

RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Flow to South Australia

Report #49/2012

Issued 10:00 am 14 December 2012

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 7 December 2012. The next flow report will be provided on Friday, 21 December 2012.

In this report, for ease of representation, large volumes of water are expressed in Gigalitres (GL), while smaller volumes are expressed in Megalitres (ML). One GL is equal to 1 000 ML.

WATER RESOURCES UPDATE

During November 2012 the total River Murray system inflow was approximately 610 GL, which is below the long-term November average of approximately 800 GL. Inflow to Menindee Lakes during November 2012 was approximately 2 GL, which is well below the long-term average of 130 GL.

The total flow to South Australia in November 2012 was approximately 490 GL, compared to 300 GL in November 2011. The flow to South Australia currently comprises the December Entitlement Flow, Additional Dilution Flow and water provided through The Living Murray Program and the Commonwealth Environmental Water Holder. South Australia is expected to continue to receive Additional Dilution Flow until the end of December 2012.

The major Murray-Darling Basin Authority controlled storages are holding about 94 per cent capacity. This will support the delivery of large volumes of water for irrigation and environmental purposes through summer and autumn.

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 12 December 2012 and 12 December 2011

Storage	Full Supply Volume (GL)	12/12/2012 (GL)	12/12/2011 (GL)	Long-term average (end of December)
Dartmouth	3 856	3 817 (99%)	2 933 (76%)	
Hume	3 003	2 646 (88%)	2 702 (90%)	
Lake Victoria	677	611 (90%)	639 (94%)	
Menindee Lakes	1 731*	1 655 (96%)	1 767 (102%)	
TOTAL	9 267	8 729 (94%)	8 041 (87%)	6 870 (74%)

*Menindee Lakes can be surcharged to 2 015 GL



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WATER & GOOD

RAINFALL AND TEMPERATURE OUTLOOK

The latest Bureau of Meteorology weather outlook for December 2012 to February 2013 indicates that there are equal chances of receiving a wetter or drier than normal season across the southeast of Australia with a wetter than normal season likely for south-east Queensland and eastern New South Wales. Warmer temperatures are more likely over most of Australia.

SOUTHERN OSCILLATION INDEX

Indicators of the El Niño-Southern Oscillation remain at neutral levels and are likely to remain in the neutral range through summer.

WATER ALLOCATION OUTLOOK

Water access entitlement holders have 100 percent water allocation in 2012-13 and the Murray-Darling Basin Authority continues to advise that South Australia will receive 1 850 GL in 2013-14.

SOUTH AUSTRALIA'S STORAGE RIGHT

To date, South Australia has not deferred any Entitlement Flow for carryover into 2013-14. This is due to a number of factors including the current high risk of spill from storages. This situation may change and opportunities to defer water during 2012-13 for use in 2013-14 will be reassessed as the water year progresses and when conditions become more favourable to defer water.

FLOW OUTLOOK

The flow at the South Australian border is approximately 18 500 ML/day and will recede to around 17 000 ML/day during the coming week, depending on upstream operations and rainfall events. The flow to South Australia currently comprises the December Entitlement Flow (nominal trade-adjusted flow of 7 000 ML/day), Additional Dilution Flow (3 000 ML/day) and environmental water provided by The Living Murray Program and Commonwealth Environmental Water Holder. The environmental water is boosting the flow to enhance native fish recruitment and support ongoing freshwater releases into the Coorong, which will reduce salinity and support the re-establishment of *Ruppia* (an important aquatic plant). The total volume of environmental water delivered to South Australia in November 2012 was approximately 232 000 ML (232 GL) and in December 2012 is expected to be around 215 000 ML (215 GL). South Australia is expected to continue to receive 3 000 ML/day of Additional Dilution Flow until the end of December 2012.

Lake Victoria storage is currently at 90 percent capacity.

The flow over Lock 1 is approximately 15 000 ML/day and is likely to remain around this rate during the coming week, then starting to recede in the following week, depending on upstream operations and diversions.

It is important to note that flow forecasts in this advice are based on the information available at the time of preparation. They may change as new gauging information becomes available, or due to further rainfall events or changed operations upstream. Flow forecasts are dependent on predictions made by the Bureau of Meteorology, Murray-Darling Basin Authority and water management agencies in upstream jurisdictions. They will be revised as new information becomes available.

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is approximately 0.79 m AHD and approximately 0.76 m AHD in Lake Albert. During the coming week, barrage operations will be managed to maximise environmental flow to the Coorong and target a water level of 0.75 m AHD in both Lakes. This will provide opportunities to continue barrage releases during the summer months.

To see live salinity data at various locations on the River Murray and in the Lower Lakes please refer to the following website:

<http://www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx>



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WATER IS GOOD

Water levels and barrage operations are monitored closely by various agencies of the South Australian Government, Murray-Darling Basin Authority and the Commonwealth Environmental Water Office.

WATER QUALITY UPSTREAM OF SOUTH AUSTRALIA

In late November 2012, the Sunraysia Regional Algal Coordinating Committee issued a precautionary alert for blue-green algae in the River Murray from Red Cliffs to Mildura Weir (upstream of South Australia). Routine sampling had identified high counts of potentially toxic blue-green algae. South Australian agencies will continue to monitor the upstream water quality and provide appropriate notifications if required. There is no evidence at this point to suggest there will be an outbreak in South Australia.

CONSTRUCTION WORKS

Construction of the Chowilla Creek Environmental Regulator is expected to be ongoing until the end of 2013. For public safety reasons, the Chowilla Creek remains closed to navigation at the construction site.



RIVER MURRAY WATER LEVELS

SA Water and the Department of Environment, Water and Natural Resources have developed a River Murray Water Levels chart (below) to provide water levels at a number of locations from Lock 10 (near Wentworth) to Murray Bridge.

River Murray Water Levels as at 12 December 2012

Location	River Km	Normal Pool Level	Current Level (m AHD)	1974 Flood Level (m AHD)	1993 Flood Level (m AHD)
Lock 10	825.0	30.80	30.84	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.44	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.63	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.28	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.25	21.03	20.50
Renmark	567.4	-	16.26	18.54	18.04
Lock 5	562.4	16.30	16.24	18.07	17.50
Lyrup	537.8	-	13.34	16.85	16.26
Berri	525.9	-	13.23	15.81	15.74
Lock 4	516.2	13.20	13.20	15.65	15.08
Loxton	489.9	-	10.54	15.05	14.12
Cobdogla	446.9	-	9.87	13.44	12.38
Lock 3	431.4	9.80	9.77	13.16	12.02
Overland Corner	425.9	-	6.75	12.73	11.58
Waikerie	383.6	-	6.38	11.26	10.24
Lock 2	362.1	6.10	6.12	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	3.49	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.22	6.81	5.38
Swan Reach	245.0	0.75	1.02	6.06	4.51
Mannum PS	149.8	0.75	0.82	3.15	1.90
Murray Bridge	115.3	0.75	0.80	2.06	1.26

Note that the above water levels may be affected by local wind conditions.



FURTHER INFORMATION

The Department of Environment, Water and Natural Resources has published a series of inundation maps for the River Murray. They are available at: www.waterconnect.sa.gov.au/RMIM/

Up-to-date River Murray flow and water level information can be accessed at the Department of Environment, Water and Natural Resources, SA Water and Murray-Darling Basin Authority websites:

www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx

www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm

www.mdba.gov.au/water/live-river-data

Details of river height and rainfall information in the River Murray within Victoria and New South Wales are available at the Bureau of Meteorology website: <http://www.bom.gov.au/vic/flood>

Information on the discharge of acid drainage water into the Lower River Murray can be accessed online at www.waterforgood.sa.gov.au/rivers-reservoirs-aquifers/river-murray/acid-drainage-water/

Information provided by the Commonwealth Environmental Water Office can be accessed at www.environment.gov.au/ewater/southern/murray/lower-murray.html

Information on The Living Murray can be accessed at www.mdba.gov.au/programs/tlm/

Regularly updated daily water level information can be found at the following websites:

SA Water

www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm

Information is also available from the SA Water Hotline on **08 8595 2299**

Department of Environment, Water and Natural Resources

www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx

UPDATES- This advice remains current until the Department of Environment, Water and Natural Resources notifies otherwise.

