# RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

## Flow to South Australia

Report #32/2012 Issued 10:00 am 17 August 2012

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 10 August 2012. The next flow report will be provided on Friday 24 August 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 July 2012 the River Murray system inflow was approximately 1 830 GL, which is well above the long-term July average inflow of approximately 1 240 GL and the 2011 July inflow of 1 470 GL. Inflow to Menindee Lakes during July 2012 was approximately 80 GL, compared to the long-term average of 135 GL. The inflow in July 2011 was 41 GL.

High inflow will be received from the Murrumbidgee and Goulburn rivers. In addition, releases from Menindee Lakes (Weir 32) have now been increased from 4 000 ML/d to 7 000 ML/d due to forecast inflows from recent rainfall upstream of Menindee Lakes. This is likely to extend the duration of unregulated flow to South Australia during September and into October 2012.

South Australia is expected to continue to receive 3 000 ML/day of Additional Dilution Flow into mid-November 2012. The extended duration of higher flow will allow for continued discharge over the barrages and in some circumstances inundation of low-lying floodplain and wetlands.

Major storages are relatively full for this time of the year.

#### STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 15 August 2012 and 15 August 2011

Storage	Full Supply Volume	15/8/2012	15/8/2011	Long-term average
	(GL)	(GL)	(GL)	(end of August)
Dartmouth	3 856	3 525 (91%)	2 655 (69%)	
Hume	3 003	2 934 (98%)	2 888 (96%)	
Lake Victoria	677	428 (63%)	513 (76%)	
Menindee Lakes	1 731*	1 999 (116%)	1 957 (113%)	
TOTAL	9 267 (100%)	8 886 (96%)	8 013 (86%)	7 130 (77%)

\*Menindee Lakes can be surcharged to 2 015 GL





#### **RAINFALL OUTLOOK**

The latest Bureau of Meteorology rainfall outlook for late winter to mid-spring (August to October) indicates that a drier than normal season is likely for large parts of the Murray-Darling Basin. This outlook is a result of emerging warmer waters in the central to eastern Pacific Ocean, with warmer than normal waters in the Indian Ocean also having an influence.

The short-term rainfall forecast shows the possibility of 25-50 mm across the Upper Murray catchment and this may provide further inflows into the River Murray.

#### 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 Hume Reservoir remains high. This situation may change and opportunities to defer water in 2012–13 for use in 2013–14 will be re-assessed as the year progresses and when conditions become more favourable to defer water.

#### FLOW OUTLOOK

The flow at the South Australian border is approximately 39 000 ML/day and is expected to remain around this rate over the coming week.

South Australia continues to receive unregulated flow, which is expected to continue during September and into October 2012. It is expected that South Australia will also continue to receive Additional Dilution Flow (ADF) of 3 000 ML/day into at least mid-November 2012; however, delivery of environmental water from Menindee Lakes may shorten this period. 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 Murray-Darling Basin Authority must discuss this issue with South Australia before any change.

The flow over Lock 1 is approximately 36 000 ML/day and is likely to remain around this rate over the coming week, depending on upstream operations.

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 0.60 m AHD and the level in Lake Albert is approximately 0.77 m AHD.

Barrage operations over the next week aim to reduce the water level in both lakes towards a target of approximately 0.55 m AHD, depending on tides and any additional local rainfall. It is proposed to hold this lower water level for a short period before refilling the lakes to a target of 0.80-0.85 m AHD. DEWNR and SA Water will monitor any potential localised impacts on water users. The cycle of lowering and raising water levels is part of a long-term operation aimed at flushing Lake Albert to reduce salinity levels. This exercise has been enabled due to the ongoing period of unregulated flow.

Due to the lower water level, people are advised to check infrastructure or property, such as irrigation offtakes and boat moorings. Parts of the Lower Lakes that are navigable at higher water levels may not be accessible by boat in the coming weeks.



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

#### **CONSTRUCTION WORKS**

Construction of the Chowilla Creek Environmental Regulator will be ongoing until spring 2013. The Chowilla Creek remains closed 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.

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	30.86	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.43	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.87	27.6	27.19
Lock 7 Rufus River	696.6	22.10	23.54	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.10	21.03	20.50
Renmark	567.4	-	16.25	18.54	18.04
Lock 5	562.4	16.30	16.11	18.07	17.50
Lyrup	537.8	-	13.87	16.85	16.26
Berri	525.9	-	13.61	15.81	15.74
Lock 4	516.2	13.20	13.20	15.65	15.08
Loxton	489.9	-	11.81	15.05	14.12
Cobdogla	446.9	-	10.21	13.44	12.38
Lock 3	431.4	9.80	9.73	13.16	12.02
Overland Corner	425.9	-	8.08	12.73	11.58
Waikerie	383.6	-	6.97	11.26	10.24
Lock 2	362.1	6.10	6.15	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	4.37	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.19	6.81	5.38
Swan Reach	245.0	0.75	1.52	6.06	4.51
Mannum PS	149.8	0.75	0.73	3.15	1.90
Murray Bridge	115.3	0.75	0.62	2.06	1.26

#### River Murray Water Levels as at 15 August 2012

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



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

#### 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 www.fightforthemurray.com.au

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

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: <u>http://www.bom.gov.au/vic/flood</u>

Information on the discharge of acid drainage water into the Lower River Murray can be accessed online at <u>www.waterforgood.sa.gov.au</u>

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.



