



RIVER MURRAY WEEKLY REPORT

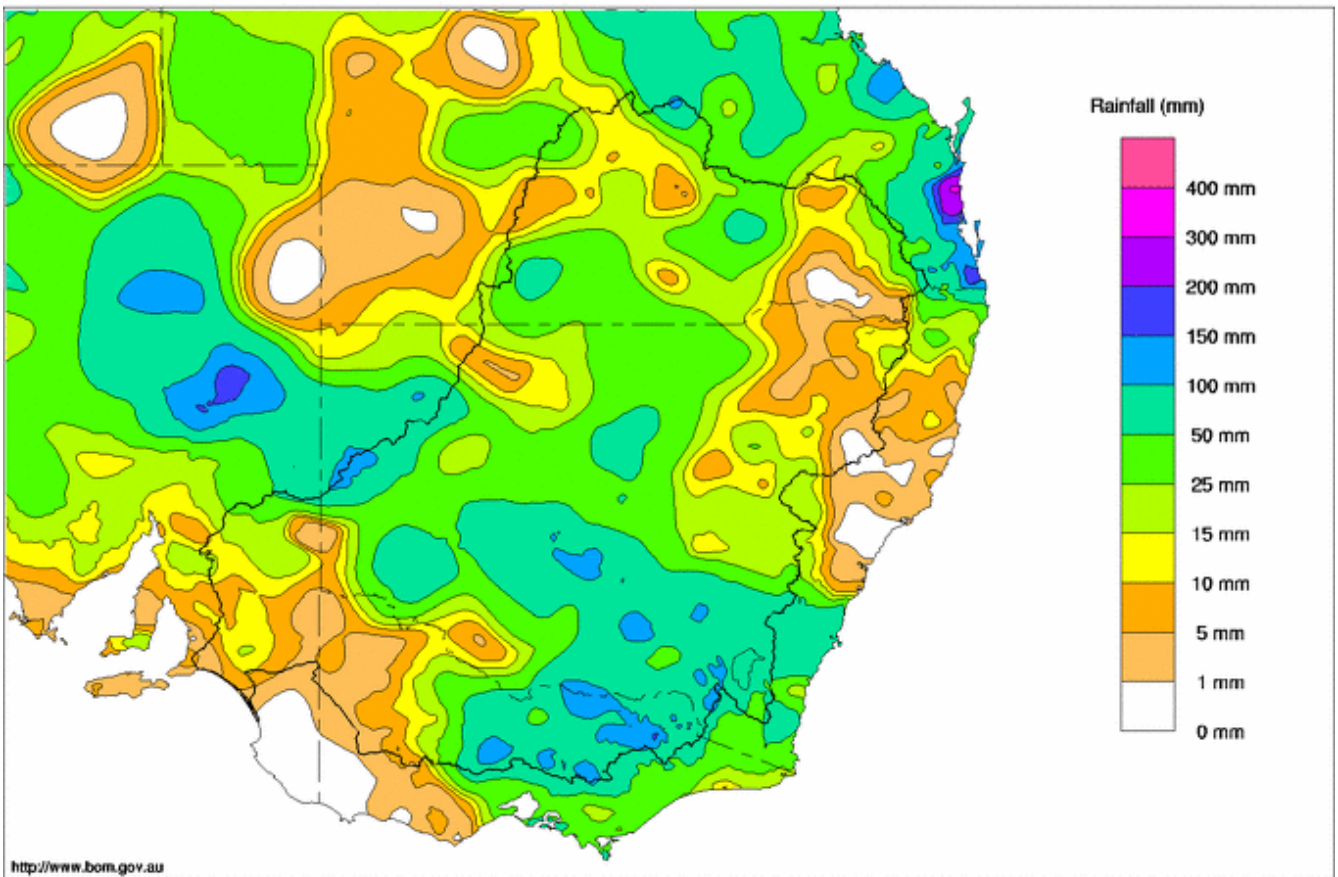
FOR THE WEEK ENDING WEDNESDAY, 29 FEBRUARY 2012

Trim Ref: D12/7673

Rainfall and Inflows

Further significant falls of rain were recorded across much of the Basin this week. Some areas in the south-eastern districts recorded over 100 mm during the week (Map 1) and the rain is continuing to fall.

Murray Darling Rainfall Totals (mm) Week Ending 29th February 2012
Product of the National Climate Centre



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Map 1 – Murray-Darling Basin rainfall for the week ending 29 February 2012 (Source: Bureau of Meteorology)

In response to this week’s rain in the Upper Murray, the flow at Hinnomunjie, upstream of Dartmouth reservoir peaked at around 5,000 ML/day, while upstream of Hume reservoir the flow at Jingellic peaked at around 13,000 ML/day. On the Kiewa River the flow at Mongans Bridge peaked at around 4,500 ML/day and on the Ovens River the flow peaked at Wangaratta at around 10,000 ML/day. On the Murrumbidgee River at Gundagai, flow peaked near 15,000 ML/day. However, further rainfall into Thursday 1 March, and forecast for the next couple of days, is expected to result in higher peaks and these will be reported in next week’s weekly report.

On the Barwon-Darling River, peak flows from the recent northern Basin floods are anticipated to arrive at Bourke in the next week. The flow at Bourke is currently 135,000 ML/day with steep rises forecast over the coming days. Further downstream, the flows at Wilcannia and the Talyawalka have levelled out and will start to rise again in the coming week. For more information regarding flood warnings, see the Bureau of Meteorology website at (www.bom.gov.au/).



River Operations

MDBA active storage decreased by 61 GL during the week and is currently 6,160 GL (72% capacity). Most of this decrease in storage was due to high releases from the Menindee Lakes, creating a further 32 GL airspace during the week, prior to the arrival of the Darling River flood peak.

At Dartmouth Reservoir, the storage has increased by 5 GL during the week and is now 2,974 GL (77% capacity). The release from Dartmouth averaged 250 ML/day during the week and is currently 200 ML/day.

At Hume Reservoir, maximum cuts were made to the release throughout the week in response to forecast rain reducing demand. Releases have reduced from 10,600 back to the minimum release of 600 ML/day today, Thursday 1 March. The volume stored in Hume Reservoir is currently 1,909 GL (64% capacity), which is a decrease of 12 GL since last week.

At Yarrawonga Weir, the pool is temporarily surcharged to 125 m AHD to manage high local inflows that have resulted from over 200 mm of rain falling in the last 4 days to Thursday 1 March 2012. Total diversions at Mulwala and Yarrawonga Main Canal were 21 GL for the week compared with 44GL last week. The release from Yarrawonga Weir was initially being held below 10,500 ML/day in order to prevent water entering the Barmah-Millewa Forest, however the recent high inflows have necessitated the release to be rapidly increased over the last two days to 30,000 ML/day today, Thursday, 1 March.

On the Edward-Wakool system, combined flow through the Edward and Gulpa offtakes has gradually increased during the week and is currently 1,850 ML/day. After the initial rainfall last Monday, an additional 1,000 ML/day was diverted upstream of Yarrawonga Weir to the Edward River via the Mulwala canal and Edward Escape to reduce the inundation of the Barmah-Millewa forest. However subsequent rainfall is expected to result in significant overbank flows through the forest, so this diversion has now been ceased. Downstream of Stevens Weir, the flow has increased from an average of around 600 ML/day to the current flow of 1,000ML/day, and is expected to continue rising in the coming weeks.

Diversion of environmental water to the Colligen Creek is now finished while the diversion to the Wakool River will be gradually reduced over the coming week. These pulses are aimed at encouraging small bodied fish to spawn.

Inflow from the Goulburn River has been steady at around 2,000 ML/day during the week, however it is expected to rise significantly in the coming week. At Torrumbarry Weir, the flow increased over the week to 7,500 ML/day and will continue rising during the coming week. Diversions to the National Channel were 2,000 to 3,000 ML/day for much of the week, however the offtakes were closed today, Thursday 1 March.

Further downstream, the Murrumbidgee River is flowing at 2,500 ML/day past Balranald. Inflow from the Murrumbidgee is expected to continue rising over the coming weeks following significant rainfall in the upper and mid-Murrumbidgee catchment.

Further downstream at Euston Weir, the flow has held steady at 5,700 ML/day during the last week and is expected to start slowly rising during the coming week.

At Menindee Lakes, the storage volume decreased to 1,482 GL (86% capacity) during the week. The release, measured at Weir 32, is around 35,000 ML/day and Lake Wetherell is now at a level where the Main Weir gates are completely out of the water (See Figure 1). Menindee town is experiencing moderate flooding and the Bureau of Meteorology (www.bom.gov.au/) forecasts that major flooding is likely to occur with a peak during mid-April.



Figure 1 Gates out at Main Weir (Left) and aerial view looking upstream to Main Weir and Lake Wetherell (Right) (Photos provided by Barry Philps (NSW State Water)).

On the lower Darling River, the flow at Burtundy continues to rise slowly and is currently at 15,300 ML/day. While the release at Weir 32 increased on average by 1,100 ML/day over the first 17 days of February (from 15,000 ML/day to 34,000 ML/day), the flow at Burtundy has increased by an average of only 105 ML/day. This is largely as a result of water breaking from the Darling to the Great Darling Anabranch. For further information on the flood operations at Menindee Lakes, please refer to the NSW Office of Water website (www.water.nsw.gov.au/) and for flood warnings refer to the Bureau of Meteorology (www.bom.gov.au/).

At the confluence of the Murray and Darling Rivers at Wentworth, the flow is currently 19,250 ML/day and is expected to steadily increase for the next few weeks.

At Lake Victoria, the storage level has continued to slowly fall to 25.19 m AHD (469 GL, 69% capacity). The flow to South Australia was reduced during the week to about 20,000 ML/day and this lower flow will be maintained for about 7–10 days while essential works are undertaken at construction sites at Chowilla and Weir 4.

The average level in the Lower Lakes rose by 1 cm to 0.69 m AHD during the week and flow out the barrages averaged around 8,500 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 29 Feb 2012

| 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 | 471.47 | 2 974 | 77% | 71 | 2 903 | +5 |
| Hume Reservoir | 192.00 | 3 005 | 185.81 | 1 909 | 64% | 23 | 1 886 | -12 |
| Lake Victoria | 27.00 | 677 | 25.19 | 469 | 69% | 100 | 369 | -22 |
| Menindee Lakes | | 1 731* | | 1 482 | 86% | (480 #) | 1 002 | -32 |
| Total | | 9 269 | | 6 834 | 74% | -- | 6 160 | -61 |
| Total Active MDBA Storage | | | | | | | 72% ^ | |

Major State Storages

| | | | | | | |
|----------------------|-------|-------|-----|-----|-------|-----|
| Burrinjuck Reservoir | 1 026 | 762 | 74% | 3 | 759 | +18 |
| Blowering Reservoir | 1 631 | 1 320 | 81% | 24 | 1 296 | +24 |
| Eildon Reservoir | 3 334 | 3 080 | 92% | 100 | 2 980 | +11 |

* 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 28 Feb 2012

| Storage | Active Storage (GL) | Weekly Change (GL) | Diversions (GL) | This Week | From 1 May 2011 |
|------------------------|---------------------|--------------------|------------------|-----------|-----------------|
| Lake Eucumbene - Total | 2 128 | n/a | Snowy-Murray | +1 | 303 |
| Snowy-Murray Component | 739 | n/a | Tooma-Tumut | +5 | 268 |
| Target Storage | 1 460 | | Net Diversion | -4 | 35 |
| | | | Murray 1 Release | +10 | 644 |

Major Diversions from Murray and Lower Darling (GL) *

| New South Wales | This Week | From 1 July 2011 | Victoria | This Week | From 1 July 2011 |
|---------------------------|-------------|------------------|---------------------------------|-------------|------------------|
| Murray Irrig. Ltd (Net) | 17.7 | 940 | Yarrowonga Main Channel (net) | 3.3 | 211 |
| Wakool Sys Allowance | 3.1 | 22 | Torrumbarry System + Nyah (net) | 15.4 | 420 |
| Western Murray Irrigation | 0.8 | 18 | Sunraysia Pumped Districts | 2.8 | 79 |
| Licensed Pumps | 4.0 | 150 | Licensed pumps - GMW (Nyah+u/s) | 0.7 | 40 |
| Lower Darling | 10.6 | 191 | Licensed pumps - LMW | 10 | 221 |
| TOTAL | 36.2 | 1321 | TOTAL | 32.2 | 971 |

* 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 entitlement for February due to Additional Dilution Flow and water trades to SA.

| | |
|------------------------|---------|
| Entitlement this month | 194.0 * |
| Flow this week | 154.3 |
| Flow so far this month | 607.1 |
| Flow last month | 543.1 |

(22 000 ML/day)

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

| | Current | Average over the last week | Average since 1 August 2011 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | 110 | 120 | 130 |
| Euston | 130 | 130 | 130 |
| Red Cliffs | 180 | 180 | 130 |
| Merbein | 200 | 200 | 140 |
| Burtundy (Darling) | 330 | 320 | 370 |
| Lock 9 | 270 | 260 | 180 |
| Lake Victoria | 260 | 240 | 210 |
| Berri | 290 | 280 | 260 |
| Waikerie | - | - | - |
| Morgan | 300 | 300 | 280 |
| Mannum | 350 | 1 620 | 450 |
| Murray Bridge | 340 | 350 | 350 |
| Milang (Lake Alex.) | 570 | 550 | 510 |
| Poltalloch (Lake Alex.) | 410 | 470 | 350 |
| Meningie (Lake Alb.) | 4 520 | 4 730 | 5 320 |
| Goolwa Barrages | 660 | 690 | 1 260 |



River Levels and Flows

Week ending Wednesday 29 Feb 2012

| 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 | - | - | - | 5 060 | F | 1 740 | 950 |
| Jingellic | 4.0 | 1.95 | 208.47 | 6 610 | R | 2 700 | 2 100 |
| Tallandoon (Mitta Mitta River) | 4.2 | 1.88 | 218.77 | 1 750 | R | 910 | 700 |
| Heywoods | 5.5 | 1.82 | 155.45 | 2 750 | F | 5 510 | 13 420 |
| Doctors Point | 5.5 | 2.20 | 150.67 | 6 060 | R | 7 010 | 14 180 |
| Albury | 4.3 | 1.20 | 148.64 | - | - | - | - |
| Corowa | 3.8 | 1.85 | 127.87 | 6 880 | F | 8 610 | 13 710 |
| Yarrawonga Weir (d/s) | 6.4 | 1.72 | 116.76 | 10 530 | R | 8 390 | 6 680 |
| Tocumwal | 6.4 | 2.14 | 105.98 | 8 630 | R | 8 110 | 6 760 |
| Torrumbarry Weir (d/s) | 7.3 | 2.38 | 80.93 | 7 460 | R | 5 520 | 4 510 |
| Swan Hill | 4.5 | 1.05 | 63.97 | 4 200 | F | 3 970 | 3 770 |
| Wakool Junction | 8.8 | 2.55 | 51.67 | 6 150 | R | 5 720 | 5 960 |
| Euston Weir (d/s) | 8.8 | 1.35 | 43.19 | 5 980 | R | 5 720 | 6 610 |
| Mildura Weir (d/s) | - | - | - | 6 550 | F | 6 090 | 6 790 |
| Wentworth Weir (d/s) | 7.3 | 3.85 | 28.61 | 19 250 | R | 18 270 | 18 180 |
| Rufus Junction | - | 5.16 | 22.09 | 19 200 | R | 21 060 | 21 450 |
| Blanchetown (Lock 1 d/s) | - | 1.51 | - | 20 140 | R | 19 170 | 21 920 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 2.43 | 155.66 | 2 920 | R | 1 120 | 750 |
| Ovens at Wangaratta | 11.9 | 10.61 | 148.29 | 10 240 | R | 2 190 | 820 |
| Goulburn at McCoys Bridge | 9.0 | 2.07 | 93.49 | 1 960 | R | 1 960 | 1 430 |
| Edward at Stevens Weir (d/s) | - | 1.28 | 81.05 | 1 050 | F | 710 | 650 |
| Edward at Liewah | - | 1.38 | 56.76 | 760 | R | 770 | 960 |
| Wakool at Stoney Crossing | - | 1.63 | 55.12 | 820 | S | 790 | 700 |
| Murrumbidgee at Balranald | 5.0 | 2.74 | 58.70 | 2 510 | R | 2 330 | 2 030 |
| Barwon at Mungindi | - | 3.50 | - | 870 | S | 1 050 | 4 140 |
| Darling at Bourke | - | 13.15 | - | 135 250 | R | 85 530 | 37 520 |
| Darling at Burtundy Rocks | - | 6.48 | - | 15 300 | R | 14 950 | 14 410 |

| | | |
|---|-------|-------|
| Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme) | 3 810 | 4 680 |
|---|-------|-------|

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 |
|--------------------|-------------|-------|-------|-----------------------|-------------|-------|-------|
| Yarrawonga | 124.90 | +0.08 | - | No. 7 Rufus River | 22.10 | +0.01 | +2.75 |
| No. 26 Torrumbarry | 86.05 | +0.01 | - | No. 6 Murtho | 19.25 | +0.01 | +1.02 |
| No. 15 Euston | 47.60 | +0.01 | - | No. 5 Renmark | 16.30 | -0.03 | +0.84 |
| No. 11 Mildura | 34.40 | -0.04 | +0.10 | No. 4 Bookpurnong | 13.20 | -0.03 | +1.93 |
| No. 10 Wentworth | 30.80 | +0.00 | +1.21 | No. 3 Overland Corner | 9.80 | -0.05 | +1.36 |
| No. 9 Kulnine | 27.40 | +0.01 | +0.61 | No. 2 Waikerie | 6.10 | +0.10 | +1.36 |
| No. 8 Wangumma | 24.60 | +0.04 | +0.98 | No. 1 Blanchetown | 3.20 | +0.06 | +0.76 |

Lower Lakes FSL = 0.75 m AHD

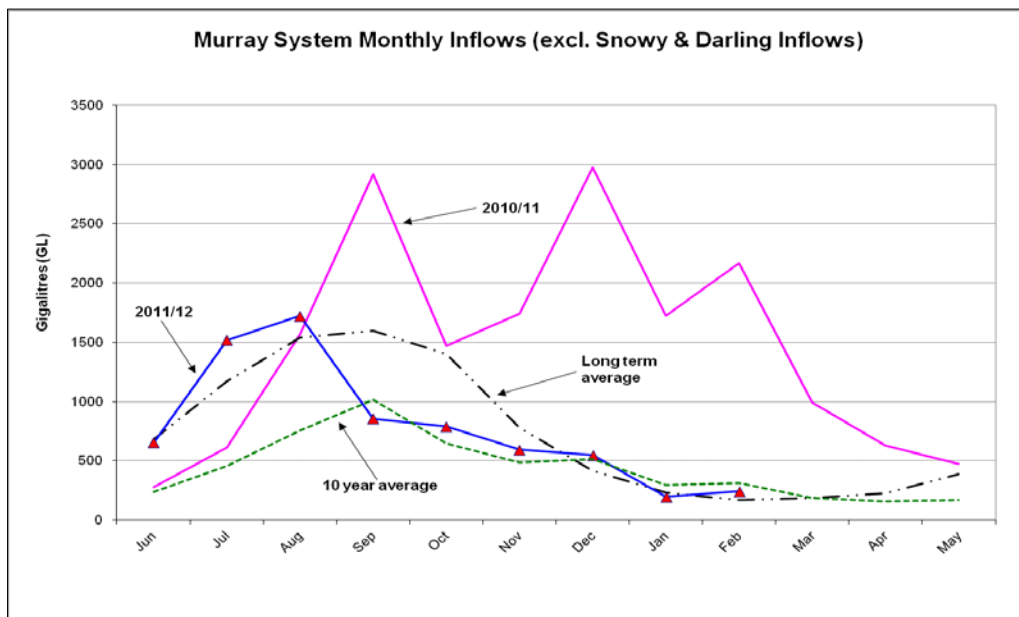
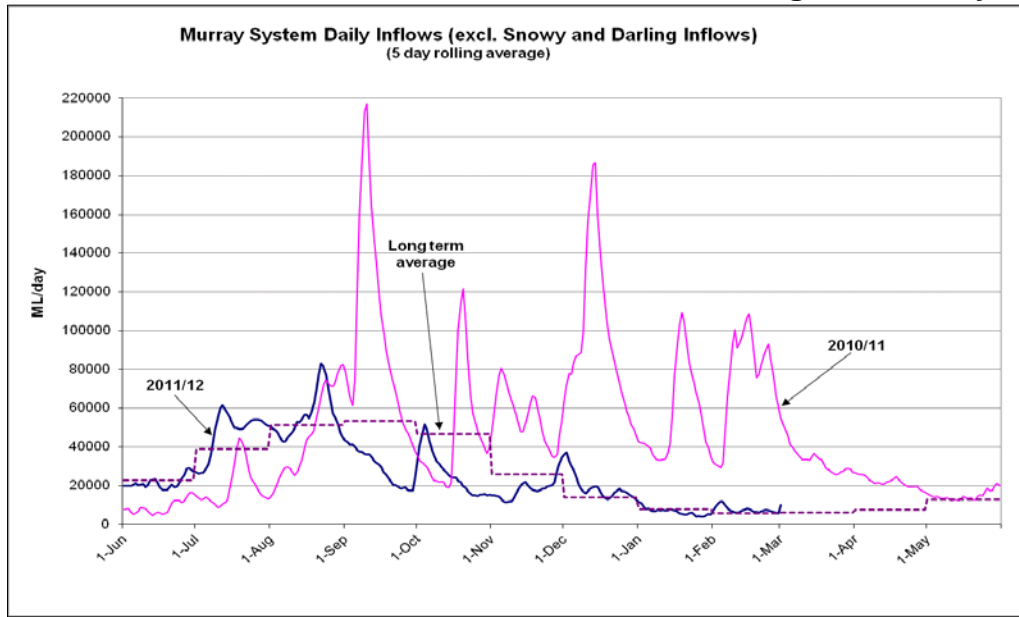
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|--|------|
| Lake Alexandrina average level for the past 5 days (m AHD) | 0.69 |
|--|------|

Barrages

Fishways at Barrages

| | Openings | Level (m AHD) | No. Open | Rock Ramp | Vertical Slot |
|----------------|--------------|---------------|----------|-----------|---------------|
| Goolwa | 128 openings | 0.78 | 6 | - | Open |
| Mundoo | 26 openings | 0.72 | 3 | - | - |
| Boundary Creek | 6 openings | - | 1 | - | - |
| Ewe Island | 111 gates | - | 3 | - | - |
| Tauwichee | 322 gates | 0.70 | 20 | Open | Open |

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



State Allocations (as at 29 Feb 2012)

NSW - Murray Valley

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

Victorian - Murray Valley

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

NSW - Murrumbidgee Valley

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

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/About-us/Media-releases/media/default.aspx>
 VIC : <http://www.g-mwater.com.au/water-resources/allocations/current.asp>
 SA : <http://www.waterforgood.sa.gov.au/category/news/>