RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Report #11/2013 Issued 10:00 am 15 March 2013

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 8 March 2013. The next flow report will be provided on Friday, 22 March 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 February 2013, the total River Murray System inflow was approximately 90 GL, which is well below the long-term February average of around 190 GL. Inflow to Menindee Lakes during February 2013 was 0 GL with the long-term average for February around 125 GL.

The total flow to South Australia during February 2013 was approximately 250 GL (including approximately 50 GL of environmental water), compared with 610 GL during February 2012. The flow to South Australia currently comprises the March Entitlement Flow and water provided through the Commonwealth Environmental Water Holder. The volume of environmental water being delivered during March 2013 will be approximately 80 GL.

The major Murray-Darling Basin Authority (MDBA) controlled storages are holding around 69 per cent capacity. This will support the delivery of large volumes of water for irrigation and environmental purposes throughout autumn, particularly under ongoing dry conditions.

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 13 March 2013 and 13 March 2012

Storage	Full Supply Volume	13/02/2013	13/02/2012	Long-term average
	(GL)	(GL)	(GL)	(end of March)
Dartmouth	3 856	3 638 (94%)	3 125 (81%)	
Hume	3 003	1 623 (54%)	2 575 (86%)	
Lake Victoria	677	226 (33%)	495 (73%)	
Menindee Lakes	1 731*	891 (51%)	1 459(84%)	
TOTAL	9 267	6 378 (69%)	7 654 (83%)	5 505 (59%)

^{*}Menindee Lakes can be surcharged to 2 015 GL

RAINFALL AND TEMPERATURE OUTLOOK





River Murray Flow Report and Water Resource Update

The latest Bureau of Meteorology weather outlook for March to May 2013 indicates that a wetter than normal autumn season is more likely for much of South Australia, western New South Wales and South West Queensland. Cooler temperatures are more likely across south-eastern Australia. This outlook is a result of warmer than normal waters in the Indian and Pacific Oceans.

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 its full Entitlement Flow of 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 long continuous periods of unregulated flow to South Australia (which did not cease until the end of October 2012) and the delivery of environmental water which will continue into May 2013. Due to the above average temperatures over summer and into autumn, irrigation water use in South Australia has been high. This means most irrigators would either have a small volume, or no unused allocation by 30 June 2013.

FLOW OUTLOOK

The flow at the South Australian border is approximately 8 500 ML/day and is likely to remain around this rate during the coming week, depending on upstream operations and rainfall events. It comprises the March Entitlement Flow (nominal trade-adjusted flow of 6 000 ML/day), with the balance made up of environmental water provided to South Australia from the Goulburn River and the upstream River Murray System.

The volume of water held in Menindee Lakes is below the Additional Dilution Flow (ADF) trigger of 1 300 GL and as a result, delivery of ADF to South Australia has ceased. It is unlikely that inflows into Menindee Lakes, from rainfall in the eastern states during the last week of January and early March, will be sufficient for ADF to recommence in the foreseeable future. The NSW Office for Water has indicated that around 350 GL to 400 GL may flow into Menindee Lakes by late March 2013.

Lake Victoria storage is at 33 per cent capacity.

As river flows have returned to regulated flow conditions and near-normal pool levels, all water users should be aware of the risk of submerged navigation hazards such as sandbars, particularly downstream of Locks 7 and 8.

The flow over Lock 1 is approximately 4 600 ML/day and is likely to remain around this rate during the coming week, depending on weather conditions, irrigation demand and environmental water availability.

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 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 0.59 m AHD and approximately 0.65 m AHD in Lake Albert. During the coming week, barrage operations will continue to target a water level between 0.60 m AHD and 0.65 m AHD in both Lakes. All barrage fishways are in operation and are being supplemented with attractant flows in adjacent bays. SA Water will continue to operate the barrages to minimise negative impacts from reverse flow events during high tide or swell conditions.

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.





River Murray Flow Report and Water Resource Update

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

Below is a table of River Murray water levels at a number of locations from Lock 10 (near Wentworth) to Murray Bridge.

River Murray Water Levels as at 12 March 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	30.83	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.45	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.70	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.18	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.26	21.03	20.50
Renmark	567.4	-	-	18.54	18.04
Lock 5	562.4	16.30	16.30	18.07	17.50
Lyrup	537.8	-	-	16.85	16.26
Berri	525.9	-	13.24	15.81	15.74
Lock 4	516.2	13.20	13.25	15.65	15.08
Loxton	489.9	-	-	15.05	14.12
Cobdogla	446.9	-	-	13.44	12.38
Lock 3	431.4	9.80	9.80	13.16	12.02
Overland Corner	425.9	-	-	12.73	11.58
Waikerie	383.6	-	-	11.26	10.24
Lock 2	362.1	6.10	6.14	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	-	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.26	6.81	5.38
Swan Reach	245.0	0.75	0.55	6.06	4.51
Mannum PS	149.8	0.75	0.62	3.15	1.90
Murray Bridge	115.3	0.75	0.62	2.06	1.26

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





River Murray Flow Report and Water Resource Update

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

http://www.environment.sa.gov.au/Home

