



RIVER MURRAY WEEKLY REPORT

FOR THE WEEK ENDING WEDNESDAY, 03 AUGUST 2011

Trim Ref: D11/23205

Rainfall and Inflows

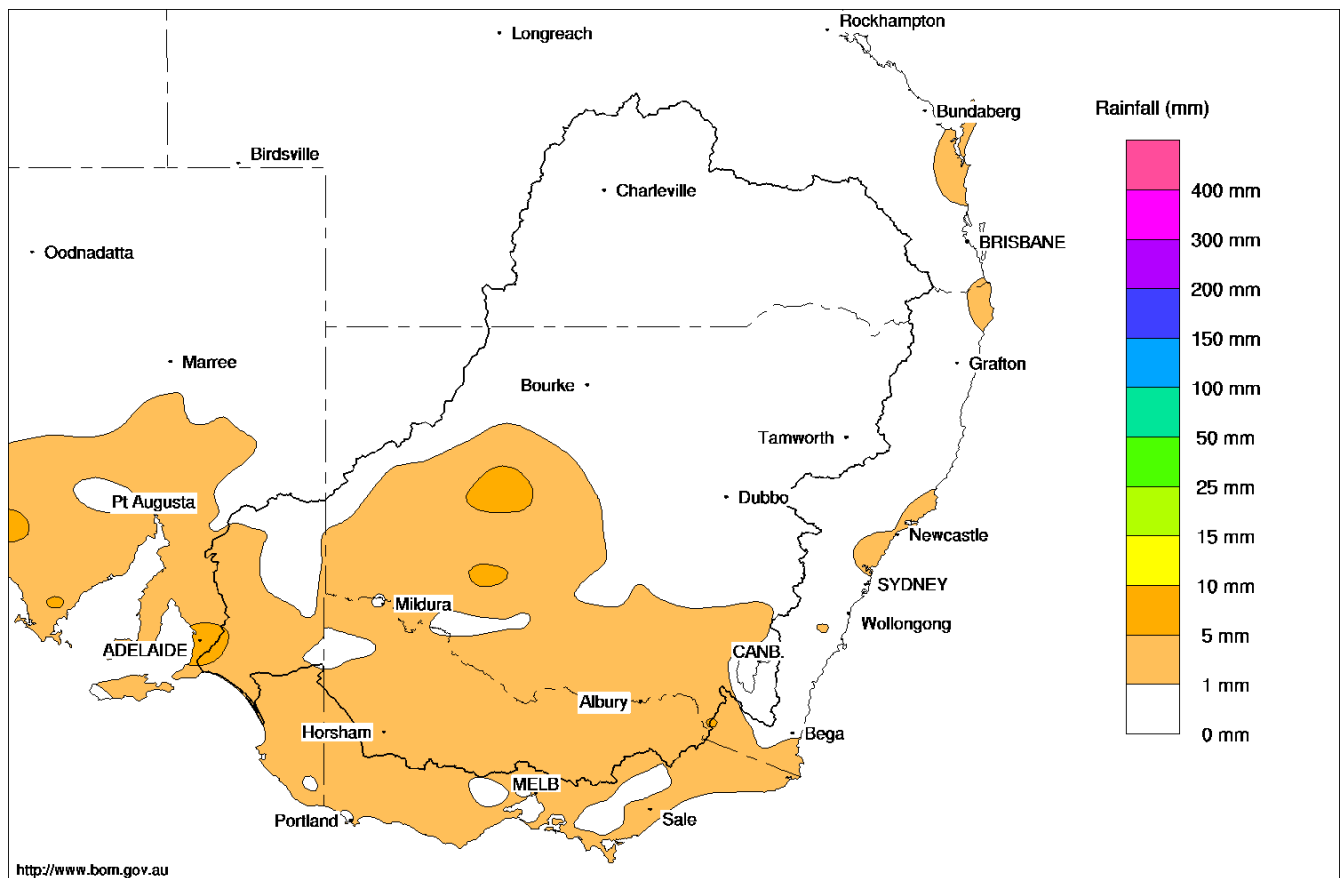
It was a relatively dry seven days across the Murray-Darling Basin as a high pressure system over the Tasman Sea directed mild north to north-west winds over most of the region, generating unseasonably warm weather later in the week.

No locations within the Basin recorded more than 10 mm for the week, with even the elevated areas such as the South Australian Mt Lofty Ranges, Victoria Alps and the NSW Snowy Mountains recording only around 5 to 10 mm (Map 1).

As a result of the dry conditions, stream flows in most upper catchments have steadily receded. On the upper River Murray for example, the flow at Biggara decreased from 2,100 to 1,400 ML/day. On the Ovens River, the flow at Wangaratta receded from 8,300 to 5,700 ML/day; while on the Kiewa River, the flow at Bandiana decreased from 2,900 to 1,900 ML/day.

Murray Darling Rainfall Analysis (mm) Week Ending 3rd August 2011

Product of the National Climate Centre



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Issued: 03/08/2011

Map 1- Murray-Darling Basin rainfall for the week ending 03 August 2011 (Source: Bureau of Meteorology).



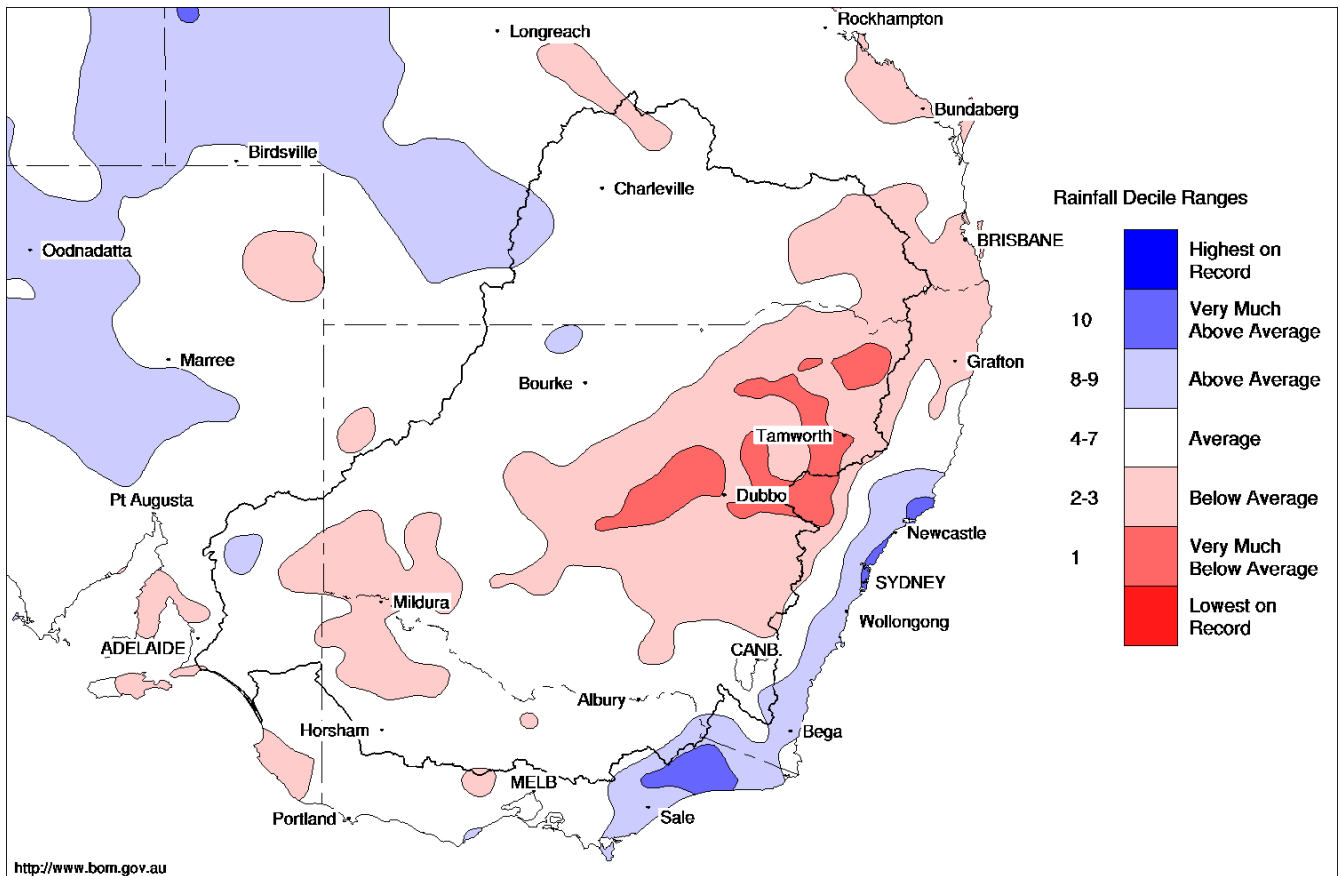
July 2011 Summary

Rainfall for July averaged 23.7 mm across the Murray-Darling Basin. This is below the long term mean and was mainly the result of below or very much below average rainfall across a large area of central NSW and the slopes and ranges to the north. The southern and south-eastern parts of the Basin received rainfall that was generally quite close to the July average. Rainfall was also close to average in the far west and north-west (Map 2).

Murray system inflows (excluding Snowy releases and Menindee inflows) for July were approximately 1,520 GL, which is above the long-term average of 1,170 GL. The above average inflows indicate that the upper catchments of the River Murray system remain responsive and should continue to generate good inflows if reasonable rains continue through the remainder of winter and into spring.

Murray Darling Rainfall Deciles July 2011

Distribution Based on Gridded Data
Product of the National Climate Centre



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Map 2 - Murray-Darling Basin rainfall for July 2011 (Source: Bureau of Meteorology).

River Operations

MDBA active storage has increased 19 GL since last week and is now 7,213 GL (84% capacity). At Dartmouth Reservoir the storage rose by 15 GL during the week to 2,598 GL. The flow at Colemans, immediately downstream of the dam is currently at the normal minimum of 200 ML/day after being temporarily increased to 1,000 ML/day earlier in the week for electricity generation purposes.

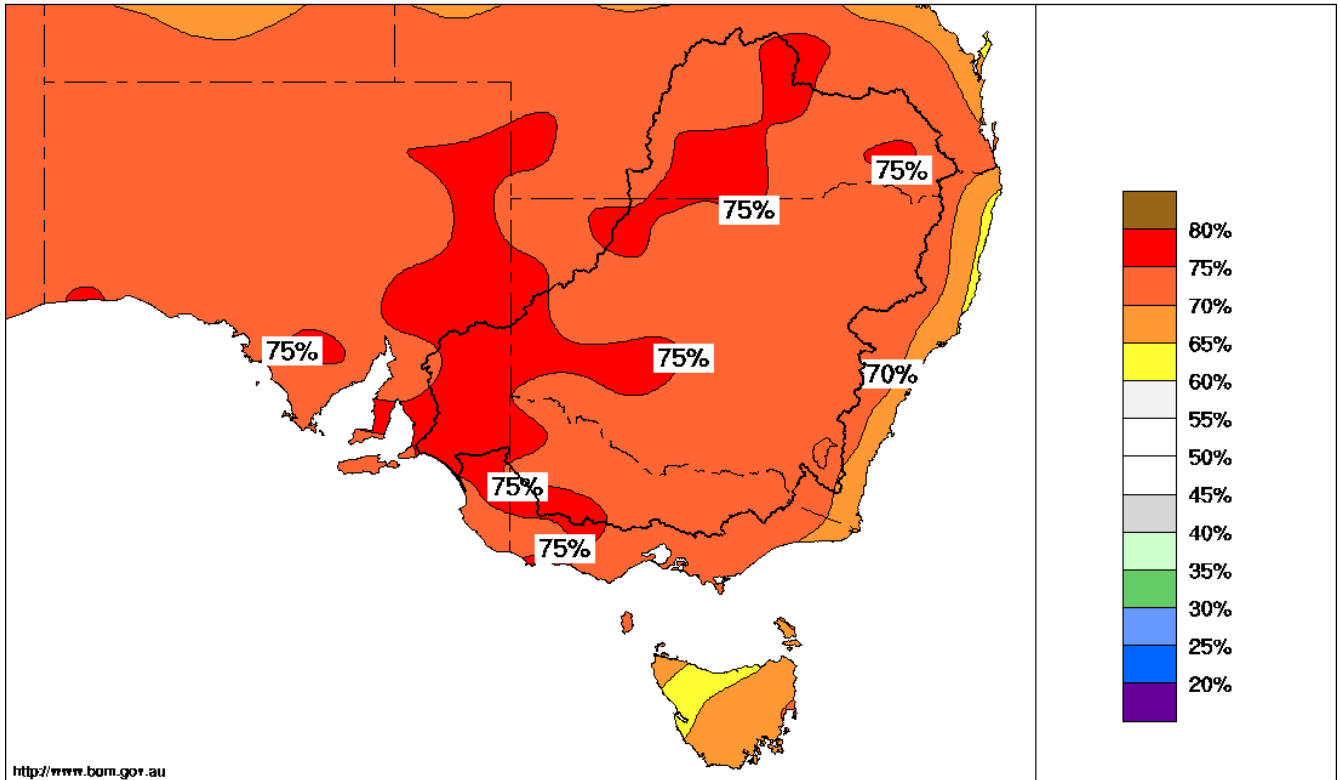
At Hume Reservoir, the level was slowly raised during the week and reached 150 GL airspace at the end of July. The level is now being further raised as the irrigation supply season approaches, however



this operation remains under constant review and may alter if any significant rainfall is forecast during the coming weeks. MDBA is paying close attention to recent Bureau of Meteorology seasonal forecasts. The latest temperature outlook indicates a very high likelihood of warmer than average conditions over the coming three months (Map 3), which may result in increased demand during the upcoming spring irrigation season if conditions are dry.

Chance of exceeding the median Max Temp. August to October 2011

Product of the National Climate Centre



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Map 3 - Murray-Darling Basin chance of exceeding median maximum temperature for the period August to October 2011 (Source: Bureau of Meteorology).

During the week, release from Hume reservoir has averaged around 7,300 ML/day and is now at 4,500 ML/day. If there are no significant inflows over the coming week, release will be held steady or even reduced further to around 3,500ML/d. The volume in the reservoir is now 2,870 GL (96% capacity), which is an increase of 33 GL since last week.

Release from Yarrawonga Weir decreased over the week from 19,500 ML/d to 12,800 ML/d, as the Hume release and tributary inflows fell away, and demand at Mulwala Canal increased. Diversion at Mulwala Canal reached 2,700 ML/d (increasing to 3,050ML/d Thursday) in response to an early warm spell. Lake Mulwala level continued to rise and is currently at 124.59 m.

Flow to the Edward River continued to fall away. In response, the gates have been reinstated at Stevens Weir to maintain a pool level of around 4.3 m. Wakool Main Canal is currently diverting 275 ML/d with a forecast order of 500 ML/d.

Inflows from the Goulburn River, measured at McCoy's Bridge, held up around 17,000 ML/d for most of the week, but have started to recede. Without significant rain, inflows are expected to fall to around 7,500 ML/d early next week. Pre-release from Eildon Dam reduced from 7,000 ML/d to 1,300 ML/d over the week, and is forecast to fall to 400 ML/d by 7 August. At Torrumbarry Weir flow peaked at around 31,000 ML/d and is now slowly falling. Demand at the National Channel is currently 500 ML/d, but increasing to 1,500 ML/d tomorrow (Thursday).

At Balranald on the Murrumbidgee River, the flow is around 9,200 ML/d. Inflow from the Murrumbidgee River is expected to remain high for the next one to two weeks. Downstream of the



confluence with the Murrumbidgee, the River Murray at Euston is 32,000ML/d and expected to slowly increase to a peak of around 33,500 to 34,000 ML/d over the coming week to ten days.

Menindee Lakes remain surcharged at about 1,958 GL (113% capacity). Flow past Weir 32 is currently being pulsed in the range of 200 to 800 ML/d (average flow of 500 ML/d) in an effort to improve downstream water quality.

Lake Victoria was lowered by 28 GL during the week to 461 GL (68% capacity). The storage is now being held steady awaiting the response of upper catchments to the rain forecast for this weekend. No improvement in upstream tributary inflows would trigger the refilling of the storage. A significant rise in tributary inflows would delay filling or even allow further draw down.

The flow to South Australia is currently around 34,500 ML/d. The level in the Lower Lakes is currently 0.69 m AHD. A level of 0.65 m AHD is being targeted over the next week in order to reduce the level in Lake Albert prior to raising to assist salt flushing.

For media inquiries contact the Media Officer on 02 6279 0141

DAVID DREVERMAN
Executive Director, River Murray

Water in Storage

Week ending Wednesday 03 Aug 2011

| 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 | 464.48 | 2 598 | 67% | 71 | 2 527 | +15 |
| Hume Reservoir | 192.00 | 3 005 | 191.32 | 2 870 | 96% | 23 | 2 847 | +33 |
| Lake Victoria | 27.00 | 677 | 25.17 | 461 | 68% | 100 | 361 | -28 |
| Menindee Lakes | | 1 731* | | 1 958 | 113% | (480 #) | 1 478 | -1 |
| Total | | 9 269 | | 7 887 | 85% | -- | 7 213 | +19 |
| Total Active MDBA Storage | | | | | | | 84% ^ | |

Major State Storages

| | | | | | | |
|----------------------|-------|-------|-----|-----|-------|-----|
| Burrinjuck Reservoir | 1 026 | 969 | 94% | 3 | 966 | +10 |
| Blowering Reservoir | 1 631 | 1 570 | 96% | 24 | 1 546 | -16 |
| Eildon Reservoir | 3 334 | 3 027 | 91% | 100 | 2 927 | +9 |

* 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 02 Aug 2011

| Storage | Active Storage (GL) | Weekly Change (GL) | Diversions (GL) | This Week | From 1 May 2011 |
|------------------------|------------------------|-----------------------|------------------|-----------|--------------------|
| Lake Eucumbene - Total | 1 305 | n/a | Snowy-Murray | +4 | 268 |
| Snowy-Murray Component | 376 | n/a | Tooma-Tumut | +5 | 76 |
| Target Storage | 1 190 | | Net Diversion | -1 | 192 |
| | | | Murray 1 Release | +7 | 345 |

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) | 11.8 | 34 | Yarrowonga Main Channel (net) | 0 | 0 |
| Wakool Sys Allowance | 0.0 | 0 | Torrumbarry System + Nyah (net) | 0.9 | 1 |
| Western Murray Irrigation | 0.1 | 0 | Sunraysia Pumped Districts | 0.2 | 1 |
| Licensed Pumps | 0.6 | 3 | Licensed pumps - GMW (Nyah+u/s) | 0 | 2 |
| Lower Darling | 0.0 | 0 | Licensed pumps - LMW | 1.6 | 4 |
| TOTAL | 12.5 | 37 | TOTAL | 2.7 | 8 |

* 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 August due to Additional Dilution Flow and Unregulated Flows.

| | | |
|------------------------|---------|-----------------|
| Entitlement this month | 124.0 * | |
| Flow this week | 239.0 | (34 100 ML/day) |
| Flow so far this month | 103.0 | |
| Flow last month | 844.9 | |

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

| | Current | Average over the last week | Average since 1 August 2011 |
|-------------------------|---------|----------------------------|-----------------------------|
| Swan Hill | 100 | 90 | 90 |
| Euston | 110 | 120 | 120 |
| Red Cliffs | 120 | 120 | 120 |
| Merbein | 100 | 90 | 90 |
| Burtundy (Darling) | 330 | 330 | 330 |
| Lock 9 | 110 | 110 | 110 |
| Lake Victoria | 200 | 200 | 200 |
| Berri | 200 | 200 | 200 |
| Waikerie | 10 | 10 | 10 |
| Morgan | 210 | 230 | 240 |
| Mannum | 220 | 230 | 220 |
| Murray Bridge | 220 | 250 | 220 |
| Milang (Lake Alex.) | 630 | 710 | 680 |
| Poltalloch (Lake Alex.) | 320 | 410 | 360 |
| Meningie (Lake Alb.) | 5 510 | 5 480 | 5 460 |
| Goolwa Barrages | | 400 | 690 |

River Levels and Flows

Week ending Wednesday 03 Aug 2011

| 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 | - | - | - | 1 490 | F | 2 580 | 3 300 |
| Jingellic | 4.0 | 1.95 | 208.47 | 6 610 | F | 8 050 | 9 930 |
| Tallandoon (Mitta Mitta River) | 4.2 | 1.75 | 218.64 | 1 350 | R | 1 680 | 1 560 |
| Heywoods | 5.5 | 2.01 | 155.64 | 5 600 | F | 7 140 | 11 260 |
| Doctors Point | 5.5 | 2.35 | 150.82 | 7 610 | F | 9 180 | 14 000 |
| Albury | 4.3 | 1.37 | 148.81 | - | - | - | - |
| Corowa | 7.0 | 2.31 | 128.33 | 9 200 | F | 10 580 | 15 570 |
| Yarrowonga Weir (d/s) | 6.4 | 2.14 | 117.18 | 13 820 | F | 15 970 | 23 040 |
| Tocumwal | 6.4 | 3.01 | 106.85 | 16 390 | F | 18 250 | 24 660 |
| Torrumbarry Weir (d/s) | 7.3 | 6.61 | 85.16 | 30 530 | S | 30 870 | 28 750 |
| Swan Hill | 4.5 | 3.48 | 66.40 | 21 320 | F | 21 210 | 20 300 |
| Wakool Junction | 8.8 | 6.75 | 55.87 | 29 630 | R | 28 530 | 26 060 |
| Euston Weir (d/s) | 8.8 | 4.67 | 46.51 | 32 140 | R | 30 840 | 28 150 |
| Mildura Weir (d/s) | - | - | - | 27 430 | F | 27 140 | - |
| Wentworth Weir (d/s) | 7.3 | 4.83 | 29.59 | 33 900 | R | 32 190 | 30 310 |
| Rufus Junction | - | 6.28 | 23.21 | 34 560 | R | 34 170 | 32 770 |
| Blanchetown (Lock 1 d/s) | - | 2.28 | - | 35 100 | S | 30 930 | 27 560 |
| Tributaries | | | | | | | |
| Kiewa at Bandiana | 2.7 | 1.90 | 155.13 | 1 940 | F | 2 180 | 2 710 |
| Ovens at Wangaratta | 11.9 | 9.67 | 147.35 | 5 720 | F | 6 720 | 9 870 |
| Goulburn at McCoys Bridge | 9.0 | 6.82 | 98.24 | 15 850 | F | 16 940 | 17 700 |
| Edward at Stevens Weir (d/s) | - | 4.12 | 83.89 | 7 000 | F | 7 670 | 8 330 |
| Edward at Liewah | - | 4.05 | 59.43 | 4 520 | R | 4 250 | 3 690 |
| Wakool at Stoney Crossing | - | 3.31 | 56.81 | 0 | F | 0 | 0 |
| Murrumbidgee at Balranald | 5.0 | 5.40 | 61.36 | 9 190 | S | 9 160 | 7 600 |
| Barwon at Mungindi | - | 3.30 | - | 260 | S | 290 | 460 |
| Darling at Bourke | - | 4.26 | - | 1 210 | S | 1 210 | 1 200 |
| Darling at Burtundy Rocks | - | 0.98 | - | 870 | F | 900 | 1 010 |

| | | |
|---|--------|--------|
| Natural Inflow to Hume (i.e. Pre Dartmouth & Snowy Mountains scheme) | 13 640 | 16 120 |
|---|--------|--------|

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 | -0.31 | - | No. 7 Rufus River | 22.10 | +1.17 | +4.00 |
| No. 26 Torrumbarry | 86.05 | -0.52 | - | No. 6 Murtho | 19.25 | -0.00 | +2.08 |
| No. 15 Euston | 47.60 | -0.38 | - | No. 5 Renmark | 16.30 | +0.05 | +1.80 |
| No. 11 Mildura | 34.40 | +0.01 | +1.91 | No. 4 Bookpurnong | 13.20 | +0.03 | +2.87 |
| No. 10 Wentworth | 30.80 | +0.08 | +2.19 | No. 3 Overland Corner | 9.80 | +0.05 | +2.26 |
| No. 9 Kulnine | 27.40 | +0.08 | +1.21 | No. 2 Waikerie | 6.10 | +0.04 | +2.38 |
| No. 8 Wangumma | 24.60 | +0.12 | +2.08 | No. 1 Blanchetown | 3.20 | +0.02 | +1.53 |

Lower Lakes FSL = 0.75 m AHD

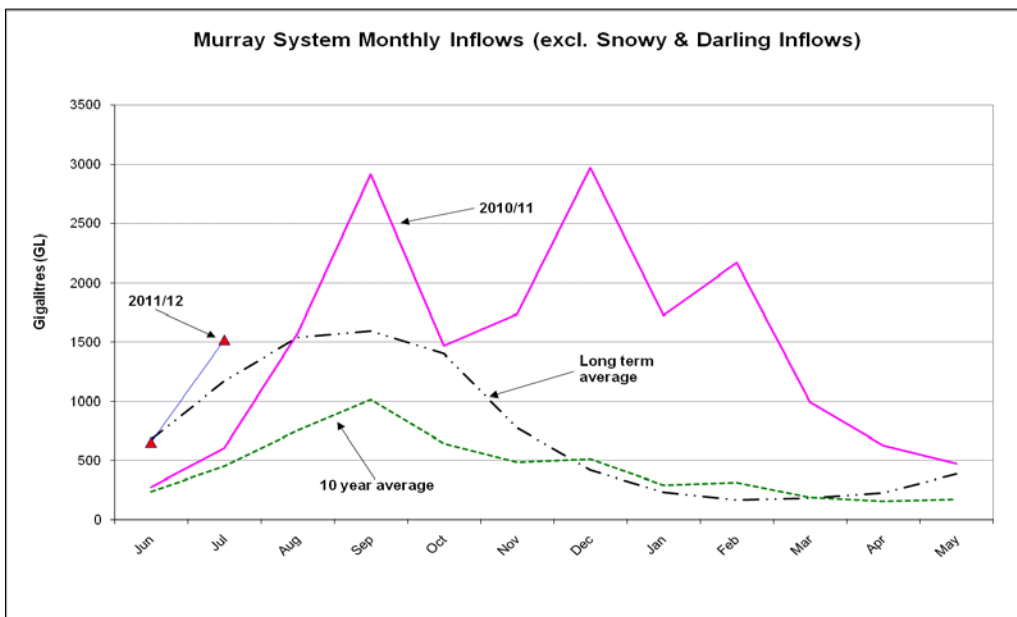
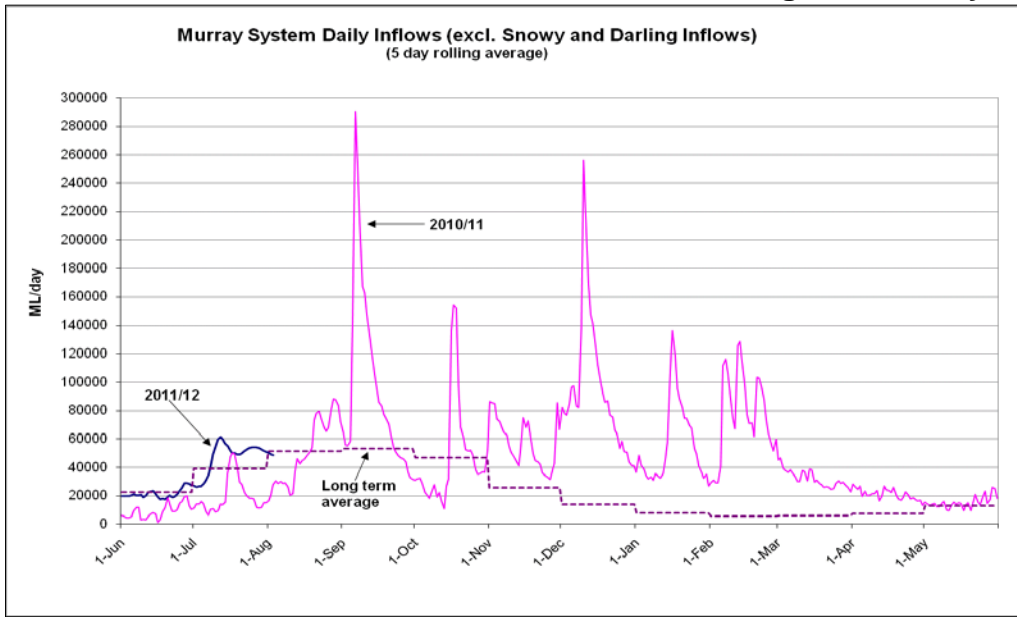
| | |
|--|------|
| Lake Alexandrina average level for the past 5 days (m AHD) | 0.68 |
|--|------|

Barrages

Fishways at Barrages

| | Openings | Level (m AHD) | No. Open | Rock Ramp | Vertical Slot |
|----------------|--------------|---------------|----------|-----------|---------------|
| Goolwa | 128 openings | 0.71 | 20 | - | Open |
| Mundoo | 26 openings | 0.66 | 6 | - | - |
| Boundary Creek | 6 openings | - | 1 | - | - |
| Ewe Island | 111 gates | - | 22 | - | - |
| Tauwichee | 322 gates | 0.69 | 72 | Open | Open |

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



State Allocations (as at 03 Aug 2011)

NSW - Murray Valley

| | |
|------------------|-----|
| High security | 97% |
| General security | 6% |

Victorian - Murray Valley

| | |
|------------------|-----|
| High reliability | 35% |
| Low reliability | 0% |

NSW - Murrumbidgee Valley

| | |
|------------------|-----|
| High security | 95% |
| General security | 50% |

Victorian - Goulburn Valley

| | |
|------------------|-----|
| High reliability | 69% |
| 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/>