

# RIVER MURRAY FLOW REPORT

Public I2 A2

**Report #14/2018**

**Issued 10:00 am 6 April 2018**

**This supersedes the previous flow report issued by the Department for Environment and Water (DEW) on 29 March 2018. The next report will be provided on Friday 13 April 2018.**

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 6 GL/day and will remain around this rate during the coming week. It comprises:

- normal April Entitlement Flow of 4.5 GL/day;
- less deferred water;
- plus environmental water; and
- interstate trade adjustments.

The flow over Lock 1 is approximately 4.3 GL/day and will remain around this rate 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. Advice may change as new gauging information becomes available, or due to rainfall events or changed operations upstream. The forecasts will be revised as new information becomes available.

## **ENVIRONMENTAL WATER**

Environmental water is being provided by the Commonwealth Environmental Water Holder to support continuous barrage releases to protect water quality (salinity) in the Coorong while also enabling a managed partial drawdown of water levels in the Lower Lakes, which will provide benefits for fringing vegetation and improve habitat for threatened frogs and fish by creating more natural wetting and drying conditions. Environmental water is being delivered to the South Australian border at a rate of 2 GL/day to ensure water levels in the Lower Lakes remain within the normal operating range during the partial drawdown and barrage releases continue.

DEW is continuing discussions regarding environmental water to be delivered during 2018.

## **MURRAY MOUTH**

Dredging operations at the Murray Mouth commenced on 9 January 2015 to maintain connectivity (exchange of water) between the Coorong and the Southern Ocean.

Two dredges are operating 24/7 in the Goolwa and Tauwitchere channels. At 1 April 2018, a total of approximately 2 814 340 cubic metres of sand had been removed by dredging operations.

There are a number of shallow zones in and adjacent to the Murray Mouth. Mariners should use caution when traversing the mouth area, follow all directions, reduce speed and avoid travelling at low tide. Boats equipped with echo sounders should check depths regularly. Mariners are reminded that navigation through the Murray Mouth is only permitted during daylight hours and that Exclusion Zones established around the dredging operations are in place to ensure public safety. Refer to Notice to Mariners No 42 of 2016 [Notice 42](#)

There is a partial park closure in place for the northern tip of the Coorong National Park. For more information visit [Coorong partial park closure notice](#)



### BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is approximately 0.52 m AHD and Lake Albert is approximately 0.49 m AHD. The difference in water levels is due to wind effects. When possible, water levels are being managed to achieve a target water level of between 0.5 m AHD and 0.6 m AHD during April.

During the week ending 3 April 2018 total barrage releases were approximately 2 GL. Barrage releases have been reduced to manage the declining water level in the Lower Lakes. All fishways remain open with some attractant flow. During adverse weather conditions SA Water will operate the barrages to minimise the risk of seawater entering Lake Alexandrina, therefore minimising any negative salinity impacts from reverse flow events.

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

### WATER QUALITY - ALGAL BLOOM

An algal bloom has been detected on the River Murray near the South Australian border. The water may appear bright green and have an odour. It does not pose a threat to the use of River Murray water for irrigation. As a precautionary measure, the public are encouraged to avoid visibly discoloured patches of water. Some people may develop a skin rash. If this occurs, people are encouraged to wash the rash with freshwater.

The Department for Health, DEW and SA Water are working closely to monitor the situation.

### WEIR POOL OPERATIONS

The Lock 1 weir pool is approximately 0.1 m below the normal pool level of 3.2 m AHD to enable engineering works to be undertaken at the weir. Works are underway and expected to be completed in about a month.

### WEIR POOL OPERATIONS (*potential*)

The Normal Pool Level (NPL) and Normal Operating Range for the South Australian locks and weirs are identified in the table below.

Weir	Normal Pool Level (NPL) m AHD	Normal Operating Range (NOR) m AHD
Lock 6 - Murtho	19.25	19.17 - 19.50
Lock 5 - Renmark	16.30	16.22 - 16.43
Lock 4 - Bookpurnong	13.20	13.16 - 13.50
Lock 3 - Overland Corner	9.80	9.77 - 10.02
Lock 2 - Waikerie	6.10	6.02 - 6.40
Lock 1 - Blanchetown	3.20	3.10 - 3.50

The following weir pool trial lowerings are being considered to be undertaken at:

- Lock 6 weir pool by a maximum of 0.2 m below NPL to 19.05 m AHD (1 May to 20 June);
- Lock 5 weir pool by a maximum of 0.15 m below NPL to 16.15 m AHD (28 May to 2 August); and
- Lock 2 weir pool by a maximum of 0.25 m below NPL to 5.85 m AHD (23 July to 31 August).

Water level changes will be undertaken in stages, at a rate of approximately 0.02 m/day.

For further information on the proposed lowerings you can contact Ms Jodie Woof on (08) 8595 2141 or [jodie.woof@sa.gov.au](mailto:jodie.woof@sa.gov.au)

### **RIVERINE RECOVERY CONSTRUCTION WORKS**

The Riverine Recovery Project will construct environmental regulators to manage a number of wetlands between Mannum and Murtho. Construction is expected to take up to nine months to complete (February to October 2018). Construction works have commenced at Big Bend, Sugar Shack, Pyap and Murtho-Wiela wetlands. During the coming months work will commence at North Curnamont, Teal Flat, Teal Flat Hut, Silverlea, Goat Island Paringa Paddock and Woolenook Bend wetlands.

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

## 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**

Location	River km	Normal Pool Level (m AHD)	Current Level 4/4/2018 (m AHD)	1974 Flood Level (m AHD)	1993 Flood Level (m AHD)	2016 High Water Level (m AHD)
Lock 10	825.0	30.80	30.90	33.81	33.32	32.72
Lock 9 Kulnine	764.8	27.40	27.31	30.03	29.44	28.85
Lock 8 Wangumma	725.7	24.60	24.33	27.60	27.19	26.85
Lock 7 Rufus River	696.6	22.10	22.04	25.70	25.24	24.97
Lock 6 Murtho	619.8	19.25	19.29	21.03	20.50	20.19
Renmark	567.4	-	16.34	18.54	18.04	17.44
Lock 5	562.4	16.30	16.34	18.07	17.50	17.05
Lyrup	537.8	-	13.30	16.85	16.26	15.80
Berri	525.9	-	13.27	15.81	15.74	15.21
Lock 4	516.2	13.20	13.26	15.65	15.08	14.73
Loxton	489.9	-	10.08	15.05	14.12	13.54
Cobdogla	446.9	-	9.91	13.44	12.38	11.59
Lock 3	431.4	9.80	9.87	13.16	12.02	10.98
Overland Corner	425.9	-	6.28	12.73	11.58	10.41
Waikerie	383.6	-	6.30	11.26	10.24	9.20
Lock 2	362.1	6.10	6.16	10.28	9.30	8.32
Cadell	332.6	-	3.24	9.17	8.08	7.01
Morgan	321.7	-	3.23	8.85	7.65	6.38
Lock 1 Blanchetown	274.2	3.20	3.15	6.81	5.38	4.46
Swan Reach	245.0	0.75	0.55	6.06	4.51	3.11
Mannum PS	149.8	0.75	0.52	3.15	1.90	1.33
Murray Bridge	115.3	0.75	0.47	2.06	1.26	1.04

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 [Home page](#)

Up-to-date River Murray salinity, flow and water level information can be accessed at the Department for Environment and Water, SA Water and Murray-Darling Basin Authority websites

- [Water allocation and carryover announcements](#)
- [River Murray real-time water data](#)
- [SA Water River Murray info - levels, flows etc](#)
- [Murray-Darling Basin real-time water data](#)

The latest news, information and announcements about the River Murray and Basin Plan are available at [River Murray Update](#).

The Department for Environment and Water has published a series of inundation maps for the River Murray. They are available at [River Murray Inundation Maps](#)

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

[Victoria rainfall and river conditions](#)

[NSW rainfall and river conditions](#)

Information provided by the Commonwealth Environmental Water Office can be accessed at [CEWH Environmental Watering](#)

Information on The Living Murray can be accessed at [MDBA TLM](#)

Chowilla Floodplain Icon Site management [Chowilla-floodplain](#)

Department for Environment and Water [Home page](#)

Information provided by the Department of Planning, Transport and Infrastructure on boat licences, registering motor boats, owning and operating water craft, and boat and marine safety can be accessed at [Boating and marine](#)

ID	RM-Flow-Report 20180406
Classification	Public I2 A2
Issued	6 April 2018
Authority	DEW
Master Document Location	R:\Water Group\RMO\WRO\04 Communications\Flow Advices\2017-18
Managed and Maintained by	River Murray Operations
Author	River Murray Operations
Reviewer	Director, River Murray Operations, Water Group

