# **RIVER MURRAY FLOW REPORT**

**Public I2 A2** 

Report #27/2014 Issued 10:00 am 4 July 2014

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 27 June 2014. The next flow report will be provided on Friday, 11 July 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 4 000 ML/day and will reduce to around 3 500 ML/day during the coming week, depending on upstream river and storage operations, extractions, and rainfall events. The flow comprises the normal July Entitlement Flow of 3 500 ML/day plus additional water due to recent rainfall. Recent rainfall in north-eastern Victoria may provide South Australia with a short period of unregulated flow in late July/early August 2014.

Construction works at the Lake Victoria outlet regulator will continue during July 2014. These works are restricting the outlet capacity. DEWNR is working closely with the Murray-Darling Basin Authority and SA Water to manage the flow to South Australia during this time.

The flow over Lock 1 is approximately 2 900 ML/day and will increase to around 3 300 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.

### **WATER ALLOCATIONS IN 2014-15**

On 17 June 2014, the Minister for Water and the River Murray, Hon Ian Hunter, announced that South Australian River Murray Water Access Entitlement Holders will receive a 100 per cent water allocation in 2014-15.

## MANAGEMENT OF SOUTH AUSTRALIA'S DEFERRED WATER

On 1 May 2014, South Australia had deferred 30 GL of its Entitlement Flow into storage to meet critical human water needs use in future dry years and 20 GL for private carryover use in future dry years. The volume of deferred water in the upstream storages is adjusted for net evaporation losses until it is delivered to South Australia. There is a high risk of some private carryover water spilling from Lake Victoria due to recent rainfall and water level limits related to the works on the outlet regulator. South Australia is not proposing to defer any additional water while the Entitlement Flow remains low and the risk of spill from Lake Victoria remains high.

DEWNR is currently investigating opportunities to defer additional Entitlement Flow during 2014-15.

## BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is approximately 0.71 m AHD and approximately 0.75 m AHD in Lake Albert. The volume of water in the Lower Lakes is being managed to optimise water availability for continuous barrage releases during winter. SA Water will continue to operate the barrages to minimise any negative salinity impacts from reverse flow events. When conditions are conducive to opening the barrages, releases will be prioritised through Tauwitchere and Goolwa. All fishways are in operation.





To see live salinity data at various locations on the River Murray and in the Lower Lakes, please refer to the following website: <a href="http://www.waterconnect.sa.gov.au/Systems/RTWD/SitePages/Home.aspx">http://www.waterconnect.sa.gov.au/Systems/RTWD/SitePages/Home.aspx</a>

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, where water is unsuitable for stock and domestic, irrigation and recreational purposes;
- Balranald on the Murrumbidgee River, where water is unsuitable for recreational and stock watering purposes; and
- downstream of Barren Box Swamp on the Murrumbidgee River, where water is unsuitable for irrigation, stock and domestic purposes.

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.

#### **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, downstream of Lock 7 and 8 and in South Australia. All watercraft users should be aware of the risk of submerged navigation hazards, and should regularly check the river depth.

## **CONSTRUCTION WORKS**

Swan Reach River Vessel Waste Disposal Station

Remedial works at Swan Reach River Vessel Waste Disposal Station are now complete. The station is undergoing testing and commissioning and advice on the reopening date will be provided in next week's Flow Report. A temporary waste pumping service is being provided by Swan Reach Septic Pumping and Maintenance. The phone number and details of the service are available at the station and advertised in the local media.

### Lock 4

Remedial works at Lock 4 commenced on 5 May 2014 and are expected to be completed by early August 2014. The works are necessary to improve the structural integrity of the Lock chamber. During this period Lock 4 will be closed to navigation.

# 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 the end of July 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.

# Chowilla

Construction of the Chowilla Creek Environmental Regulator and associated structures is nearing completion. For public safety reasons, the Chowilla Creek remains closed to navigation at the construction site at this time. Works to upgrade Pipeclay Creek and Slaney Creek weirs to improve the management of flows into the Chowilla anabranch and to enable fish passage have recently been completed.





Lake Victoria Outlet Regulator

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

Camping is not allowed in the area immediately downstream of the regulator during the construction period. There are alternate camping sites nearby, along Rufus River.

#### Lock 11

Installation of mechanised gates at Lock 11 will commence on 15 July 2014 and is expected to be completed in mid-August 2014. During this period the water level in the Lock 11 weir pool (Mildura) will be drawn down to a very low level and the Lock will be closed to navigation.

# **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 July 2014**

Location	River km	Normal Pool Level	Current Level	1974 Flood Level	1993 Flood Level
			(m AHD)	(m AHD)	(m AHD)
Lock 10	825.0	30.80	30.82	33.81	33.32
Lock 9 Kulnine	764.8	27.40	27.51	30.03	29.44
Lock 8 Wangumma	725.7	24.60	25.09	27.60	27.19
Lock 7 Rufus River	696.6	22.10	22.15	25.70	25.24
Lock 6 Murtho	619.8	19.25	19.26	21.03	20.50
Renmark	567.4	-	-	18.54	18.04
Lock 5	562.4	16.30	16.37	18.07	17.50
Lyrup	537.8	-	13.23	16.85	16.26
Berri	525.9	-	13.20	15.81	15.74
Lock 4	516.2	13.20	13.20	15.65	15.08
Loxton	489.9	-	10.04	15.05	14.12
Cobdogla	446.9	-	-	13.44	12.38
Lock 3	431.4	9.80	9.89	13.16	12.02
Overland Corner	425.9	-	6.37	12.73	11.58
Waikerie	383.6	-	6.41	11.26	10.24
Lock 2	362.1	6.10	6.29	10.28	9.30
Cadell	332.6	-	3.45	9.17	8.08
Morgan	321.7	-	3.44	8.85	7.65
Lock 1 Blanchetown	274.2	3.20	3.39	6.81	5.38
Swan Reach	245.0	0.75	0.75	6.06	4.51
Mannum PS	149.8	0.75	0.70	3.15	1.90
Murray Bridge	115.3	0.75	0.66	2.06	1.26

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



## **FURTHER INFORMATION**

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

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: <a href="http://www.waterconnect.sa.gov.au/Systems/RMIM/Pages/default.aspx">http://www.waterconnect.sa.gov.au/Systems/RMIM/Pages/default.aspx</a>

Information on the management of acid drainage water in the Lower River Murray can be accessed online at: <a href="http://www.epa.sa.gov.au/environmental">http://www.epa.sa.gov.au/environmental</a> info/water quality/acid sulfate soils ass/lower river murray reclaimed <a href="irrigation">irrigation</a> area Imria

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: <a href="http://www.bom.gov.au/vic/flood">http://www.bom.gov.au/vic/flood</a>

Information provided by the Commonwealth Environmental Water Office can be accessed at: <a href="https://www.environment.gov.au/ewater/southern/murray/lower-murray.html">www.environment.gov.au/ewater/southern/murray/lower-murray.html</a>

Information on The Living Murray can be accessed at: <a href="http://www.mdba.gov.au/about-basin/environmental-sites">http://www.mdba.gov.au/about-basin/environmental-sites</a>

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

Department of Environment, Water and Natural Resources <a href="http://www.environment.sa.gov.au/Home">http://www.environment.sa.gov.au/Home</a>

ID	RM-Flow-Report 20140704		
Classification	Public I2 A2		
Issued	4 July 2014		
Authority	DEWNR		
Master Document Location	Q:\OMP\RM REM\02 RM Ops\04 Communications\Flow Advices\2013-14		
Managed and Maintained by	River Murray Operations		
Author	River Murray Operations		
Reviewer	Director River Murray Operations and Major Projects		

