

# RIVER MURRAY FLOW REPORT

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**Report #4/2017**

**Issued 10:00 am 27 January 2017**

**This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 20 January 2017. The next report will be provided on Friday 3 February 2017.**

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 10.5 GL/day and will decrease to around 9.5 GL/day during the coming week. It comprises:

- normal January Entitlement Flow 7 GL/day
- plus additional dilution flow 3 GL/day
- plus environmental water
- minus deferred water, and
- interstate trade adjustments.

The flow over Lock 1 is approximately 11.5 GL/day and will decrease to around 9 GL/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. 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.

## **RIVER HAZARDS**

Due to the rapid fall in water levels (to around normal pool level), some riverbanks may have become unstable and susceptible to slumping. Signs of bank instability include cracks or leaning trees. Caution should be exercised when near riverbanks. Anyone with concerns about the safety of a particular riverbank should contact their local council. In the event of an emergency call 000.

If you intend to engage in high speed activities, ensure that the area of water is safe prior to commencing the activity. Power boat wash should be kept to a minimum if operating in the vicinity of shacks and other structures.

## **ENVIRONMENTAL WATER**

During January, approximately 50 GL of environmental water will be delivered to South Australia. The environmental water will provide in-channel, Lower Lakes and Coorong environmental and water quality benefits.

DEWNR is continuing discussions regarding environmental water to be delivered during 2016-17.

## **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.

The dredging operations combined with recent substantial barrage releases have improved conditions at the Murray Mouth. As the unregulated flow event has now ceased, the dredging program is being reviewed to determine if dredging should continue. The review is expected to be completed by mid-February. One dredge is currently operating in the Goolwa and Tauwiche channels. At 22 January 2017, a total of approximately 1 770 000 cubic metres of sand had been removed by dredging operations since commencement.



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Mariners are advised that there are still a number of shallow zones in and adjacent to the Murray Mouth and should follow all directions in the area and reduce their speed. Boats equipped with echo sounders should regularly check depths and avoid travelling at low tide. 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 [www.dpti.sa.gov.au/news?a=287322](http://www.dpti.sa.gov.au/news?a=287322)

There is a partial park closure in place for the northern tip of the Coorong National Park. For more information visit [www.environment.sa.gov.au/parks/Safety/Park\\_closures/141219-coorong-national-park](http://www.environment.sa.gov.au/parks/Safety/Park_closures/141219-coorong-national-park).

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

The water level in Lake Alexandrina is approximately 0.83 m AHD and Lake Albert approximately 0.76 m AHD. The difference in water levels is due to wind effects. Water levels are being actively managed to achieve a target water level greater than 0.5 m AHD by the end of March 2017.

Barrage releases are being prioritised at Tauwitchere barrage. All fishways are operational and providing fish passage between Lake Alexandrina and the Coorong. During the week ending 24 January 2017 total barrage releases were approximately 54 GL.

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.

### **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.

### **NAVIGATION ISSUES**

Sandbars in the vicinity of the Murray Mouth may cause navigation hazards. Boaters 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 watercraft users 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 25/01/2017 (m AHD) | 1974 Flood Level (m AHD) | 1993 Flood Level (m AHD) | 2016 High Water Level (m AHD) |
|--------------------|----------|---------------------------|----------------------------------|--------------------------|--------------------------|-------------------------------|
| Lock 10            | 825.0    | 30.80                     | 30.82                            | 33.81                    | 33.32                    | 32.72                         |
| Lock 9 Kulnine     | 764.8    | 27.40                     | 27.42                            | 30.03                    | 29.44                    | 28.85                         |
| Lock 8 Wangumma    | 725.7    | 24.60                     | 24.53                            | 27.60                    | 27.19                    | 26.85                         |
| Lock 7 Rufus River | 696.6    | 22.10                     | 21.85                            | 25.70                    | 25.24                    | 24.97                         |
| Lock 6 Murtho      | 619.8    | 19.25                     | 19.19                            | 21.03                    | 20.50                    | 20.19                         |
| Renmark            | 567.4    | -                         | 16.33                            | 18.54                    | 18.04                    | 17.44                         |
| Lock 5             | 562.4    | 16.30                     | 16.31                            | 18.07                    | 17.50                    | 17.05                         |
| Lyrup              | 537.8    | -                         | 13.31                            | 16.85                    | 16.26                    | 15.80                         |
| Berri              | 525.9    | -                         | 13.24                            | 15.81                    | 15.74                    | 15.21                         |
| Lock 4             | 516.2    | 13.20                     | 13.24                            | 15.65                    | 15.08                    | 14.73                         |
| Loxton             | 489.9    | -                         | 10.35                            | 15.05                    | 14.12                    | 13.54                         |
| Cobdogla           | 446.9    | -                         | 9.90                             | 13.44                    | 12.38                    | 11.59                         |
| Lock 3             | 431.4    | 9.80                      | 9.84                             | 13.16                    | 12.02                    | 10.98                         |
| Overland Corner    | 425.9    | -                         | 6.57                             | 12.73                    | 11.58                    | 10.41                         |
| Waikerie           | 383.6    | -                         | 6.80                             | 11.26                    | 10.24                    | 9.20                          |
| Lock 2             | 362.1    | 6.10                      | 6.18                             | 10.28                    | 9.30                     | 8.32                          |
| Cadell             | 332.6    | -                         | 3.40                             | 9.17                     | 8.08                     | 7.01                          |
| Morgan             | 321.7    | -                         | 3.28                             | 8.85                     | 7.65                     | 6.38                          |
| Lock 1 Blanchetown | 274.2    | 3.20                      | 3.14                             | 6.81                     | 5.38                     | 4.46                          |
| Swan Reach         | 245.0    | 0.75                      | 0.95                             | 6.06                     | 4.51                     | 3.11                          |
| Mannum PS          | 149.8    | 0.75                      | 0.84                             | 3.15                     | 1.90                     | 1.33                          |
| Murray Bridge      | 115.3    | 0.75                      | 0.80                             | 2.06                     | 1.26                     | 1.04                          |

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

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## FURTHER INFORMATION

Please tell us what you value about the Coorong and Lower Lakes, and what threats you think need to be managed. Your input will help us write the updated Ramsar Management Plan. Find out more at [www.environment.sa.gov.au/coorongvalues](http://www.environment.sa.gov.au/coorongvalues)

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

Up-to-date River Murray salinity, 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

- [www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-trade/water-allocations-and-announcements](http://www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-trade/water-allocations-and-announcements)
- [www.waterconnect.sa.gov.au/Systems/RTWD/Pages/Default.aspx](http://www.waterconnect.sa.gov.au/Systems/RTWD/Pages/Default.aspx)
- [www.sawater.com.au/SAWater/Environment/WaterProofingAdelaide/TheRiverMurray/RMOU/Dailyflow.htm](http://www.sawater.com.au/SAWater/Environment/WaterProofingAdelaide/TheRiverMurray/RMOU/Dailyflow.htm)
- <http://livedata.mdba.gov.au/>

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

The Department of Environment, Water and Natural Resources has published a series of inundation maps for the River Murray. They are available at [www.waterconnect.sa.gov.au/Systems/RMIM/SitePages/Home.aspx](http://www.waterconnect.sa.gov.au/Systems/RMIM/SitePages/Home.aspx)

Information on the management of acid drainage water in the Lower River Murray can be accessed at [www.epa.sa.gov.au/environmental\\_info/water\\_quality/programs/acid\\_sulfate\\_soils/lower\\_river\\_murray\\_reclaimed\\_irrigation\\_area\\_lmria](http://www.epa.sa.gov.au/environmental_info/water_quality/programs/acid_sulfate_soils/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 [www.bom.gov.au/vic/flood](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](http://www.environment.gov.au/ewater/southern/murray/lower-murray.html)

Information on The Living Murray can be accessed at [www.mdba.gov.au/managing-water/environmental-water/delivering-environmental-water/living-murray-program](http://www.mdba.gov.au/managing-water/environmental-water/delivering-environmental-water/living-murray-program)

Chowilla Floodplain Icon Site management [www.environment.sa.gov.au/Chowilla-floodplain](http://www.environment.sa.gov.au/Chowilla-floodplain)

Department of Environment, Water and Natural Resources [www.environment.sa.gov.au/Home](http://www.environment.sa.gov.au/Home)

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 [www.sa.gov.au/boatingmarine](http://www.sa.gov.au/boatingmarine)

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