RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Report #7/2013
Issued 10:00 am 15 February 2013

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 8 February 2013. The next flow report will be provided on Friday, 22 February 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 January 2013, the total River Murray System inflow was approximately 130 GL, which is half the long-term January average of around 260 GL. Inflow to Menindee Lakes during January 2013 was 0 GL and the long-term average for January is around 120 GL.

The total flow to South Australia in January 2013 was approximately 330 GL (including approximately 100 GL of environmental water), compared to 540 GL in January 2012. The flow to South Australia currently comprises the February 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 73 per cent capacity. This will support the delivery of large volumes of water for irrigation and environmental purposes through summer and autumn.

STORAGE VOLUMES

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

Storage	Full Supply Volume (GL)	13/02/2013 (GL)	13/02/2012 (GL)	Long-term average (end of February)
Dartmouth	3 856	3 724 (97%)	2 964 (77%)	
Hume	3 003	1 737 (58%)	2 012 (67%)	
Lake Victoria	677	333 (49%)	538 (80%)	
Menindee Lakes	1 731*	990 (57%)	1 614 (93%)	
TOTAL	9 267	6 784 (73%)	7 128 (77%)	5 922 (64%)

*Menindee Lakes can be surcharged to 2 015 GL

RAINFALL AND TEMPERATURE OUTLOOK

The latest Bureau of Meteorology weather outlook for February to April 2013 indicates that a drier season is likely for south-eastern Australia, with a wetter than normal season more likely for northern 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 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.

INTERSTATE RAINFALL EVENT

Recent heavy rainfall across southern Queensland and northern New South Wales has provided substantial inflows in rivers near the New South Wales-Queensland border. A proportion of this water will flow into the Barwon-Darling system. Preliminary forecasts indicate that good flows will be reinstated through the Darling River to the Menindee Lakes, where conditions have been dry with low inflows since last summer. It will take a few months for this flow to reach the Menindee Lakes due to the long distance the water has to travel. Given the above factors, it is difficult at this time to forecast an inflow volume. As water arrives at Bourke and Wilcannia more reliable estimates can be undertaken.

The Bureau of Meteorology has issued flood warnings for the Balonne and Weir rivers in Queensland and Barwon, Narran and Culgoa rivers in New South Wales, which flow into the Darling River. These warnings can be accessed at:

http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDQ20825.html

http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDQ20835.html

http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDN36634.html

http://www.bom.gov.au/cgi-bin/wrap_fwo.pl?IDN36630.html

FLOW OUTLOOK

The flow at the South Australian border is approximately 8 200 ML/day and is likely to remain around this rate during the coming week, depending on upstream operations and rainfall events. It comprises the February Entitlement Flow (nominal trade-adjusted flow of 6 929 ML/day) and environmental water provided by The Living Murray Program and Commonwealth Environmental Water.

The volume of water held in Menindee Lakes has dropped 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 will be sufficient for ADF to recommence in the foreseeable future. Lake Victoria storage is at 49 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 5 000 ML/day and is likely to remain around this rate 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 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 0.63 m AHD and approximately 0.58 m AHD in Lake Albert. During the coming week, barrage operations will be targeting a water level in both Lakes between 0.60 m AHD and 0.65 m AHD. 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.

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 River Murray water level chart at a number of locations from Lock 10 (near Wentworth) to Murray Bridge, provided by SA Water and the Department of Environment, Water and Natural Resources.

River Murray Water Levels as at 13 February 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	30.84	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.48	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.74	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.20	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.27	21.03	20.50
Renmark	567.4	-	16.32	18.54	18.04
Lock 5	562.4	16.30	16.31	18.07	17.50
Lyrup	537.8	-	13.26	16.85	16.26
Berri	525.9	-	13.23	15.81	15.74
Lock 4	516.2	13.20	13.22	15.65	15.08
Loxton	489.9	-	10.14	15.05	14.12
Cobdogla	446.9	-	9.85	13.44	12.38
Lock 3	431.4	9.80	9.78	13.16	12.02
Overland Corner	425.9	-	6.35	12.73	11.58
Waikerie	383.6	-	6.32	11.26	10.24
Lock 2	362.1	6.10	6.16	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	3.24	6.81	5.38
Swan Reach	245.0	0.75	0.71	6.06	4.51
Mannum PS	149.8	0.75	0.67	3.15	1.90
Murray Bridge	115.3	0.75	0.70	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