

RIVER MURRAY FLOW REPORT

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Report #14/2014

Issued 10:00 am 4 April 2014

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 28 March 2014. The next flow report will be provided on Friday, 11 April 2014.

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.

FLOW OUTLOOK

The flow at the South Australian border is approximately 4 100 ML/day and will increase to around 6 000 ML/day during the coming week, depending on upstream river and storage operations, extractions, and rainfall events. The flow comprises the normal April Entitlement Flow of 4 500 ML/day, minus deferred Entitlement Flow of 220 ML/day, minus some April Entitlement Flow (which will be delivered in May) and environmental water from the Commonwealth Environmental Water Holder.

South Australia's April Entitlement Flow is being delivered in an altered daily pattern due to construction works at Lake Victoria outlet regulator, which restricts the outlet capacity. The Commonwealth Environmental Water Holder is delivering environmental water to South Australia in April 2014. South Australia is working with the Commonwealth Environmental Water Holder to deliver additional environmental water in future months. South Australia will receive flows in April above the normal Entitlement Flow of 135 GL.

On 1 April 2014, South Australia had 30 GL of its Entitlement Flow stored in the upstream (interstate) storages for critical human water needs use in future dry years and 13.4 GL for private carryover use in future dry years. South Australia has requested that the Murray-Darling Basin Authority defer and store an additional 6.6 GL of Entitlement Flow in April 2014 for future private carryover use. South Australia is not proposing to defer any of its Entitlement Flow in May 2014 due to a lower monthly Entitlement Flow of only 93 GL. The volume stored in the upstream storages will be adjusted for net evaporation losses.

The flow over Lock 1 is approximately 3 000 ML/day and will increase to about 3 500 ML/day during the coming week, depending on weather conditions and extractions.

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 0.65 m AHD in Lake Albert. The volume of water in the Lower Lakes is being managed to maximise water availability for continuous barrage releases during autumn. Barrage releases have increased recently and are being prioritised through Tauwichee and Goolwa. All fishways are in operation. SA Water will continue to operate the barrages to minimise any negative salinity impacts from reverse flow events.

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/Systems/RTWD/SitePages/Home.aspx>

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



WATER QUALITY – Blue-Green Algae

The New South Wales Government (through Regional Algal Coordinating Committees) has issued red alert warnings for toxic blue-green algae at:

- Menindee Lakes and the Great Darling Anabranch at, and upstream of, Tara Downs, where the water is unsuitable for stock and domestic, irrigation and recreational purposes;
- Griffith and Balranald on the Murrumbidgee River, where the water is unsuitable for recreational and stock watering purposes; and
- downstream of Barren Box Swamp on the Murrumbidgee River, where the water is unsuitable for irrigation, stock and domestic purpose.

Although these toxic blue-green algal blooms pose no threat to South Australia at this stage, the Murray-Darling Basin Authority and the relevant South Australian Government agencies are regularly monitoring the situation. It is not uncommon to experience algal blooms at this time of the year.

NAVIGATION ISSUES

Sandbars in the vicinity of the Murray Mouth may cause navigation hazards. Mariners are advised to navigate with caution when operating in the area. Sandbars are also present along sections of the River Murray in South Australia and all watercraft users should be aware of, and regularly check, the river depth.

CONSTRUCTION WORKS

River Vessel Waste Disposal Station Upgrades

Upgrade works are continuing at the **Mannum** River Vessel Waste Disposal Station, which will be out of commission until 16 April 2014. Temporary pump-out facilities are available 500 metres downstream of Mannum at the Unforgettable Houseboats Marina.

The upgrade works at the **Morgan** River Vessel Waste Disposal Station are now complete and the station is operational.

Lake Victoria Outlet Regulator

Remedial works on the Lake Victoria Outlet Regulator are expected to be completed around June 2014. The works are necessary to improve the structural integrity of the regulator.

Mullaroo Creek

Remedial works in the Mullaroo Creek (located in Victoria and flows into the Lindsay River, which enters the River Murray between Lock 6 and 7) are expected to be completed around June 2014. The works are necessary to improve the control of flows in this system. For public safety reasons the Mullaroo Creek will be closed to navigation at the work site during the construction period.

Lock 4

Remedial works at Lock 4 are scheduled to commence early May 2014 and be completed around early August 2014. During this period Lock 4 will be closed to navigation.

Lock 11

Pre-works for the installation of mechanised gates at Lock 11 (Mildura weir pool) is scheduled to commence in mid-June for approximately one week. The installation of the mechanised gates will commence in mid-July and is expected to be completed in early August 2014. During this period Lock 11 will be closed to navigation.

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. Works are also underway to upgrade the weirs on Pipeclay Creek and Slaney Creek to improve the management of flows into the Chowilla anabranch and to enable fish passage. The weirs are closed to boat traffic during this construction program.

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 on 2 April 2014

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	30.80	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.31	30.03	29.44
Lock 8 Wangumma	725.7	24.60	24.15	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.11	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.27	21.03	20.50
Renmark	567.4	-	-	18.54	18.04
Lock 5	562.4	16.30	16.40	18.07	17.50
Lyrup	537.8	-	13.31	16.85	16.26
Berri	525.9	-	13.27	15.81	15.74
Lock 4	516.2	13.20	13.28	15.65	15.08
Loxton	489.9	-	10.17	15.05	14.12
Cobdogla	446.9	-	-	13.44	12.38
Lock 3	431.4	9.80	9.94	13.16	12.02
Overland Corner	425.9	-	6.45	12.73	11.58
Waikerie	383.6	-	6.49	11.26	10.24
Lock 2	362.1	6.10	6.31	10.28	9.30
Cadell	332.6	-	3.48	9.17	8.08
Morgan	321.7	-	3.44	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.38	6.81	5.38
Swan Reach	245.0	0.75	0.70	6.06	4.51
Mannum PS	149.8	0.75	0.66	3.15	1.90
Murray Bridge	115.3	0.75	0.67	2.06	1.26

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

River Murray Flow Report

FURTHER INFORMATION

The WaterConnect website is South Australia's comprehensive water information portal and can be accessed at: <http://www.waterconnect.sa.gov.au>

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:

<http://www.waterconnect.sa.gov.au/Systems/RTWD/SitePages/Home.aspx>

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

<http://www.mdba.gov.au/river-data/live-river-data>

The Department of Environment, Water and Natural Resources has published a series of inundation maps for the River Murray. They are available at: <http://www.waterconnect.sa.gov.au/Systems/RMIM/Pages/default.aspx>

Information on the management of acid drainage water in the Lower River Murray can be accessed online at:

http://www.epa.sa.gov.au/environmental_info/water_quality/acid_sulfate_soils_ass/lower_river_murray_reclaimed_irrigation_area_lmria

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 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:

<http://www.mdba.gov.au/about-basin/environmental-sites>

Information is also available from the SA Water Hotline on **08 8595 2299**

Department of Environment, Water and Natural Resources

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

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