

RIVER MURRAY FLOW REPORT AND WATER RESOURCE UPDATE

Flow to South Australia

Report #19/2012

Issued 10:00 am 11 May 2012

This supersedes the previous flow report issued by the Department for Water on 4 May 2012. A further flow report will be provided on Friday 18 May 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 April 2012 the River Murray system inflow was approximately 1,080 GL. This is the second highest April inflow on record. The April long-term average is approximately 230 GL. The high inflow was largely due to the heavy rainfall event in early March 2012. April 2012 has been relatively dry. Most of the inflow was generated downstream of the major reservoirs and is therefore unregulated. South Australia will continue to receive unregulated flow in May and probably into June 2012.

Menindee Lakes received approximately 1,200 GL of inflow in April. This is well above the April long-term average of 200 GL.

The flow to South Australia peaked just below 60 GL/day in early April. Since the peak, the flow rate has remained between 55 GL/day and 60 GL/day. South Australia has received nearly 8,500 GL since 1 July 2011, which includes a large volume of unregulated flow and environmental water from the Commonwealth Environmental Water Holder. The extended duration of higher flow will allow for continued discharge through the barrages and some inundation of low-lying floodplain and wetlands.

Most of the major storages are relatively full. This has enabled a large volume of water to be made available to each state at the start of 2012-13. South Australia is guaranteed its full Entitlement Flow of 1,850 GL in 2012-13 and has reserved some water towards the Minimum Reserve (to assist in securing Entitlement Flow) in 2013-14, in accordance with the Murray-Darling Basin Agreement (clause 103).



Government of South Australia
Department for Water

WATER IS GOOD

STORAGE VOLUMES

Murray-Darling Basin Authority storage volumes at 9 May 2012 and 9 May 2011

Storage	Full Supply Volume (GL)	9/5/2012 (GL)	9/5/2011 (GL)	Long-term average (end of May)
Dartmouth	3,856	3,208 (83%)	2,437 (63%)	
Hume	3,003	2,623 (87%)	2,799 (93 %)	
Lake Victoria	677	350 (52 %)	373 (55 %)	
Menindee Lakes	1,731*	1,987 (115 %)	1,904 (110 %)	
TOTAL	9,267 (100%)	8,168 (88 %)	7,513 (81 %)	5,729 (59%)

*Menindee Lakes can be surcharged to 2015 GL

RAINFALL OUTLOOK

The latest Bureau of Meteorology (BoM) rainfall outlook for May to July 2012 indicates that large parts of northern and eastern Australia are likely to experience a wetter season. South-east Australia is likely to experience a drier season. This outlook is mainly influenced by warmer than normal waters in the Indian Ocean.

WATER ALLOCATION OUTLOOK FOR 2012-13

South Australian irrigators will receive 100 percent water allocation in 2012-13. As South Australia is continuing to receive unregulated flow, it is prevented from deferring and storing Entitlement Flow for carryover under the Murray-Darling Basin Agreement. There will be no ability to carry over water into the 2012-13 water year. However, irrigators will have 100 per cent water allocation so they will have enough water to meet their normal production requirements without the need to use carryover.

FLOW OUTLOOK

The flow at the South Australian border is approximately 55,000 ML/day. During the coming week the flow is likely to reduce to around 50,000 ML/day.

The flow over Lock 1 is approximately 53,000 ML/day and is likely to remain around this rate during the coming week.

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 upstream operations. 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 0.71m AHD and the level in Lake Albert is approximately 0.78m AHD.

Barrage operations over the past week have maximised opportunities to release water from the Lower Lakes, taking into account high swells, tides and winds. Although reverse head conditions were experienced at times, there was negligible impact on salinity. In the coming week, the barrages will be closed for a few days due to high tides, which will limit opportunities for barrage releases. This will be carefully monitored and managed to minimise seawater ingress during reverse head conditions.

Residents and landholders located near the barrages may observe increased salinity in the area's waterways due to reverse head conditions. With large volumes of fresh River Murray water flowing into the area, any salinity spikes are likely to be short-lived.

Note that the boat locks at Tauwitchere and Goolwa will continue to operate as normal.

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

BLACKWATER AT JUNCTION OF RIVER MURRAY AND MURRUMBIDGEE RIVER

At the junction of the River Murray and Murrumbidgee River the dissolved oxygen level is relatively low. This low-oxygen blackwater is being monitored and managed with environmental water releases to increase dissolved oxygen. At this stage, it is not anticipated that this event will pose a threat to South Australia.

Blackwater is a natural part of the ecology of lowland river systems during high flows, where accumulated organic matter decays in wetlands or waterways. As the organic matter decays, oxygen in the water is consumed, which results in low dissolved oxygen and the water turning black. The low level of dissolved oxygen may cause stress to aquatic animals and fish deaths.

Updates will be provided in future flow reports.



RIVER MURRAY WATER LEVELS

SA Water and the Department for Water 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.

River Murray Water Levels as at 9 May 2012

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	31.01	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.66	30.03	29.44
Lock 8 Wangumma	725.7	24.60	25.85	27.6	27.19
Lock 7 Rufus River	696.6	22.10	24.12	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.33	21.03	20.50
Renmark	567.4	-	16.48	18.54	18.04
Lock 5	562.4	16.30	16.24	18.07	17.50
Lyrup	537.8	-	14.63	16.85	16.26
Berri	525.9	-	14.27	15.81	15.74
Lock 4	516.2	13.20	13.84	15.65	15.08
Loxton	489.9	-	12.51	15.05	14.12
Cobdogla	446.9	-	10.65	13.44	12.38
Lock 3	431.4	9.80	9.96	13.16	12.02
Overland Corner	425.9	-	9.02	12.73	11.58
Waikerie	383.6	-	7.85	11.26	10.24
Lock 2	362.1	6.10	7.04	10.28	9.30
Cadell	332.6	-	-	9.17	8.08
Morgan	321.7	-	5.10	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.49	6.81	5.38
Swan Reach	245.0	0.75	2.08	6.06	4.51
Mannum PS	149.8	0.75	0.93	3.15	1.90
Murray Bridge	115.3	0.75	0.78	2.06	1.26

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



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/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

Information provided by the Commonwealth Environmental Water Holder can be accessed at <http://www.environment.gov.au/ewater/southern/murray/lower-murray.html>

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 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.

