RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Flow to South Australia
Report #3/2013
Issued 10:00 am 18 January 2013

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 11 January 2013. The next flow report will be provided on Friday, 25 January 2013.

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 December 2012, the total River Murray System inflow was approximately 280 GL, which is well below the long-term December average of around 460 GL. Inflow to Menindee Lakes during December 2012 was 0 GL, which is well below the long-term December average of around 120 GL.

The total flow to South Australia in December 2012 was approximately 530 GL (including approximately 235 GL of environmental water), compared to 520 GL in December 2011. The flow to South Australia currently comprises the January Entitlement Flow and water provided through The Living Murray Program and the Commonwealth Environmental Water Holder.

The major Murray-Darling Basin Authority (MDBA) controlled storages are holding about 82 per cent capacity. This will support the delivery of large volumes of water for irrigation and environmental purposes through summer and autumn, particularly if conditions remain dry.

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 16 January 2013 and 16 January 2012

Storage	Full Supply Volume (GL)	16/01/2013 (GL)	16/01/2012 (GL)	Long-term average (end of January)
Dartmouth	3 856	3 741 (97%)	2 956 (77%)	
Hume	3 003	2 117 (70%)	2 269 (76%)	
Lake Victoria	677	493 (73%)	555 (82%)	
Menindee Lakes	1 731*	1 235 (71%)	1 519 (88%)	
TOTAL	9 267	7 586 (82%)	8 041 (87%)	6 340 (68%)

*Menindee Lakes can be surcharged to 2 015 GL

RAINFALL AND TEMPERATURE OUTLOOK

The latest Bureau of Meteorology (BOM) weather outlook for the Murray-Darling Basin for January 2013 to March 2013 forecasts a 40-50 per cent chance of exceeding median rainfall. Warmer temperatures are more likely across the Murray-Darling Basin, with a 50 per cent chance of exceeding median maximum temperatures across southern areas and a 60-70 per cent chance across northern areas.

WATER ALLOCATION OUTLOOK

Water access entitlement holders have a 100 per cent water allocation in 2012-13 and the Murray-Darling Basin Authority has confirmed 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 high risk of spill from storages, receiving unregulated flow for long continuous periods and the delivery of environmental water. 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 10 000 ML/day and will remain around this rate during the coming week, depending on upstream operations and rainfall events. It comprises the January Entitlement Flow (nominal trade-adjusted flow of 7 000 ML/day) and environmental water provided by The Living Murray Program and Commonwealth Environmental Water Holder. The flow is expected to be maintained at a rate of around 10 500 ML/day due to continuing delivery of environmental water, which will support further fresh water releases into the Coorong and maintain connectivity with the lakes.

The volume of water held in Menindee Lakes has dropped below the Additional Dilution Flow (ADF) trigger of 1 300 GL; therefore, delivery of ADF to South Australia has now ceased.

Lake Victoria storage is at 73 per cent capacity.

The current period of hot, dry weather has resulted in increased extractions and evaporation, causing changing river conditions and operations. As river flows have returned to normal flow conditions and near-normal pool levels, all water users should be aware of submerged navigation hazards such as sandbars, particularly downstream of Locks 7 and 8.

The flow over Lock 1 is approximately 7 500 ML/day and is likely to be between 6 000 to 7 500 ML/day during the coming week, depending on weather conditions and irrigation demand.

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 rainfall events or changed operations upstream. Flow forecasts are dependent on predictions made by the BOM, MDBA 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 0.64 m AHD and approximately 0.63 m AHD in Lake Albert. During the coming weeks, the Lower Lakes will be operated to maintain water levels and prolong barrage releases through summer. Barrage releases are being prioritised through Tauwitchere Barrage to enhance ecological outcomes in the Coorong. All barrage fishways are in operation and are being supported with attractant flows.

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

Water levels and barrage operations are monitored closely by various agencies of the South Australian Government, MDBA and the Commonwealth Environmental Water Office.

CONSTRUCTION WORKS

Construction of the Chowilla Creek Environmental Regulator and associated structures is ongoing. 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 16 January 2013

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	30.85	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.59	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.87	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.33	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.28	21.03	20.50
Renmark	567.4	-	16.36	18.54	18.04
Lock 5	562.4	16.30	16.33	18.07	17.50
Lyrup	537.8	-	13.33	16.85	16.26
Berri	525.9	-	13.29	15.81	15.74
Lock 4	516.2	13.20	13.27	15.65	15.08
Loxton	489.9	-	10.15	15.05	14.12
Cobdogla	446.9	-	9.78	13.44	12.38
Lock 3	431.4	9.80	9.72	13.16	12.02
Overland Corner	425.9	-	6.44	12.73	11.58
Waikerie	383.6	-	6.34	11.26	10.24
Lock 2	362.1	6.10	6.18	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	3.34	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.25	6.81	5.38
Swan Reach	245.0	0.75	0.74	6.06	4.51
Mannum PS	149.8	0.75	0.68	3.15	1.90
Murray Bridge	115.3	0.75	0.67	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.