# **River Murray Flow Report**





## Report #22/2020

Issued 10:00 am 29 May 2020

This supersedes the previous flow report issued by the Department for Environment and Water (DEW) on 22 May 2020. The next flow report will be provided on Friday 5 June 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**

May water allocation announcement sees projected water allocations improve.

Increased rainfall across the southern Murray-Darling Basin has improved water availability and resulted in South Australia's minimum River Murray Entitlement for the next water year increasing to 900 GL, providing a more positive outlook for the start of 2020-21.

The projected minimum opening allocation of eight per cent is conservative and based on storage levels at the end of April 2020. There is a high chance of significant improvements to water availability in the coming months, given recent rainfall events and a favourable rainfall outlook from the Bureau of Meteorology.

This short Video explains more about the latest water resources and allocations update.

Further details about water allocations and projections are available in the <u>River Murray Water Allocation Statement</u> and the Private Carryover policy is outlined in the <u>Water Allocation Plan for the South Australian River Murray.</u>

To stay up to date with all the latest information, please visit our website. The next update will be on 15 June 2020.

# 2019-20 END OF YEAR WATER TRADING ADVICE

To **guarantee** that a water application is determined in the 2019-20 water year, you must lodge your water trade application with DEW by **2pm on 19 June 2020**.

Water trade applications can be lodged up to 5pm on 30 June 2020, however, there is no guarantee that it will be determined in the 2019-20 water year. Interstate water trade applications must be lodged with DEW by 11am (SA Time) on 30 June 2020.

More information about water trade applications can be found here <a href="https://www.environment.sa.gov.au/licences-and-permits/water-licence-and-permit-forms">https://www.environment.sa.gov.au/licences-and-permits/water-licence-and-permit-forms</a>

## COORONG INFRASTRUCTURE OPTIONS

The public is invited to have its say on future infrastructure options to support the recovery of South Australia's iconic Coorong via a consultation survey released this week.

The consultation, part of the Healthy Coorong, Healthy Basin program, aims to assess the potential environmental, social and cultural benefits and impacts of a range of long-term management solutions to improve the health of the Coorong, with a focus on the Coorong South Lagoon.

A number of major infrastructure and management options have been identified over the years to potentially improve water delivery and enhance the ecological health of the Coorong.

We are now seeking the community's input into what criteria should be used to assess these potential infrastructure solutions and what other options could be considered.

The feedback received will then be discussed with the Coorong Partnership representative group, and from there, we'll be looking to hold a more targeted community workshop with a range of experts to flesh-out the agreed criteria. Once we've settled on the final criteria, further workshops will be held to evaluate potential options.

<u>Click here to complete the survey</u> or visit the <u>Project Coorong</u> website for more information.

# **NORTHERN BASIN**

Heavy rainfall events in early 2020 have generated inflows in most river systems across the Northern Basin (Barwon-Darling system). On 25 May 2020, Water NSW advised that the total forecast volume expected to reach Menindee Lakes is around 565 GL to 580 GL. The projected volume will be updated as changes are observed. The Darling River and River Murray have now reconnected.

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 volume stored and estimated flow in-transit to Menindee Lakes.

#### FLOW OUTLOOK

The flow at the South Australian border is approximately 5 GL/day and will decrease to around 3.5 GL/day during the coming week. It comprises:

- full May Entitlement Flow (3.0 GL/day);
- plus water for the environment (see below Water for the Environment); and
- interstate trade adjustments.

During May, the daily flow to South Australia has been managed to deliver less water in the first half of the month and more water during the last half of the month. This strategy aims to maximise inflows into Lake Victoria to improve the Basin States' water availability.

The flow over Lock 1 is approximately 4.5 GL/day and will decrease to around 3.5 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

Upstream of the South Australian border, water for the environment has reduced the rate of recession of a high flow event in the Goulburn River and is now providing elevated base-flows in the Goulburn River and Lower Broken Creek to support native fish habitat, provide food resources and connectivity. After this water is used in these rivers, it is being returned to the River Murray. This water is currently being used in South Australia to:

- provide for barrage releases to the Coorong to support a productive, food-rich environment for fish and birds;
- 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, including through targeted releases at the barrages when weather conditions are best suited to push water down the 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, 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 24 May 2020, a total of approximately 5 798 032 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 0.61m AHD and Lake Albert is approximately 0.66 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 numerous gates open at various times plus the fishways. This provided targeted releases when the wind, swell and tide conditions aligned to push fresher water down the Coorong. As of Tuesday 26 May 2020, the weekly releases were approximately 8.2 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.

# **RIVER VESSEL WASTE DISPOSAL STATIONS**

#### Loxton

The Loxton River Vessel Waste Disposal Station is currently being upgraded and will be closed until 30 October 2020. A temporary pump-out service is available for river vessel users in this area. To use this service, please call Mr David Thiselton on 0412 839 392 to arrange a suitable time to pump-out waste. This service is available from Monday to Saturday, 8am to 5pm (please note: 4 hours notice is required for this service).

If you need any other help or advice with regard to this station, please call Mr Hayden Smith on 0457 820 553.

#### Lock 3

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 facility located at Waikerie. 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

All major works on the Katarapko Floodplain are now complete. From 5 June 2020, all parts of the Murray River National Park will be open for camping and other activities. Visitors are encourage to continue to practice social distancing and comply with relevant limits on gatherings. Bookings can be made online by visiting the following website <a href="https://www.parks.sa.gov.au/booking#Murray%20River%20National%20Park">https://www.parks.sa.gov.au/booking#Murray%20River%20National%20Park</a>

#### 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.

# **QUARTERLY METER REPORTING**

All River Murray water users must 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 in South Australia. A penalty for excess water use will apply if you have used more water than the volume of water available on your account at close of business 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 allocations. 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 <u>DEW website</u> or contact the Berri water licencing office via telephone: (08) 8595 2053 or email: <u>DEW.waterlicensingberri@sa.gov.au</u>

# **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 27/5/2020 (m AHD)	1974 Flood Level (m AHD)	1993 Flood Level (m AHD)	2016 High Water Level (m AHD)
Lock 10	825.0	30.80	30.82	33.81	33.32	32.72
Lock 9 Kulnine	764.8	27.40	27.56	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	21.67	25.70	25.24	24.97
Lock 6 Murtho	619.8	19.25	19.33	21.03	20.50	20.19
Renmark	567.4	-	16.38	18.54	18.04	17.44
Lock 5	562.4	16.30	16.38	18.07	17.50	17.05
Lyrup	537.8	-	13.43	16.85	16.26	15.80
Berri	525.9	-	13.39	15.81	15.74	15.21
Lock 4	516.2	13.20	13.39	15.65	15.08	14.73
Loxton	489.9	-	10.20	15.05	14.12	13.54
Cobdogla	446.9	-	10.00	13.44	12.38	11.59
Lock 3	431.4	9.80	9.98	13.16	12.02	10.98
Overland Corner	425.9	-	6.40	12.73	11.58	10.41
Waikerie	383.6	-	6.36	11.26	10.24	9.20
Lock 2	362.1	6.10	6.28	10.28	9.30	8.32
Cadell	332.6	-	3.45	9.17	8.08	7.01
Morgan	321.7	-	3.40	8.85	7.65	6.38
Lock 1 Blanchetown	274.2	3.20	3.35	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	0.55	3.15	1.90	1.33
Murray Bridge	115.3	0.75	0.53	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: <u>WaterConnect Real-time water data.</u>

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 <u>River Murray Update</u>.

The Department for Environment and Water has published a series of inundation maps for the River Murray. They are available at <u>River Murray Inundation Maps</u>.

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 <u>Boating and marine</u>.

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