

RIVER MURRAY FLOW REPORT

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Report #2/2017

Issued 10:00 am 13 January 2017

This supersedes the previous flow report issued by the Department of Environment, Water and Natural Resources (DEWNR) on 6 January 2017. The next report will be provided on Friday 20 January 2017.

In this report, for ease of representation, large volumes of water are expressed in gegalitres (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 17 GL/day and will decrease to around 14 GL/day during the coming week. It comprises the normal January Entitlement Flow of 7 GL/day, 3 GL/day additional dilution flow plus environmental water.

The flow over Lock 1 is approximately 16 GL/day and will decrease to around 14 GL/day during the coming week, depending on weather conditions and extractions.

The peak flow has passed down the river, with most locations now experiencing water levels around normal pool level.

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.

Some boat launching facilities may be unserviceable due to changed river levels. Boaters are also likely to encounter floating debris which may cause damage to vessels or injury to water skiers.

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.

For more information, contact Department of Planning, Transport and Infrastructure Marine Operations on 1300 183 046.

WATER QUALITY - Salinity

Recent increases in salinity have been observed in some areas of the River Murray as flow and water levels decreased, particularly between Berri and Blanchetown (Lock 1). The recent high flow event mobilised salt from wetlands, backwaters and floodplains, causing salinity to increase in the main River Murray channel as river levels decreased. Salinity levels are now starting to decline in most areas upstream of Swan Reach, with similar trends expected below Swan Reach in the coming days and weeks. Higher than normal salinity levels may last for several weeks. Information on near real-time salinity levels can be accessed at

www.waterconnect.sa.gov.au/Systems/RTWD/Pages/Default.aspx

WATER QUALITY - Blackwater

The peak of the blackwater event has now passed through South Australia, with significant improvements in water quality (decreasing dissolved organics, increasing dissolved oxygen) being observed upstream of Morgan. Water quality is still being impacted downstream of Morgan, however significant improvements are



expected over the next few weeks. The colour of the water is now more like iced coffee (turbid water) rather than cola (blackwater). DEWNR, SA Water and Murray-Darling Basin Authority with other government agencies will continue to monitor the situation.

PRIVATE CARRYOVER 2017-18

Due to the forecast risk of spill in Dartmouth during 2017-18 being greater than 10%, private carryover will not be granted in 2017-18. This is in-line with the private carryover policy. For more information on private carryover please refer to the DEWNR website www.environment.sa.gov.au/managing-natural-resources/river-murray/water-allocation-and-trade

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. On 27 October 2016, one of the two dredges was decommissioned. The remaining dredge paused operations for maintenance during the Christmas-New Year period and is scheduled to recommence operations Monday 16 January 2017. At 5 December 2016, a total of approximately 1 756 500 cubic metres of sand had been removed by dredging operations since commencement.

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

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.

BARRAGE OPERATIONS AND WATER LEVELS IN THE LOWER LAKES

The water level in Lake Alexandrina is approximately 0.79 m AHD and Lake Albert approximately 0.77 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 at the end of March 2017.

Barrage releases being prioritised at Tauwitchere barrage. All fishways are operational to provide fish passage between Lake Alexandrina and the Coorong. During the week ending 10 January 2017 total barrage releases were approximately 107 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 South Australian Government agencies, the Murray-Darling Basin Authority and the Commonwealth Environmental Water Office.

LOXTON RIVER VESSEL WASTE DISPOSAL STATION

Due to the high flows and water levels, the Loxton River Vessel Waste Disposal Station has been closed since 14 November 2016. Work is currently being undertaken to recommission the station. It is expected to be fully operational early next week.

The remaining 12 waste disposal stations operated by DEWNR are available for use. The nearest river vessel waste disposal stations are at Berri (38 km upstream) or Lock 3 (55 km downstream). For further information contact Hayden Smith (DEWNR) on 0457 820 553.

NAVIGATION ISSUES

While this is a great time to visit the river, all visitors are reminded to exercise caution when navigating through the locks, and to be mindful of floating debris.

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 11/01/2017 (m AHD) | 1974 Flood Level (m AHD) | 1993 Flood Level (m AHD) | 2016 High Water Level (m AHD) |
|--------------------|----------|---------------------------|----------------------------------|--------------------------|--------------------------|-------------------------------|
| Lock 10 | 825.0 | 30.80 | 30.78 | 33.81 | 33.32 | 32.72 |
| Lock 9 Kulnine | 764.8 | 27.40 | 27.47 | 30.03 | 29.44 | 28.85 |
| Lock 8 Wangumma | 725.7 | 24.60 | 24.59 | 27.60 | 27.19 | 26.85 |
| Lock 7 Rufus River | 696.6 | 22.10 | 22.14 | 25.70 | 25.24 | 24.97 |
| Lock 6 Murtho | 619.8 | 19.25 | 19.23 | 21.03 | 20.50 | 20.19 |
| Renmark | 567.4 | - | 16.33 | 18.54 | 18.04 | 17.44 |
| Lock 5 | 562.4 | 16.30 | 16.30 | 18.07 | 17.50 | 17.05 |
| Lyrup | 537.8 | - | 13.34 | 16.85 | 16.26 | 15.80 |
| Berri | 525.9 | - | - | 15.81 | 15.74 | 15.21 |
| Lock 4 | 516.2 | 13.20 | 13.23 | 15.65 | 15.08 | 14.73 |
| Loxton | 489.9 | - | 10.60 | 15.05 | 14.12 | 13.54 |
| Cobdogla | 446.9 | - | - | 13.44 | 12.38 | 11.59 |
| Lock 3 | 431.4 | 9.80 | 9.97 | 13.16 | 12.02 | 10.98 |
| Overland Corner | 425.9 | - | 6.86 | 12.73 | 11.58 | 10.41 |
| Waikerie | 383.6 | - | 6.55 | 11.26 | 10.24 | 9.20 |
| Lock 2 | 362.1 | 6.10 | 6.30 | 10.28 | 9.30 | 8.32 |
| Cadell | 332.6 | - | 3.84 | 9.17 | 8.08 | 7.01 |
| Morgan | 321.7 | - | 3.64 | 8.85 | 7.65 | 6.38 |
| Lock 1 Blanchetown | 274.2 | 3.20 | 3.41 | 6.81 | 5.38 | 4.46 |
| Swan Reach | 245.0 | 0.75 | 1.05 | 6.06 | 4.51 | 3.11 |
| Mannum PS | 149.8 | 0.75 | 0.87 | 3.15 | 1.90 | 1.33 |
| Murray Bridge | 115.3 | 0.75 | 0.82 | 2.06 | 1.26 | 1.04 |

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

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

The WaterConnect website is South Australia's comprehensive water information portal and can be accessed at 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
- www.waterconnect.sa.gov.au/Systems/RTWD/Pages/Default.aspx
- 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

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

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

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 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

Department of Environment, Water and Natural Resources 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

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