in the next few days. The flow in the Edward River at Moulamein is expected to reach about 1,600 ML/day during the weekend then slowly recede. In the Wakool River at Kyalite the flow is expected to remain above 2,000 ML/day for the next week or so.

On the Goulburn River at McCoys Bridge, the flow has been receding to 990 ML/day and is expected to remain about 950 ML/day for the next week. At Torrumbarry Weir, the flow downstream has receded to 5,800 ML/day, which is the lowest flow since late July 2013. The flow is expected to continue receding towards 5,000 ML/day by mid-January.

At Balranald on the Murrumbidgee River, the flow has receded to about 270 ML/day but is expected to rise towards 1,000 ML/day in the next week or so. Downstream on the Murray at Euston, flow has dropped below 10,000 ML/day for the first time since early August 2013 and is currently 9,600 ML/day. This flow is expected to continue receding to below 6,000 ML/day by mid-January.

At Mildura Weir, the lock was closed for urgent repairs from 23–29 December (see attached media release). Flow downstream of the weir has been steadily receding since Christmas and is expected to continue falling during the coming week. At Wentworth Weir, the flow is 12,500 ML/day and receding.

Total storage in Menindee Lakes fell by 112 GL over the last two weeks to 695 GL (40% capacity). The release to the lower Darling River will continue to be reduced over the coming weeks (see attached flow advice).

At Lake Victoria, the storage volume has risen by 12 GL during the last two weeks and is currently 602 GL (89% capacity). The flow to South Australia has receded from a high of about 14,200 ML/day on Christmas Day to about 11,000 ML/day currently. Flows to SA which are above the normal monthly entitlement have been supplied from environmental water accounts. During the next week, the flow to South Australia is expected to reduce to about 7,000 ML/day.

At the Lower Lakes, the 5-day average level for Lake Alexandrina is 0.74 m AHD. The estimated release through the barrages was about 1,300 ML/day two weeks ago but is now about 800 ML/day.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Management



Water in Storage

Week ending Wednesday 25 Dec 2013

| MDBA Storages | Full Supply Level | Full Supply Volume (GL) | Current Storage Level | Current Storage | | Dead Storage (GL) | Active Storage (GL) | Change in Total Storage for the Week (GL) |
|---------------------------|-------------------|----------------------------|-----------------------|-----------------|------------|----------------------|------------------------|--|
| | (m AHD) | | (m AHD) | (GL) | % | | | |
| Dartmouth Reservoir | 486.00 | 3 856 | 483.73 | 3 709 | 96% | 71 | 3 638 | -19 |
| Hume Reservoir | 192.00 | 3 005 | 187.83 | 2 234 | 74% | 23 | 2 211 | -73 |
| Lake Victoria | 27.00 | 677 | 26.30 | 592 | 87% | 100 | 492 | +2 |
| Menindee Lakes | | 1 731* | | 746 | 43% | (480 #) | 266 | -61 |
| Total | | 9 269 | | 7 281 | 79% | -- | 6 607 | -151 |
| Total Active MDBA Storage | | | | | | | 77% ^ | |

Major State Storages

| | | | | | | |
|----------------------|-------|-------|-----|-----|-------|-----|
| Burrinjuck Reservoir | 1 026 | 579 | 56% | 3 | 576 | -43 |
| Blowering Reservoir | 1 631 | 1 419 | 87% | 24 | 1 395 | +21 |
| Eildon Reservoir | 3 334 | 2 933 | 88% | 100 | 2 833 | -19 |

* Menindee surcharge capacity – 2050 GL

** All Data is rounded to nearest GL **

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

^ % of total active MDBA storage

Snowy Mountains Scheme

Snowy diversions for week ending 24 Dec 2013

| Storage | Active Storage (GL) | Weekly Change (GL) | Diversions (GL) | This Week | From 1 May 2013 |
|------------------------|---------------------|--------------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | 1 623 | -36 | Snowy-Murray | +13 | 591 |
| Snowy-Murray Component | 766 | -4 | Tooma-Tumut | +7 | 231 |
| Target Storage | 1 510 | | Net Diversion | 6 | 359 |
| | | | Murray 1 Release | +16 | 864 |

Major Diversions from Murray and Lower Darling (GL) *

| New South Wales | This Week | From 1 July 2013 | Victoria | This Week | From 1 July 2013 |
|---------------------------|-------------|------------------|---------------------------------|--------------|------------------|
| Murray Irrig. Ltd (Net) | 43.9 | 545 | Yarrowonga Main Channel (net) | 9.8 | 163 |
| Wakool Sys Allowance | 2.8 | 9 | Torrumbarry System + Nyah (net) | 17 | 236 |
| Western Murray Irrigation | 1.1 | 12 | Sunraysia Pumped Districts | 4.9 | 57 |
| Licensed Pumps | 7.2 | 108 | Licensed pumps - GMW (Nyah+u/s) | 125.3 | 136 |
| Lower Darling | 5.7 | 141 | Licensed pumps - LMW | 7.5 | 122 |
| TOTAL | 60.7 | 815 | TOTAL | 164.5 | 714 |

* 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 above is rounded to nearest 100 ML for weekly data and nearest GL for cumulative data**

Flow to South Australia (GL)

* Flow to SA will be greater than normal entitlement for this month due to the delivery of additional environmental water.

| | | |
|------------------------|---------|-----------------|
| Entitlement this month | 217.0 * | |
| Flow this week | 88.4 | (12 600 ML/day) |
| Flow so far this month | 299.1 | |
| Flow last month | 388.8 | |

Salinity (EC) (microSiemens/cm at 25° C)

| | Current | Average over the last week | Average since 1 August 2013 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | 70 | 50 | 90 |
| Euston | 70 | 80 | 100 |
| Red Cliffs | 90 | 90 | 110 |
| Merbein | 100 | 100 | 120 |
| Burtundy (Darling) | 540 | 560 | 510 |
| Lock 9 | 180 | 180 | 140 |
| Lake Victoria | 200 | 190 | 270 |
| Berri | 250 | 260 | 260 |
| Waikerie | 250 | 260 | 320 |
| Morgan | 260 | 250 | 300 |
| Mannum | 260 | 250 | 350 |
| Murray Bridge | 250 | 240 | 370 |
| Milang (Lake Alex.) | 680 | 680 | 650 |
| Poltalloch (Lake Alex.) | 530 | 520 | 540 |
| Meningie (Lake Alb.) | 2 760 | 2 760 | 2 600 |
| Goolwa Barrages | 810 | 800 | 1 480 |



River Levels and Flows

Week ending Wednesday 25 Dec 2013

| 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 | - | - | - | 440 | S | 1 950 | 4 850 |
| Jingellic | 4.0 | 1.44 | 207.96 | 2 420 | R | 3 760 | 5 530 |
| Tallandoon (Mitta Mitta River) | 4.2 | 2.46 | 219.35 | 4 190 | F | 4 230 | 5 280 |
| Heywoods | 5.5 | 3.21 | 156.84 | 17 220 | F | 18 690 | 16 070 |
| Doctors Point | 5.5 | 3.21 | 151.68 | 17 330 | F | 18 810 | 16 880 |
| Albury | 4.3 | 2.24 | 149.68 | - | - | - | - |
| Corowa | 3.8 | 3.77 | 129.79 | 19 450 | R | 18 560 | 15 030 |
| Yarrowonga Weir (d/s) | 6.4 | 1.69 | 116.73 | 10 240 | S | 10 350 | 10 500 |
| Tocumwal | 6.4 | 2.36 | 106.20 | 10 150 | R | 10 210 | 10 510 |
| Torrumbarry Weir (d/s) | 7.3 | 2.95 | 81.50 | 9 040 | F | 11 530 | 15 170 |
| Swan Hill | 4.5 | 2.07 | 64.99 | 11 150 | F | 12 700 | 13 870 |
| Wakool Junction | 8.8 | 4.46 | 53.58 | 14 430 | F | 15 420 | 14 720 |
| Euston Weir (d/s) | 8.8 | 2.68 | 44.52 | 15 630 | F | 15 610 | 13 390 |
| Mildura Weir (d/s) | - | - | - | - | F | - | - |
| Wentworth Weir (d/s) | 7.3 | 3.55 | 28.31 | 17 490 | R | 14 750 | 11 290 |
| Rufus Junction | - | 4.49 | 21.42 | 13 420 | S | 11 960 | 9 480 |
| Blanchetown (Lock 1 d/s) | - | 0.90 | - | 9 330 | R | 6 890 | 8 570 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 1.07 | 154.30 | 610 | R | 570 | 520 |
| Ovens at Wangaratta | 11.9 | 8.16 | 145.84 | 1 020 | R | 790 | 1 150 |
| Goulburn at McCoys Bridge | 9.0 | 1.76 | 93.18 | 1 410 | F | 3 170 | 6 970 |
| Edward at Stevens Weir (d/s) | - | 1.69 | 81.46 | 1 560 | F | 1 220 | 1 270 |
| Edward at Liewah | - | 1.97 | 57.35 | 1 290 | F | 1 480 | 1 480 |
| Wakool at Stoney Crossing | - | 1.69 | 55.18 | 1 160 | F | 1 340 | 1 400 |
| Murrumbidgee at Balranald | 5.0 | 0.83 | 56.79 | 470 | F | 830 | 890 |
| Barwon at Mungindi | - | 3.21 | - | 130 | S | 120 | 100 |
| Darling at Bourke | - | 3.99 | - | 50 | S | 50 | 70 |
| Darling at Burtundy Rocks | - | 2.16 | - | 3 240 | R | 2 820 | 1 470 |

| | | |
|---|-------|-------|
| Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme) | 3 680 | 3 090 |
|---|-------|-------|

Weirs and Locks Pool levels above or below Full Supply Level (FSL)

| Murray | FSL (m AHD) | u/s | d/s | | FSL (m AHD) | u/s | d/s |
|--------------------|-------------|-------|-------|-----------------------|-------------|-------|-------|
| Yarrowonga | 124.90 | -0.03 | - | No. 7 Rufus River | 22.10 | +0.05 | +2.15 |
| No. 26 Torrumbarry | 86.05 | +0.01 | - | No. 6 Murtho | 19.25 | +0.03 | +0.62 |
| No. 15 Euston | 47.60 | +0.03 | - | No. 5 Renmark | 16.30 | +0.02 | +0.54 |
| No. 11 Mildura | 34.40 | +0.08 | +0.52 | No. 4 Bookpurnong | 13.20 | +0.08 | +1.32 |
| No. 10 Wentworth | 30.80 | +0.00 | +0.91 | No. 3 Overland Corner | 9.80 | +0.04 | +0.54 |
| No. 9 Kulnine | 27.40 | +0.01 | +0.37 | No. 2 Waikerie | 6.10 | +0.05 | +0.53 |
| No. 8 Wangumma | 24.60 | +0.02 | +0.67 | No. 1 Blanchetown | 3.20 | +0.01 | +0.15 |

Lower Lakes FSL = 0.75 m AHD

| | |
|--|------|
| Lake Alexandrina average level for the past 5 days (m AHD) | 0.73 |
|--|------|

Barrages

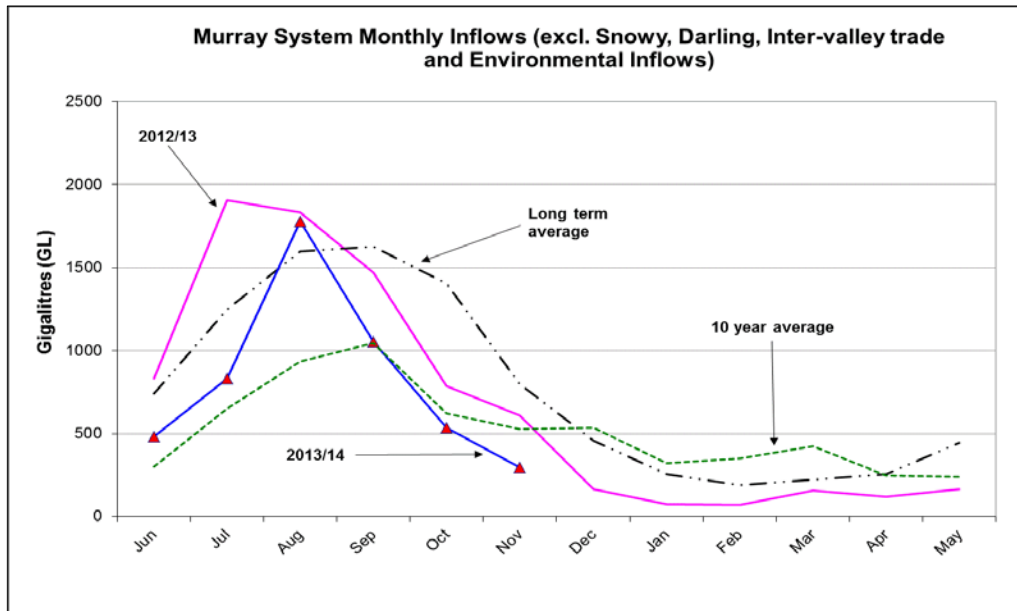
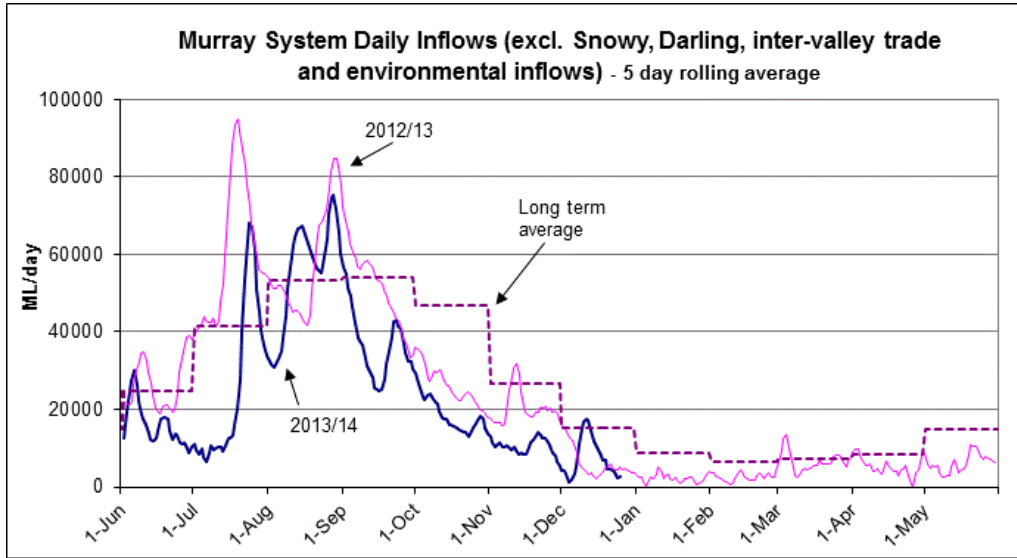
Fishways at Barrages

| | Openings | Level (m AHD) | No. Open | Rock Ramp | Vertical Slot |
|----------------|--------------|---------------|------------|-----------|---------------|
| Goolwa | 128 openings | 0.75 | 1 | - | Open |
| Mundoo | 26 openings | 0.72 | All closed | - | - |
| Boundary Creek | 6 openings | - | 0.1 | - | - |
| Ewe Island | 111 gates | - | All closed | - | - |
| Tauwichee | 322 gates | 0.77 | 4 | Open | Open |

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



Week ending Wednesday 25 Dec 2013



State Allocations (as at 25 Dec 2013)

NSW - Murray Valley

| | |
|------------------|------|
| High security | 100% |
| General security | 100% |

Victorian - Murray Valley

| | |
|------------------|------|
| High reliability | 100% |
| Low reliability | 0% |

NSW - Murrumbidgee Valley

| | |
|------------------|-----|
| High security | 95% |
| General security | 47% |

Victorian - Goulburn Valley

| | |
|------------------|------|
| High reliability | 100% |
| Low reliability | 0% |

NSW - Lower Darling

| | |
|------------------|------|
| High security | 100% |
| General security | 100% |

South Australia - Murray Valley

| | |
|---------------|------|
| High security | 100% |
|---------------|------|

NSW : <http://www.water.nsw.gov.au/Water-management/Water-availability/Water-allocations/Water-allocations-summary/water-allocations-summary/default.aspx>

VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>

SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>



Water in Storage

Week ending Wednesday 01 Jan 2014

| MDBA Storages | Full Supply Level | Full Supply Volume (GL) | Current Storage Level | Current Storage | | Dead Storage (GL) | Active Storage (GL) | Change in Total Storage for the Week (GL) |
|---------------------------|-------------------|----------------------------|-----------------------|-----------------|------------|----------------------|------------------------|--|
| | (m AHD) | | (m AHD) | (GL) | % | | | |
| Dartmouth Reservoir | 486.00 | 3 856 | 483.33 | 3 683 | 96% | 71 | 3 612 | -26 |
| Hume Reservoir | 192.00 | 3 005 | 187.32 | 2 148 | 71% | 23 | 2 125 | -86 |
| Lake Victoria | 27.00 | 677 | 26.38 | 602 | 89% | 100 | 502 | +10 |
| Menindee Lakes | | 1 731* | | 695 | 40% | (480 #) | 215 | -51 |
| Total | | 9 269 | | 7 128 | 77% | -- | 6 454 | -152 |
| Total Active MDBA Storage | | | | | | | 75% ^ | |

Major State Storages

| | | | | | | |
|----------------------|-------|-------|-----|-----|-------|-----|
| Burrinjuck Reservoir | 1 026 | 562 | 55% | 3 | 559 | -17 |
| Blowering Reservoir | 1 631 | 1 367 | 84% | 24 | 1 343 | -52 |
| Eildon Reservoir | 3 334 | 2 909 | 87% | 100 | 2 809 | -25 |

* Menindee surcharge capacity – 2050 GL

** All Data is rounded to nearest GL **

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

^ % of total active MDBA storage

Snowy Mountains Scheme

Snowy diversions for week ending 31 Dec 2013

| Storage | Active Storage (GL) | Weekly Change (GL) | Diversions (GL) | This Week | From 1 May 2013 |
|------------------------|---------------------|--------------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | 1 586 | -38 | Snowy-Murray | +0 | 591 |
| Snowy-Murray Component | 766 | -0 | Tooma-Tumut | +2 | 234 |
| Target Storage | 1 520 | | Net Diversion | -2 | 357 |
| | | | Murray 1 Release | +3 | 867 |

Major Diversions from Murray and Lower Darling (GL) *

| New South Wales | This Week | From 1 July 2013 | Victoria | This Week | From 1 July 2013 |
|---------------------------|-------------|------------------|---------------------------------|-------------|------------------|
| Murray Irrig. Ltd (Net) | 41.2 | 586 | Yarrowonga Main Channel (net) | 10.8 | 174 |
| Wakool Sys Allowance | 2.3 | 12 | Torrumbarry System + Nyah (net) | 0.2 | 245 |
| Western Murray Irrigation | 1.2 | 13 | Sunraysia Pumped Districts | 4.7 | 62 |
| Licensed Pumps | 5.7 | 114 | Licensed pumps - GMW (Nyah+u/s) | 0.7 | 137 |
| Lower Darling | 5.5 | 146 | Licensed pumps - LMW | 16 | 138 |
| TOTAL | 55.9 | 871 | TOTAL | 32.4 | 756 |

* 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 above is rounded to nearest 100 ML for weekly data and nearest GL for cumulative data**

Flow to South Australia (GL)

* Flow to SA will be greater than normal entitlement for this month due to the delivery of additional environmental water.

| | |
|------------------------|---------|
| Entitlement this month | 217.0 * |
| Flow this week | 85.6 |
| Flow so far this month | 10.7 |
| Flow last month | 374.1 |

(12 200 ML/day)

Salinity (EC) (microSiemens/cm at 25° C)

| | Current | Average over the last week | Average since 1 August 2013 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | - | 70 | 90 |
| Euston | 80 | 70 | 100 |
| Red Cliffs | 90 | 90 | 110 |
| Merbein | 100 | 100 | 120 |
| Burtundy (Darling) | 560 | 550 | 520 |
| Lock 9 | 230 | 220 | 150 |
| Lake Victoria | 200 | 210 | 260 |
| Berri | 210 | 210 | 260 |
| Waikerie | 280 | 260 | 320 |
| Morgan | 260 | 260 | 300 |
| Mannum | 270 | 260 | 350 |
| Murray Bridge | 250 | 260 | 360 |
| Milang (Lake Alex.) | 670 | 670 | 650 |
| Poltalloch (Lake Alex.) | 510 | 520 | 540 |
| Meningie (Lake Alb.) | 2 680 | 2 720 | 2 610 |
| Goolwa Barrages | 820 | 810 | 1 450 |



River Levels and Flows

Week ending Wednesday 01 Jan 2014

| 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 | - | - | - | 440 | F | 530 | 1 950 |
| Jingellic | 4.0 | 1.35 | 207.87 | 1 780 | R | 1 520 | 3 760 |
| Tallandoon (Mitta Mitta River) | 4.2 | 2.44 | 219.33 | 4 040 | F | 4 100 | 4 230 |
| Heywoods | 5.5 | 3.24 | 156.87 | 17 150 | F | 16 660 | 18 690 |
| Doctors Point | 5.5 | 3.21 | 151.68 | 17 200 | F | 16 900 | 18 810 |
| Albury | 4.3 | 2.25 | 149.69 | - | - | - | - |
| Corowa | 3.8 | 3.51 | 129.53 | 17 520 | R | 17 040 | 18 560 |
| Yarrowonga Weir (d/s) | 6.4 | 1.69 | 116.73 | 10 310 | S | 10 300 | 10 350 |
| Tocumwal | 6.4 | 2.33 | 106.17 | 9 950 | S | 10 000 | 10 210 |
| Torrumbarry Weir (d/s) | 7.3 | 2.04 | 80.59 | 5 760 | F | 6 710 | 11 530 |
| Swan Hill | 4.5 | 1.33 | 64.25 | 6 390 | F | 8 270 | 12 700 |
| Wakool Junction | 8.8 | 3.41 | 52.53 | 9 280 | F | 11 560 | 15 420 |
| Euston Weir (d/s) | 8.8 | 1.90 | 43.74 | 9 610 | F | 12 260 | 15 610 |
| Mildura Weir (d/s) | - | - | - | - | F | - | - |
| Wentworth Weir (d/s) | 7.3 | 3.27 | 28.03 | 12 470 | F | 15 620 | 14 750 |
| Rufus Junction | - | 4.03 | 20.96 | 10 030 | R | 11 560 | 11 960 |
| Blanchetown (Lock 1 d/s) | - | 0.82 | - | 9 100 | F | 9 860 | 6 890 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 0.90 | 154.13 | 410 | F | 470 | 570 |
| Ovens at Wangaratta | 11.9 | 7.97 | 145.65 | 550 | F | 730 | 790 |
| Goulburn at McCoys Bridge | 9.0 | 1.52 | 92.94 | 990 | S | 1 010 | 3 170 |
| Edward at Stevens Weir (d/s) | - | 1.80 | 81.57 | 1 700 | F | 2 130 | 1 220 |
| Edward at Liewah | - | 1.81 | 57.19 | 1 130 | R | 1 170 | 1 480 |
| Wakool at Stoney Crossing | - | 1.63 | 55.12 | 930 | F | 1 030 | 1 340 |
| Murrumbidgee at Balranald | 5.0 | 0.60 | 56.56 | 270 | F | 310 | 830 |
| Barwon at Mungindi | - | 3.16 | - | 40 | F | 130 | 120 |
| Darling at Bourke | - | 3.97 | - | 20 | S | 30 | 50 |
| Darling at Burtundy Rocks | - | - | - | 3 210 | F | 3 260 | 2 820 |

| | | |
|---|-------|-------|
| Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme) | 1 980 | 3 680 |
|---|-------|-------|

Weirs and Locks Pool levels above or below Full Supply Level (FSL)

| Murray | FSL (m AHD) | u/s | d/s | | FSL (m AHD) | u/s | d/s |
|--------------------|-------------|-------|-------|-----------------------|-------------|-------|-------|
| Yarrowonga | 124.90 | -0.05 | - | No. 7 Rufus River | 22.10 | +0.01 | +1.70 |
| No. 26 Torrumbarry | 86.05 | +0.00 | - | No. 6 Murtho | 19.25 | +0.04 | +0.44 |
| No. 15 Euston | 47.60 | +0.00 | - | No. 5 Renmark | 16.30 | +0.04 | +0.40 |
| No. 11 Mildura | 34.40 | +0.06 | +0.30 | No. 4 Bookpurnong | 13.20 | +0.10 | +1.14 |
| No. 10 Wentworth | 30.80 | +0.03 | +0.63 | No. 3 Overland Corner | 9.80 | -0.01 | +0.45 |
| No. 9 Kulnine | 27.40 | +0.04 | +0.24 | No. 2 Waikerie | 6.10 | +0.01 | +0.46 |
| No. 8 Wangumma | 24.60 | +0.01 | +0.39 | No. 1 Blanchetown | 3.20 | +0.02 | +0.07 |

Lower Lakes FSL = 0.75 m AHD

| | |
|--|------|
| Lake Alexandrina average level for the past 5 days (m AHD) | 0.74 |
|--|------|

Barrages

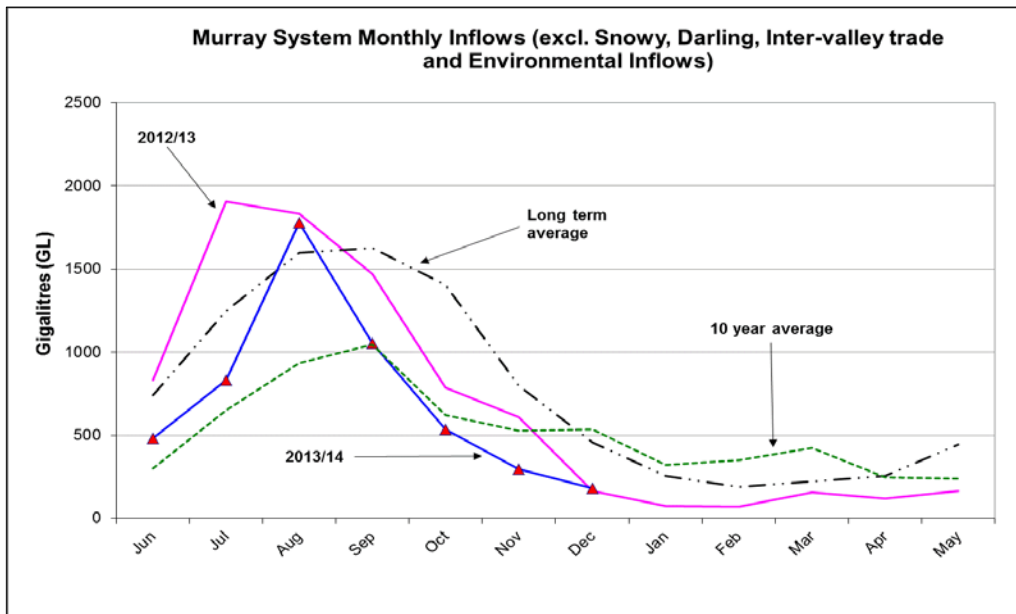
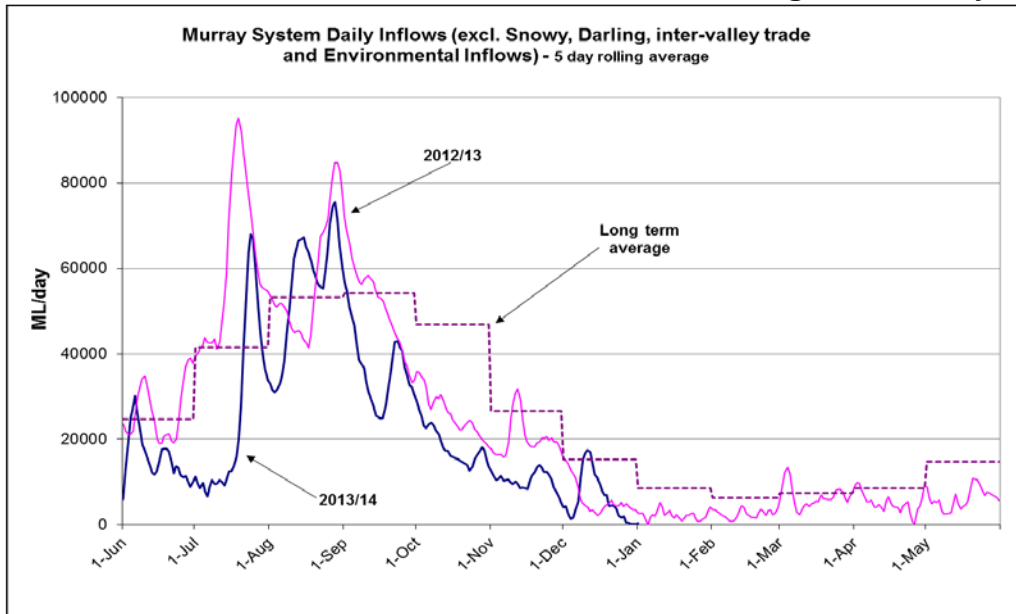
Fishways at Barrages

| | Openings | Level (m AHD) | No. Open | Rock Ramp | Vertical Slot |
|----------------|--------------|---------------|------------|-----------|---------------|
| Goolwa | 128 openings | 0.85 | 1 | - | Open |
| Mundoo | 26 openings | 0.81 | All closed | - | - |
| Boundary Creek | 6 openings | - | 0.1 | - | - |
| Ewe Island | 111 gates | - | All closed | - | - |
| Tauwichee | 322 gates | 0.78 | 2 | Open | Open |

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



Week ending Wednesday 01 Jan 2014



State Allocations (as at 01 Jan 2014)

NSW - Murray Valley

| | |
|------------------|------|
| High security | 100% |
| General security | 100% |

Victorian - Murray Valley

| | |
|------------------|------|
| High reliability | 100% |
| Low reliability | 0% |

NSW - Murrumbidgee Valley

| | |
|------------------|-----|
| High security | 95% |
| General security | 52% |

Victorian - Goulburn Valley

| | |
|------------------|------|
| High reliability | 100% |
| Low reliability | 0% |

NSW - Lower Darling

| | |
|------------------|------|
| High security | 100% |
| General security | 100% |

South Australia - Murray Valley

| | |
|---------------|------|
| High security | 100% |
|---------------|------|

NSW : <http://www.water.nsw.gov.au/Water-management/Water-availability/Water-allocations/Water-allocations-summary/water-allocations-summary/default.aspx>
 VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>
 SA : <http://www.environment.sa.gov.au/managing-natural-resources/river-murray>

MEDIA RELEASE



29 December 2013

Mildura lock resumes operations

Mildura's Lock 11 has resumed operations today following urgent repair work to one of its gates over the Christmas period.

The lock was closed after a timber seal on one of the upstream gates broke on Monday, 23 December.

Murray-Darling Basin Authority acting chief executive David Dreverman said Goulburn-Murray Water staff had carried out urgent repairs to get the lock operating again.

"We're very conscious that this stretch of river is popular for boaters during the Christmas holiday period, so Goulburn-Murray Water staff have worked as quickly as possible to get a temporary fix in place so boats can pass through the lock," Mr Dreverman said.

"We really appreciate the efforts of those staff who worked hard during the Christmas break to get the work done quickly and minimise the impact on boat users.

"We'd also like to thank community members and boat users for their patience and understanding while this essential work was completed."

Mr Dreverman said the temporary fix would mean further essential repair work would need to be done during winter 2014.

ENDS

For more information, contact the MDBA Media office at media@mdba.gov.au or 02 6279 0141 or Goulburn-Murray Water on 03 5826 3754.

Follow the MDBA http://twitter.com/MD_Basin_Auth

Join the discussion on the MDBA blog: <http://freeflow.mdba.gov.au/>

Lower Darling River flow advice



3 January 2014

Releases from Menindee Lakes reducing

Landholders and river users, including pumpers, are being encouraged to take note of the falling water levels in the lower Darling River, and to make necessary adjustments to their activities.

Releases from Menindee Lakes will continue to be gradually reduced towards the normal summer minimum of 350 ML/day (1.5 m local gauge height) by about early February.

The flow at Weir 32 is currently about 3,000 ML/day (2.2 m local gauge height) and will be reduced by about 100 ML/day each day, on average, starting Monday, January 6.

Downstream at Burtundy, the flow is currently about 3,000 ML/day (2.1 m local gauge height) and is expected to recede to about 1,000 ML/day (1.0 m local gauge height) by late January.

The reductions in flows will ensure that release from the lakes will be at a minimum when the combined storage volume of the Menindee Lakes falls to 480 GL.

Once the lake levels fall to 480 GL, management of the lakes becomes the responsibility of NSW. Responsibility returns to the MDBA once lake levels rise above 640 GL.

This flow forecast is dependent on weather conditions and operational requirements and assumes no significant rainfall or inflows.

A further flow advice will be issued if there are any significant changes to these planned releases.

Forecast flows and Menindee storage volumes are available on the MDBA website at www.mdba.gov.au/river-data/current-information-forecasts.

ENDS

Media enquiries can be directed to the MDBA Media Office at media@mdba.gov.au or 02 6279 0141.

Public enquiries can be directed to engagement@mdba.gov.au or 02 6279 0100.

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