

RIVER MURRAY WEEKLY FLOW REPORT

Flow to South Australia

Report #12/2012

Issued 10:00am 23 March 2012

This supersedes the previous flow report issued by the Department for Water on 16 March 2012. A further flow report will be provided on Friday 30 March 2012.

Please note that what was the weekly "Flow Advice" is now called the River Murray Weekly Flow Report to avoid confusion about the role of this and other River Murray advisory documents.

RECENT RAINFALL UPSTREAM OF SOUTH AUSTRALIA

Rainfall in the range of 10mm to 50mm occurred across the southern Murray-Darling Basin over the past week and this will not significantly increase inflows into the River Murray system. The river conditions report (Figure 1) provided by the Bureau of Meteorology (BoM) highlights a number of locations that are in minor, moderate and major flooding categories. Major flooding is occurring at the following locations:

- Darling River at Louth 12.87m and Tilpa 12.88m, which peaked on 20 March. Major flooding will occur at Wilcannia around 3 April at 10.9m. Airspace continues to be made at Menindee Lakes to accommodate the peak inflows;
- Lachlan River at Eaubalong 6.86m, which was due to peak today at 6.88m ; and
- Murrumbidgee River at Hay 8.76m, which will fall slowly to about 8.1m by around 29 March.

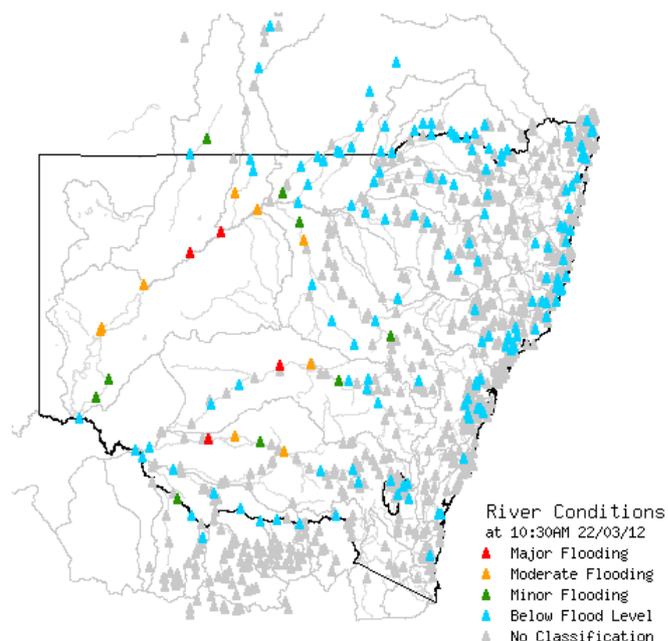


Figure 1 BoM River Conditions Report



Government of South Australia
Department for Water

WATER IS GOOD

The implications for South Australia of recent rainfall across New South Wales and Victoria are becoming clearer, and inflow estimations are being revised continually due to large potential losses expected as a result of water flowing across expansive floodplains and through major irrigation areas. Large flow peaks have been observed at upstream locations such as Wagga Wagga and Gundagai; however, the flow peak will be reduced significantly by the time it reaches Balranald in early to mid-April 2012. These higher flows from the Murrumbidgee River are likely to arrive at the River Murray after other high flows have passed downstream.

The Bureau of Meteorology advised on 21 March that flows from the Murray, Murrumbidgee and Darling Rivers are not expected to cause any flooding or access problems to towns along the River Murray. Based on current flow projections, river heights at other forecast locations, such as Swan Hill, Robinvale, Echuca, Euston and Wentworth, are expected to remain below their respective minor flood levels.

NSW is still releasing 35,000 ML/day from Menindee Lakes to accommodate future floodwater in transit from earlier this year. The Menindee Lakes will be surcharged when the peak arrives in early April. These rainfall events have wet all major catchments and nearly filled the major storages. This will also wet the floodplain before winter and spring. These conditions increase the chances of higher inflow events during the remainder of 2012 and possibly into 2013.

South Australia will experience higher flows for approximately two months as a result of these inflows, which will provide benefits for wetlands and some floodplains, and will enable continued discharge from the Lower Lakes and improved conditions in Lake Albert and the Coorong.

RAINFALL OUTLOOK

The latest BoM rainfall outlook for April to June 2012 indicates that large parts of eastern Australia are more likely to experience a wetter season. This outlook is predominantly due to warmer than normal waters in the Indian Ocean.

FLOW OUTLOOK

The flow to South Australia is currently 41,500 ML/day and will continue to increase in the next week up towards 50,000 ML/day. The flow is likely to rise to around 60,000 ML/day by mid-April. Further rises may occur above 60,000 ML/day due to possible revisions to inflow forecasts at upstream locations, notably at Balranald on the Murrumbidgee River. This is a preliminary forecast which will be updated and provided on a weekly basis.

Based on currently available information, the flow to South Australia is not expected to reach the 93,800 ML/day observed in mid-February 2011.

Significant overbank flows begin to occur when the flow to South Australia increases to more than 40,000 ML/day at the border. A flow of between 60,000 and 100,000 ML/day is required to begin flooding shack areas downstream of Cadell and the floodplains in South Australia.

There is no immediate risk of flooding to South Australia.

South Australia's Entitlement Flow during March is 6000 ML/day and Additional Dilution Flow (ADF) of 3000 ML/day is still being received. Unregulated flow conditions are being experienced and are likely to continue for a number of months. There is a high risk of spill from the Upper River Murray storages over the next six to eight months.

The flow over Lock 1 is currently 27,000 ML/day and will increase over the coming week, and is likely to be between 30,000 and 35,000 ML/day.



Much of the unregulated flow will pass through South Australia to the Lower Lakes and Coorong. This will assist in the maintenance of barrage releases over autumn and winter, to improve and maintain salinity levels in Lakes Alexandrina and Albert and maintain connectivity with the Coorong. In addition, environmental water from *The Living Murray* initiative is being delivered to Coombool Swamp on the Chowilla Floodplain to enhance the vegetation and wildlife habitat of this high elevation wetland. Other planned environmental watering of lower level wetlands at Chowilla has been suspended because the sites are likely to receive water naturally as a result of the high flows. Coombool Swamp has received approximately 2500 ML of water and a waterbird survey has identified more than 1500 birds (24 species) using the wetland.

SALINITY OUTLOOK

Continuation of Additional Dilution Flow in conjunction with substantial unregulated flow will continue to mitigate some of the impacts of localised salinity increases. The Department for Water continues to undertake detailed modelling of salt loads.

Irrigators are reminded to check the salinity levels regularly at their pump sites and also to access the Department for Water's River Murray Water Data website to obtain real-time salinity data from locations where monitoring sites are established. The data can be accessed via the following link:

<http://data.rivermurray.sa.gov.au/Telemetry/Default.aspx?App=RMW>

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

High tides in the Coorong will continue over the next few days and all non-hydraulically operated barrage openings, with the exception of Boundary Creek, will be closed. It is normal for the occurrence of high tides to increase every year from April. Water levels and barrage operations are continuously monitored by the various agencies of the South Australian Government, Murray-Darling Basin Authority and the Commonwealth Environmental Water Holder.

The water level in Lake Alexandrina is approximately 0.59m AHD and the water level in Lake Albert is approximately 0.61m AHD. An operation to cycle water in and out of Lake Albert by manipulating water levels is being undertaken in order to mobilise and export salt. Given the large volume of water expected to flow across the border over the next three months, there is a possibility of further water level manipulations.

It is important to note that water levels in the Lower Lakes may also vary considerably with wind speed and direction. This, when combined with the high tides in the Coorong, could result in seawater backflow events. In addition, wind effects may cause inundation of low-lying areas around the edges of Lake Alexandrina, Lake Albert or the Goolwa Channel. Barrage operations are being closely monitored by SA Water to minimise the impacts of any forecast backflow events.

The Department for Water is responsible for monitoring salinity in the Lower Lakes and maintains a network of salinity recording devices at a number of locations. Data collected from this monitoring network assists the Murray-Darling Basin Authority and the Government of South Australia in determining barrage operations, conducting scientific analysis and formulating policy positions.

RIVER MURRAY WATER LEVELS

SA Water and the Department for Water have developed a River Murray Water Level chart (attached) to provide water levels at a number of locations from Lock 10 (near Wentworth) to Murray Bridge.



FURTHER INFORMATION

The Department for Water 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 for Water, SA Water and Murray-Darling Basin Authority websites:

<http://data.rivermurray.sa.gov.au>

www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm

<http://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/australia/flood/>

Information provided by the Commonwealth Environmental Water Holder:

<http://www.environment.gov.au/ewater/southern/murray/lower-murray.html>

Information on the discharge of acid drainage water into the Lower River Murray can be accessed online at

www.waterforgood.sa.gov.au



River Murray Water Levels as at 21 March 2012

Location	River Km	Normal Pool Level	Current Level (m AHD)
Lock 10	825.0	30.80	30.84
Lock 9 Kulnine	764.8	27.40	27.40
Lock 8 Wangumma	725.7	24.60	24.94
Lock 7 Rufus River	696.6	22.10	23.29.
Lock 6 Murtho	619.8	19.25	19.19
Renmark	567.4	-	16.30
Lock 5	562.4	16.30	16.24
Lyrup	537.8	-	13.48
Berri	525.9	-	13.30
Lock 4	516.2	13.20	13.15
Loxton	489.9	-	11.12
Cobdogla	446.9	-	-
Lock 3	431.4	9.80	9.87
Overland Corner	425.9	-	7.38
Waikerie	383.6	-	6.45
Lock 2	362.1	6.10	6.03
Cadell	332.6	-	-
Morgan	321.7	-	3.71
Lock 1 Blanchetown	274.2	3.20	3.12
Swan Reach	245.0	0.75	0.99
Mannum PS	149.8	0.75	0.80
Murray Bridge	115.3	0.75	0.70

Note that the above water levels may be affected by local wind conditions. Regularly updated water level information can be found at the following websites:

SA Water

www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm

Department for Water

<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 for Water notifies otherwise.

