RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Report #15/2013
Issued 10:00 am 12 April 2013

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 5 April 2013. The next flow report will be provided on Friday, 19 April 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 March 2013, the total River Murray System inflow was approximately 180 GL, which is well below the long-term March average of 220 GL. Inflow to Menindee Lakes during March 2013 was 370 GL, with the long-term average for March around 187 GL.

The total flow to South Australia during March 2013 was approximately 260 GL (including approximately 95 GL of environmental water), compared with 1 025 GL during March 2012. The flow to South Australia currently comprises the April Entitlement Flow and water provided through the Commonwealth Environmental Water Holder. The volume of environmental water being delivered during April 2013 will be approximately 90 GL.

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

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 10 April 2013 and 10 April 2012

Storage	Full Supply Volume (GL)	10/04/2013 (GL)	10/04/2012 (GL)	Long-term average (end of April)
Dartmouth	3 856	3 581 (93%)	3 184 (83%)	
Hume	3 003	1 446 (48%)	2 656 (88%)	
Lake Victoria	677	196 (29%)	441 (73%)	
Menindee Lakes	1 731*	1 164 (67%)	1 428 (65%)	
TOTAL	9 267	6 387 (69%)	7 709 (83%)	5 424 (59%)

*Menindee Lakes can be surcharged to 2 015 GL

RAINFALL AND TEMPERATURE OUTLOOK

The latest Bureau of Meteorology weather outlook for April to June 2013 indicates that a wetter than normal season is more likely for most of southern Queensland and northern and eastern NSW. A drier than normal season is more likely for Victoria and South Australia. Warmer temperatures are more likely over most of 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 at least 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 only a small volume, or no unused allocation by 30 June 2013.

FLOW OUTLOOK

The flow at the South Australian border is approximately 7 300 ML/day and is likely to reduce to around 6 500 ML/day during the coming week, depending on upstream operations and rainfall events. It comprises the April Entitlement Flow (nominal trade-adjusted flow of 4 500 ML/day), with the balance made up of environmental water provided to South Australia from the Goulburn and Broken Rivers and the River Murray System storages.

Inflows into the Darling River System from rainfall in Queensland and New South Wales during late January and early March are flowing into the Menindee Lakes, with inflows of around 370 GL during March 2013.

Lake Victoria storage is at 29 per cent capacity.

As the River Murray is under regulated flow conditions, pool levels are near normal. 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 6 000 ML/day and is likely to reduce to around 5 500 ML/day during the coming week, depending on weather conditions, irrigation demand and environmental water delivery.

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 0.64 m AHD and approximately 0.62 m AHD in Lake Albert. During the coming week, barrage operations will 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 any 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, Murray-Darling Basin Authority and the Commonwealth Environmental Water Office.

CONSTRUCTION WORKS

Currency Creek

The Currency Creek Regulator is currently being removed by Maritime Constructions. Mobilisation to the site commenced on Monday, 8 April 2013. The dredge is scheduled to arrive in the week starting 15 April 2013. Removal of the regulator will commence soon after and take approximately 3 months to complete. Maritime Construction will be operating 24 hours a day, 7 days a week until the work is completed.

Chowilla

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 10 April 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	30.86	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.46	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.71	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.16	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.23	21.03	20.50
Renmark	567.4	-	16.33	18.54	18.04
Lock 5	562.4	16.30	16.31	18.07	17.50
Lyrup	537.8	-	13.29	16.85	16.26
Berri	525.9	-	13.27	15.81	15.74
Lock 4	516.2	13.20	13.24	15.65	15.08
Loxton	489.9	-	10.14	15.05	14.12
Cobdogla	446.9	-	9.89	13.44	12.38
Lock 3	431.4	9.80	9.82	13.16	12.02
Overland Corner	425.9	-	6.45	12.73	11.58
Waikerie	383.6	-	6.32	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	-	3.35	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.26	6.81	5.38
Swan Reach	245.0	0.75	0.69	6.06	4.51
Mannum PS	149.8	0.75	0.64	3.15	1.90
Murray Bridge	115.3	0.75	0.73	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

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