

River Murray Flow Report



Report #01/2021

Issued 10:00 am 08 January 2021

This supersedes the previous flow report issued by the Department for Environment and Water (DEW) on 24 December 2020. The next flow report will be provided on Friday 15 January 2021.

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.

QUARTER 2 METER READING DUE BY 31 JANUARY 2021

If you hold a water resource works approval that includes a condition that requires you to provide quarterly meter readings to the Department for Environment and Water, please be reminded that meter readings for the Quarter 2 accounting period for 2020-21 (which ended on 31 December 2020) must be recorded within the first fourteen days of January 2021 and submitted to the department by 31 January 2021.

Your meter reading can be submitted via one of the following options:

- The online [Meter Reading Form](#);
- By telephone on (08) 8595 2053; or
- By emailing the Department for Environment and Water at DEW.waterlicensingberri@sa.gov.au.

Should you require any assistance in supplying your meter reading, including how to complete the online Meter Reading Form, please call the telephone number directly above and an officer will be happy to assist you.

The Department's preferred approach is to encourage and facilitate voluntary compliance. However, failure to voluntarily comply with the conditions of a water resource works approval may result in an expiation notice being issued.

FLOW OUTLOOK

The flow at the South Australian border is approximately 8.5 GL/day and will remain around 8.5 GL/day over the coming week. It comprises:

- full January Entitlement Flow (7 GL/day);
- plus water for the environment (see below *Environmental News*); and
- interstate trade adjustments.

The flow over Lock 1 is approximately 5.8 GL/day and will decrease to around 5.5 GL/day over the coming week.

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.

ENVIRONMENTAL NEWS

In South Australia, water for the environment is currently helping to:

- increase 'flowing water habitat' to benefit native fish, animals and plants in the River Murray channel that have adapted to a riverine environment, including supporting spawning and recruitment of golden perch and Murray cod;
- maintain barrage flow to the Coorong North Lagoon to support a productive, food-rich environment for fish and birds and promote suitable conditions for estuarine fish (e.g. black bream) to spawn;
- remove excess salt from the River Murray (see more information [here](#));
- maintain healthy water quality, salinity and water levels in the River Murray Channel and the Lower Lakes and Coorong, including targeted releases from Tauwichee Barrage to push water down the Coorong when weather conditions are best suited (see more information [here](#));
- maintain flow connectivity between the River Murray Channel and its tributaries down to the Murray Mouth, to enable fish migration; and

- deliver a range of outcomes to wetlands in the Riverland via arrangements with the Murraylands and Riverland Landscape Board, Renmark Irrigation Trust, Australian Landscape Trust and Nature Foundation.



Figure 1: The River Murray from Headings Cliff lookout, north of Paringa (Kimberley Williamson, DEW)

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 20 December 2020, a total of approximately 6 712 592 cubic metres of sand had been removed by dredging operations.

Both dredges took a break over the Christmas period and returned to the Murray Mouth this week.

Barrage releases combined with dredging have helped to maintain flow connectivity of the River Murray Channel to the Murray Mouth and have assisted in exporting salt from the river system.

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 0.8 m AHD and Lake Albert is approximately 0.65 m AHD. The difference in water levels is due to wind effects.

Water for the environment has enabled continuous fishway releases and barrage releases to be undertaken during winter, spring and into summer.

As of Tuesday 05 January 2020, the weekly releases were approximately 13.2 GL. Gate openings at the barrages during the week can be seen in Table 1.

Table 1: Number of barrage gates open each day for the week ending Tuesday 5 January 2021

	30 Dec 2021	31 Dec 2021	1 Jan 2021	2 Jan 2021	3 Jan 2021	4 Jan 2021	5 Jan 2021	Objective of releases
Goolwa	2	2	2	2	2	4	4	Provide an optimal salinity gradient to promote black bream spawning & recruitment & support diadromous fish migration.
Mundoo	0	0	0	0	0	0	0	
Boundary Creek	0	0	0	0	0	0	0	
Ewe Island	0	0	0	0	0	0	0	
Tauwitchere	1	1	1	1	1	1	1	Push fresher water down the Coorong to lower salinity levels.
Fishways	Fishways at all barrages and at Hunters Creek (11 in total) were open during the entire week							Provide for fish passage between the Coorong and Lower Lakes.

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.

HEALTHY COORONG, HEALTHY BASIN

Following a successful Healthy Coorong, Healthy Basin Science Forum in February 2020 at Meningie, the [Project Coorong](#) team are holding a World Wetlands Day Science Forum in Goolwa on Tuesday 2 February 2021.

[World Wetlands Day](#) is celebrated each year to raise global awareness about the vital role of wetlands for people and our planet. This day also marks the 50th Anniversary of the Ramsar Convention with the adoption of the Convention on Wetlands of International Importance happening in Ramsar, Iran, on 2 February 1971.



This full day event will focus on "Science Informing Action" with themes to include First Nations knowledge; Coorong water quality and aquatic plants; Coorong fish, waterbirds and invertebrates; Lower Lakes ecology and climate change, hydrological trends and infrastructure investigations.

Venue capacity will be strictly limited and formal registration will be required through [Eventbrite](#). While the intention is that the forum will be held face-to-face, COVID-19 restrictions may require the event to shift to an online format at short notice.

In December 2020 the Healthy Coorong, Healthy Basin program also published its latest update which outlines recent activities and achievements, and highlights how the community continues to help to inform and shape the program. You can find the update [here](#).

If you have any questions on the Science Forum or update please contact project.coorong@sa.gov.au

RIVER VESSEL WASTE DISPOSAL STATIONS

Loxton

The Loxton River Vessel Waste Disposal Station upgrade is now complete and available for public use. 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.

FLOODPLAIN OPERATIONS

The operations of the new Pike and Katarapko floodplain infrastructure and associated weir pool raisings have been completed. Preliminary observations on ecological response during the event indicate that there was abundant frog calling from five different species at Katarapko floodplain and six species at Pike floodplain, and that River Red Gums, Black Box and lignum have all responded to watering with new growth. Key water quality parameters were monitored throughout the event and managed within expected ranges. Further analysis of data that was collected during the event and data from follow up surveys will occur over the coming months.

Updates on future operations will continue to be provided in the *River Murray Flow Report*. If you would like to be sent further communications about Pike and Katarapko floodplain operations via email, please provide your details to the Engagement Officer, Ellee Eleftheriadis, at ellee.eleftheriadis2@sa.gov.au.



Figure 2: Environmental water on the Pike floodplain at the height of the planned inundation (Michelle Denny, DEW)

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.

QUARTERLY COMPLIANCE – QUARTER 3 ENDS ON 31 MARCH 2021

All South Australian River Murray water users are reminded that the Quarter 3 accounting period for 2020-21 ends on March 2021. Compliance action will be taken if any water is taken in excess of the allocation available on a water account at the end of the quarter. For a water trade to be considered for Quarter 3, all paperwork must be lodged with the Department for Environment and Water before 5:00 pm on 31 March 2021.

In order to comply with the *Landscape South Australia Act 2019* by remaining 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; or
- Investigate whether water efficiency measures could be implemented for your property to decrease your demand for water.

To assist you to monitor your water use and remain within the water allocation available on your water account, you can submit an online meter reading at any time and elect to receive a water usage advice (similar to a bank statement) by email or SMS: <https://forms.business.gov.au/smartforms/sa-dfw/meter-reading-form/>.

For more information please [visit DEW's website](#), or contact the Berri water licensing office via telephone: (08) 8595 2053 or email: 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 06/01/2021 (m AHD)	2016 High Water Level (m AHD)
Lock 10	825.0	30.80	30.82	32.72
Lock 9 Kulnine	764.8	27.40	27.33	28.85
Lock 8 Wangumma	725.7	24.60	24.13	26.85
Lock 7 Rufus River	696.6	22.10	21.63	24.97
Lock 6 Murtho	619.8	19.25	19.26	20.19
Renmark	567.4	-	16.34	17.44
Lock 5	562.4	16.30	16.33	17.05
Lyrup	537.8	-	13.23	15.80
Berri	525.9	-	13.18	15.21
Lock 4	516.2	13.20	13.18	14.73
Loxton	489.9	-	10.11	13.54
Cobdogla	446.9	-	-	11.59
Lock 3	431.4	9.80	9.83	10.98
Overland Corner	425.9	-	6.30	10.41
Waikerie	383.6	-	6.23	9.20
Lock 2	362.1	6.10	6.12	8.32
Cadell	332.6	-	3.41	7.01
Morgan	321.7	-	3.34	6.38
Lock 1 Blanchetown	274.2	3.20	3.24	4.46
Swan Reach	245.0	0.75	1.01	3.11
Mannum PS	149.8	0.75	0.95	1.33
Murray Bridge	115.3	0.75	0.82	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: [Managing Acid Sulfate Soils Research Project](#)

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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