

# River Murray Flow Report



## Report #17/2020

Issued 10:00 am 24 April 2020

**This supersedes the previous flow report issued by the Department for Environment and Water (DEW) on 17 April 2020. The next flow report will be provided on Friday 11 May 2020.**

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.

## 2020-21 Water Allocations

**South Australian River Murray irrigators have been advised to plan for low water availability with a minimum opening allocation of two per cent projected for the 2020-21 water year.**

This is only a projected minimum opening allocation to help irrigators prepare for the year ahead. It is a conservative starting point, which provides certainty to irrigators who have indicated a preference that allocations do not get reduced mid-way through a season.

While allocations are projected to start low, improvements across the water year are expected. How quickly and how much allocations improve depends on future rainfall, where and when it occurs and how much runoff then makes its way into Southern Basin storages.

Irrigators will also be eligible to carryover unused allocation volumes available at the end of the current water year into 2020-21 (up to 20 per cent of their entitlement volume).

While irrigators will continue to be subject to a 100 per cent limit on their combined allocation and carryover volumes, new rules will be applied from 1 July 2020 that will improve the future flexibility of the carryover product for irrigators.

Water allocation volumes that would otherwise be granted above this 100 per cent limit in 2020-21, will be 'rolled over' into the following year, if the minimum opening allocation announced in April 2021 is 50 per cent or less.

The South Australia's River Murray Water Allocation Statement also includes more information on water allocation projections, water in storage and climate outlooks.

The next update on water allocations will be provided on **15 May 2020**. This will incorporate any improvements to this year's projected minimum opening allocation, and the actual opening allocation will be advised on **15 June 2020**.

Check out our website to keep up to date with all the latest information on water allocations.

You can also view the recent South Australian Government webinar which featured the latest information for water users on water availability and outlook, as well as a water market overview.

## NORTHERN BASIN

Heavy rainfall events in early 2020, have generated inflows in most river systems across the Northern Basin (Barwon-Darling system). On 10 March 2020, the Darling River started to flow into Menindee Lakes. On 20 April 2020, Water NSW advised that the total forecast volume expected to reach Menindee Lakes is around 435 GL to 475 GL. The projected volume will be updated as changes are observed.

Water NSW is releasing a small volume of water from Menindee Lakes to flush and freshen the Lower Darling. This flow has reconnected the Darling with the River Murray.

The Menindee Lakes are currently under the control of Water NSW. If the volume of water in Menindee Lakes increases to 640 GL the Murray-Darling Basin Authority can direct releases to supplement the River Murray system, which is unlikely based on the current estimates of inflow.

## FLOW OUTLOOK

Reduced Entitlement Flow will continue during the 2019-20 water year. In addition to reduced Entitlement Flow, South Australia will receive water for the environment.

The flow at the South Australian border is approximately 3.6 GL/day and will increase to around 4.4 GL/day during the coming week. It comprises:

- reduced April Entitlement Flow (3.3 GL/day);
- less deferred water (approximately 0.55 GL/day);
- plus water for the environment (see below *Water for the Environment*); and
- interstate trade adjustments.

The flow over Lock 1 is approximately 2.1 GL/day and will increase to around 2.6 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.

## 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, with up to 100 GL forecast to be released into the Coorong between April and June 2020;
- maintain good connection from the Coorong to the upstream areas of the River Murray, and its tributaries, to enable fish movement and migration;
- maintain water quality, salinity and water levels below critical thresholds in the River Murray channel, Lower Lakes and Coorong;
- deliver a range of outcomes to wetlands in the Riverland via arrangements with the South Australian Murray-Darling Basin Natural Resources Management Board, Renmark Irrigation Trust, Banrock Station, Calperum Station and Nature Foundation South Australia; and
- deliver a range of outcomes to wetlands on the Chowilla floodplain via The Living Murray.

## 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. At 19 April 2020, a total of approximately 5 655 945 cubic metres of sand had been removed by dredging operations.

Two dredges are operating between the Goolwa and Tauwitchere channels 24 hours a day, 7 days a week.

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 0.50 m AHD and Lake Albert is approximately 0.55 m AHD. The difference in water level is due to wind effects.

Water for the environment has enabled continuous fishway releases and small barrage releases to be undertaken in autumn. During the past week, fishways at all the barrages have provided connectivity between the Coorong and the Lower Lakes. In addition, Tauwitchere Barrage had a number of gates open at various times plus the fishway. This provided targeted releases when the wind, swell and tide conditions aligned to push fresher water down the Coorong. As of Tuesday 21 April 2020, the weekly releases were approximately 3.5 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, Murray-Darling Basin Authority and Commonwealth Environmental Water Office.

### LOCK 3 RIVER VESSEL WASTE DISPOSAL STATION

The Lock 3 River Vessel Waste Disposal Station is currently out of commission due to an infrastructure failure. This means that boat operators who need to empty sewage tanks will need to use the nearest alternative waste facilities located at Waikerie and Loxton. Alternatively boat operators who require an urgent pump-out in the Kingston-on-Murray area can contact Mr Hayden Smith on 0457 820 553 for help or advice. Normal boat waste (domestic or galley waste) can still be deposited at the Lock 3 facility at the present time.

### 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.

### SOUTH AUSTRALIAN RIVERLAND FLOODPLAINS INTEGRATED INFRASTRUCTURE PROGRAM CONSTRUCTION WORKS

#### Katarapko

Construction works on the Katarapko Floodplain are nearing completion. All of the major concrete works and track surfacing is complete, with some minor works remaining around the structures and within the Murray River National Park. The installation of guard rails on the structures is in progress and commissioning of all the structures to ensure correct operation is well underway. It is expected that the construction of all infrastructure will be completed by the end of May 2020.

As a result of restrictions due to Covid-19, the Department for Environment and Water has closed campgrounds and facilities in all South Australian National Parks until further notice. However, local community members can still visit parks (including the Murray River National Park) for walking, cycling or fishing activities. More information can be found on the following website <https://www.environment.sa.gov.au/news-hub/news/articles/2020/03/sa-parks-are-open>

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

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

#### Pike

Although work on the regulating structures and blocking bank on the Pike Floodplain is now complete, other works continue in this area. Access to the floodplain is still restricted to construction personnel and authorised visitors. Access to the Pike River anabranch complex is possible by boat however there are restrictions in place at the Tanyaca regulator and Pike River regulator sites.

### QUARTERLY METER REPORTING

All River Murray water users are reminded of their requirement to ensure that they have not used more water than is available on their account by the end of each quarter. This is to help ensure that water can be reliably delivered to all River Murray water users (including the environment) in South Australia. The end of Quarter 4 of the 2019-20 water use year is 30 June 2020. A penalty will be applied in all instances where the volume of water taken is in excess of the available allocation on a water account **at 5:00 pm on 30 June 2020**.

In order to remain within your available water allocation, you can:

- Stop taking water when you reach your allocation limit;
- Before you reach your allocation limit, trade water allocation onto your water account to cover your additional water needs. To comply with the *Natural Resources Management Act 2004*, to ensure that you do not exceed your available allocation and to avoid receiving a penalty charge, you need to trade water allocation onto your account before you take water above your current allocation limit; or
- Investigate whether water efficiency measures could be implemented for your property to decrease your demand for water.

Water users are encouraged to closely monitor their water use throughout the year and remain within their water allocation. You can submit an online meter reading at any time and elect to receive a water usage advice statement (similar to a bank statement) by email or SMS. This helps ensure you are monitoring water use and remaining within your available water allocation.

For more information, please see the [DEW website](#) or contact the Berri water licencing office via telephone: (08) 8595 2053 or email: [DEW.waterlicensingberri@sa.gov.au](mailto:DEW.waterlicensingberri@sa.gov.au)

## 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 22/4/2020 (m AHD)	1974 Flood Level (m AHD)	1993 Flood Level (m AHD)	2016 High Water Level (m AHD)
Lock 10	825.0	30.80	30.61	33.81	33.32	32.72
Lock 9 Kulnine	764.8	27.40	27.35	30.03	29.44	28.85
Lock 8 Wangumma	725.7	24.60	23.63	27.60	27.19	26.85
Lock 7 Rufus River	696.6	22.10	22.02	25.70	25.24	24.97
Lock 6 Murtho	619.8	19.25	19.27	21.03	20.50	20.19
Renmark	567.4	-	16.32	18.54	18.04	17.44
Lock 5	562.4	16.30	16.32	18.07	17.50	17.05
Lyrup	537.8	-	13.34	16.85	16.26	15.80
Berri	525.9	-	13.31	15.81	15.74	15.21
Lock 4	516.2	13.20	13.31	15.65	15.08	14.73
Loxton	489.9	-	10.03	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	-	6.28	11.26	10.24	9.20
Lock 2	362.1	6.10	6.20	10.28	9.30	8.32
Cadell	332.6	-	3.39	9.17	8.08	7.01
Morgan	321.7	-	3.33	8.85	7.65	6.38
Lock 1 Blanchetown	274.2	3.20	3.28	6.81	5.38	4.46
Swan Reach	245.0	0.75	0.51	6.06	4.51	3.11
Mannum PS	149.8	0.75	0.54	3.15	1.90	1.33
Murray Bridge	115.3	0.75	0.48	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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