# RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

### Flow to South Australia

Report #37/2012 Issued 10:00 am 21 September 2012

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 14 September 2012. The next flow report will be provided on Friday 28 September 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 August 2012 the River Murray system inflow was approximately 1 850 GL, which is above the long-term August average of approximately 1 600 GL. Inflow to Menindee Lakes during August 2012 was approximately 300 GL, which is also higher than the long-term average of 215 GL.

The flow to South Australia in August 2012 was approximately 1 250 GL, compared to 1 080 GL in August 2011.

South Australia is expected to continue to receive 3 000 ML/day of Additional Dilution Flow into December 2012 and unregulated flow into October 2012.

The major Murray-Darling Basin Authority-controlled storages are effectively full.

#### **STORAGE VOLUMES**

Murray-Darling Basin Authority storage volumes at 19 September 2012 and 19 September 2011

Storage	Full Supply Volume	19/9/2012	19/9/2011	Long-term average
	(GL)	(GL)	(GL)	(end of September)
Dartmouth	3 856	3 698 (96%)	2 763 (72%)	
Hume	3 003	2 956 (98%)	2 948 (98%)	
Lake Victoria	677	647 (96%)	532 (79%)	
Menindee Lakes	1 731*	2 025 (117%)	1 932 (112%)	
TOTAL	9 267 (100%)	9 326 (101%)	8 175 (88%)	7 458 (80%)

<sup>\*</sup>Menindee Lakes can be surcharged to 2 015 GL

#### RAINFALL OUTLOOK

The latest Bureau of Meteorology weather outlook for September to November 2012 indicates that a drier than normal season is likely for large parts of eastern Australia, with a wetter than normal season likely for southwest Queensland, and warmer temperatures are more likely over northern and eastern Australia.





### **River Murray Flow Report and Water Resource Update**

In the short term there are no significant rainfall events forecast across the key catchments.

#### WATER ALLOCATION OUTLOOK

Water access entitlement holders have 100 per cent water allocation in 2012–13. As South Australia continues to receive unregulated flow, the State is prevented from deferring and storing Entitlement Flow for carryover use in 2013–14 at this stage. In addition, the risk of spill from the major storages remains high. This situation may change and opportunities to defer water in 2012–13 for use in 2013–14 will be reassessed as the year progresses and when conditions become more favourable to defer water.

#### **FLOW OUTLOOK**

The flow at the South Australian border is approximately 44 000 to 45 000 ML/day. As Lake Victoria will be full in about one week, there is limited capacity to manage flow peaks to South Australia in the short term. Therefore, the flow to South Australia is expected to increase slightly over the next few weeks to around 48 000 ML/day, unless conditions change upstream. SA Water will monitor any impacts of the higher flows on the construction works at the Chowilla Environmental Regulator site.

South Australia is receiving unregulated flow, which is expected to continue into October 2012. Additional Dilution Flow (ADF) of 3 000 ML/day will continue to be received into December 2012 and possibly beyond. However, delivery of environmental water from Menindee Lakes may shorten this period if it commences in the next two months. This is because there is a storage volume cut-off trigger for ADF that might be met sooner if environmental water is delivered from the Menindee system.

The flow over Lock 1 is approximately 41 000 ML/day and is likely to remain at around this rate over the coming 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 changing 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. Forecasts 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 0.58 m AHD and the level in Lake Albert is approximately 0.77 m AHD.

In the coming week, barrage operations will be targeted to maintain water levels in the normal operating range. An additional water level lowering and raising event may be attempted in mid-spring when tide conditions are more conducive, providing there is sufficient water flowing down the river to refill the lakes after lowering. This will occur as part of an ongoing exercise to reduce salinity in Lake Albert.

Any salinity increases in the Goolwa Channel, as a result of possible high tides, are likely to be short-lived due to the large volume of fresh River Murray water flowing into Lake Alexandrina and out the barrages. To see live salinity data at various locations on the River Murray and in the Lower Lakes please refer to the following website: <a href="http://www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx">http://www.waterconnect.sa.gov.au/RMWD/Pages/default.aspx</a>

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.

#### **CONSTRUCTION WORKS**

Construction of the Chowilla Creek Environmental Regulator will be ongoing until Spring 2013. The Chowilla Creek remains closed to navigation at the construction site.





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#### **RIVER MURRAY WATER LEVELS**

SA Water and the Department of Environment, Water and Natural Resources have developed a River Murray Water Level 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 19 September 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	31.04	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.84	30.03	29.44
Lock 8 Wangumma	725.7	24.60	25.69	27.60	27.19
Lock 7 Rufus River	696.6	22.10	23.76	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.25	21.03	20.50
Renmark	567.4	-	-	18.54	18.04
Lock 5	562.4	16.30	16.21	18.07	17.50
Lyrup	537.8	-	-	16.85	16.26
Berri	525.9	-	13.88	15.81	15.74
Lock 4	516.2	13.20	13.40	15.65	15.08
Loxton	489.9	-	12.06	15.05	14.12
Cobdogla	446.9	-	-	13.44	12.38
Lock 3	431.4	9.80	9.92	13.16	12.02
Overland Corner	425.9	-	8.36	12.73	11.58
Waikerie	383.6	-	7.18	11.26	10.24
Lock 2	362.1	6.10	6.43	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	4.63	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.38	6.81	5.38
Swan Reach	245.0	0.75	1.72	6.06	4.51
Mannum PS	149.8	0.75	0.79	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.





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#### **FURTHER INFORMATION**

The South Australian Government has launched a campaign to fight for the health of the Murray River. The Fight for the Murray campaign aims to secure more water for the river under the proposed Murray-Darling Basin Plan. If you have an interest in the River Murray and a better Basin Plan, you are encouraged to join the fight for a healthy river at <a href="https://www.fightforthemurray.com.au">www.fightforthemurray.com.au</a>

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

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.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: <a href="http://www.bom.gov.au/vic/flood">http://www.bom.gov.au/vic/flood</a>

Information on the discharge of acid drainage water into the Lower River Murray can be accessed online at <a href="https://www.waterforgood.sa.gov.au">www.waterforgood.sa.gov.au</a>

Information provided by the Commonwealth Environmental Water Holder can be accessed at <a href="http://www.environment.gov.au/ewater/southern/murray/lower-murray.html">http://www.environment.gov.au/ewater/southern/murray/lower-murray.html</a>

Information on The Living Murray can be accessed at <a href="http://www.mdba.gov.au/programs/tlm/">http://www.mdba.gov.au/programs/tlm/</a>

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

#### **Department of Environment, Water and Natural Resources**

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

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

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



