

# River Murray Flow Report



## Report #48/2019

Issued 10:00 am 13 December 2019

**This supersedes the previous flow report issued by the Department for Environment and Water (DEW) on 6 December 2019. The next report will be provided on Friday 20 December 2019.**

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.

## DRAFT RIVER MURRAY WATER ALLOCATION PLAN UNDER DEVELOPMENT

The South Australian Murray-Darling Basin Natural Resources Management Board (the Board), in partnership with the Department for Environment and Water is considering potential amendments to the Private Carryover Policy included in the River Murray Water Allocation Plan.

The Board has heard that improvements can be made to the Private Carryover Policy after implementation of the policy in the 2019-20 water use year.

The Board intends to prepare an amendment to the River Murray Water Allocation Plan incorporating changes to the policy, with consultation on a draft plan scheduled to begin in January 2020.

Consultation in early 2020 will ensure that any changes, if supported by the community, are in place by the first opening allocation announcement due to be made in April 2020.

To find out more, visit the Natural Resources [website](#). Keep an eye on the website for consultation details early in 2020.

## RIVER MURRAY PENALTY RATES

Penalty rates for the River Murray have increased for this quarter (October to December 2019) in response to the drought and water market conditions being experienced across the Basin. Penalty rates are calculated based on market value and take into account the risk to the resource if water theft occurs.

This quarter (and the last one) has seen an increasing trend in the water prices for the River Murray. Simultaneously the water theft risk category was reassessed as part of the annual review (increasing from a Category 3 to 3A). This reflects the potential for the current demand to exceed supply.

For category definitions and more detail about the risk-based compliance approach please see the [National Framework for Compliance and Enforcement Systems for Water Resource Management](#).

## WATER ALLOCATIONS

Water allocations for South Australian River Murray Class 3 water access entitlement holders are 100%.

For more information on South Australia's water allocations visit the [DEW website](#).

For information on Victoria's water allocations visit [Victorian water allocations](#).

For information on NSW water allocations visit [NSW Water Allocation Statements](#) or [NSW water allocations](#).

## FLOW OUTLOOK

The minimum volume of Entitlement Flow available to South Australia during 2019-20 (at 1 December 2019) is 1 525 GL. As water resource conditions improve across the Murray-Darling Basin, this volume will increase. Full Entitlement Flow is 1 850 GL.

The flow at the South Australian border is approximately 7 GL/day and will remain around this rate during the coming week. It comprises:

- reduced December Entitlement Flow of 6.05 GL/day;
- water for the environment (see below *Water for the Environment*); and
- interstate trade adjustments.

Due to the dry water resource conditions across the Murray-Darling Basin, South Australia is currently receiving reduced monthly Entitlement Flow. During December 2019, South Australia will receive a reduced Entitlement Flow of 187.6 GL, compared to the full December Entitlement Flow of 217 GL. It is likely that reduced Entitlement Flow will continue during 2019-20 unless the water resource conditions improve enough to provide South Australia with close to its full Entitlement Flow. In addition to the reduced Entitlement Flow, South Australia will receive water for the environment.

The flow over Lock 1 is approximately 3.5 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.

## **WATER FOR THE ENVIRONMENT**

Water for the environment is currently being used to:

- provide for barrage releases to the Coorong to support a productive, food-rich environment for fish and birds;
- maintain good connections from the Coorong to the upstream areas of the River Murray, and its tributaries, to enable fish movement and migration;
- maintain water quality and salinity levels in the River Murray channel, Lower Lakes and Coorong; and
- deliver a range of outcomes to wetlands in the Riverland via arrangements with South Australian Murray-Darling Basin Natural Resource Management Board, Renmark Irrigation Trust, Banrock Station and Nature Foundation South Australia.

## **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.

One dredge is operating between the Goolwa and Tauwichee channels 24 hours a day, 7 days a week. At 8 December, a total of approximately 5 130 619 cubic metres of sand had been removed by dredging operations. Barrage releases combined with dredging have helped to maintain connectivity of the Murray Mouth.

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. Mariners equipped with echo sounders should check depths regularly. Navigation through the Murray Mouth is only permitted during daylight hours. 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 0.74 m AHD and Lake Albert is approximately 0.64 m AHD. The difference in water level is due to wind effects.

Water for the environment is enabling barrage releases to be undertaken for a longer period during spring and summer. As of Tuesday 10 December 2019, the weekly barrage releases were approximately 3.2 GL. All fishways remain open. 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, Murray-Darling Basin Authority and Commonwealth Environmental Water Office.

## **WATER QUALITY – Blue-Green Algae**

A red alert has been issued for blue-green algae in the Mildura weir pool (Lock 11 to Bruce's Bend Boat Ramp) and Menindee Lakes at Lake Wetherell. At this stage there is no threat to South Australia. The situation will be closely monitored by SA Water and the Department for Environment and Water.

## 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.

## SA RIVERLAND FLOODPLAINS INTEGRATED INFRASTRUCTURE PROGRAM CONSTRUCTION WORKS

### Katarapko

Construction works on the Katarapko Floodplain are expected to be completed by mid-2020. As a result, some parts of the Murray River National Park will be temporarily closed for camping and other recreational activities. See the link for temporary park closure map [Caring for Katarapko](#)

For safety reasons, the following water access restrictions apply to river vessels and people (other than authorised personnel) until late March 2020:

1. Sawmill Creek, the entire length between Katarapko Creek and Eckert's Creek; and
2. Eckert's Creek, for 1.3 kilometres upstream of the confluence point with Katarapko Creek (ie *The Splash*).

The construction works will enable over 1120 hectares of floodplain to be inundated more regularly to improve ecological health and resilience. For more information, or to receive regular updates, about the Katarapko Floodplain Project please contact the Department for Environment and Water's Engagement Officer, Ms Ellee Eleftheriadis on 8595 2148 or email [ellee.elftheriadis2@sa.gov.au](mailto:ellee.elftheriadis2@sa.gov.au)

### Pike

Although work on the regulating structures and blocking bank on the Pike Floodplain is now complete, other works continue in this area. Vessels and persons other than those participating in the works are still prohibited from entering the Pike River near the Rumpagunyah Creek and Tanyaca Creek junction, downstream of the Mundic Creek junction.

## RIVER MURRAY WATER LEVELS

Below is a table of River Murray water levels at a number of locations from Lock 10 to Murray Bridge.

### River Murray Water Levels

Location	River km	Normal Pool Level (m AHD)	Current Level 11/12/2019 (m AHD)	1974 Flood Level (m AHD)	1993 Flood Level (m AHD)	2016 High Water Level (m AHD)
Lock 10	825.0	30.80	30.89	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	24.25	27.60	27.19	26.85
Lock 7 Rufus River	696.6	22.10	21.67	25.70	25.24	24.97
Lock 6 Murtho	619.8	19.25	19.27	21.03	20.50	20.19
Renmark	567.4	-	16.34	18.54	18.04	17.44
Lock 5	562.4	16.30	16.33	18.07	17.50	17.05
Lyrup	537.8	-	13.28	16.85	16.26	15.80
Berri	525.9	-	13.24	15.81	15.74	15.21
Lock 4	516.2	13.20	13.23	15.65	15.08	14.73
Loxton	489.9	-	10.03	15.05	14.12	13.54
Cobdogla	446.9	-	9.86	13.44	12.38	11.59
Lock 3	431.4	9.80	9.81	13.16	12.02	10.98
Overland Corner	425.9	-	6.22	12.73	11.58	10.41
Waikerie	383.6	-	6.21	11.26	10.24	9.20
Lock 2	362.1	6.10	6.10	10.28	9.30	8.32
Cadell	332.6	-	3.38	9.17	8.08	7.01
Morgan	321.7	-	3.32	8.85	7.65	6.38
Lock 1 Blanchetown	274.2	3.20	3.23	6.81	5.38	4.46
Swan Reach	245.0	0.75	0.81	6.06	4.51	3.11
Mannum PS	149.8	0.75	0.77	3.15	1.90	1.33
Murray Bridge	115.3	0.75	0.69	2.06	1.26	1.04

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. For real-time data (like salinity, water levels) go to the following page:

[WaterConnect Real-time water data](#)

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](#)

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