River Murray Flow Report





Report #04/2021

Issued 10:00 am 29 January 2021

This supersedes the previous flow report issued by the Department for Environment and Water (DEW) on 22 January 2021. The next flow report will be provided on Friday 5 February 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 <u>DEW.waterlicensingberri@sa.gov.au</u>.

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 9.2 GL/day and will decrease to around 8.2 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 5.5 GL/day and will decrease to around 4.5 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.



Figure 1: The Lower River Murray flag flying over Lock 5 at Paringa (Kimberley Williamson, DEW)

ENVIRONMENTAL NEWS

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

- maintain flow connectivity and facilitate fish movement between the River Murray channel and its tributaries, Lower Lakes, Coorong and Murray Mouth;
- maintain healthy water quality, salinity and water levels in the River Murray Channel and the Lower Lakes and Coorong;
- remove excess salt from the River Murray;
- 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 (see more information here).

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 January 2021, a total of approximately 6 823 956 cubic metres of sand had been removed by dredging operations.

Two dredges are operating between the Goolwa and Tauwitchere channels 24 hours a day, seven days a 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 0.77 m AHD and Lake Albert is approximately 0.65 m AHD. The difference in water levels is due to wind effects.

As of Tuesday 26 January 2021, the weekly releases were approximately 3.6 GL. Gate openings at the barrages during the week can be seen in Table 1. The automatic gate at Goolwa barrage has been opened when weather conditions have been suitable.

Table 1: Number of barrage gates open each day for the week ending Tuesday 26 January 2021

	20 Jan 2021	21 Jan 2021	22 Jan 2021	23 Jan 2021	24 Jan 2021	25 Jan 2021	26 Jan 2021	Objective of releases
Goolwa	1	1	1	1	1	0	0	Provide a small area with 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	0	0	0	0	0	0	0	Push fresher water down the Coorong to assist lowering 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.

PROJECT COORONG

Following a successful Healthy Coorong, Healthy Basin Science Forum in February 2020 at Meningie, the <u>Project Coorong</u> team are holding a World Wetlands Day Science Forum in Goolwa on Tuesday 2 February 2021.

<u>World Wetlands Day</u> 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.

If you cannot attend in person you can join us via live stream. You can register to receive a link to the live stream here.

If you have registered for in person attendance but wish to change to joining us online please email the team at ProjectCoorong@sa.gov.au.

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

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.

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 <u>visit DEW's website</u>, or contact the Berri water licensing 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 27/01/2021 (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	27.34	28.85
Lock 8 Wangumma	725.7	24.60	24.10	26.85
Lock 7 Rufus River	696.6	22.10	21.58	24.97
Lock 6 Murtho	619.8	19.25	19.28	20.19
Renmark	567.4	-	16.36	17.44
Lock 5	562.4	16.30	16.35	17.05
Lyrup	537.8	-	13.28	15.80
Berri	525.9	-	13.24	15.21
Lock 4	516.2	13.20	13.23	14.73
Loxton	489.9	-	10.14	13.54
Cobdogla	446.9	-	-	11.59
Lock 3	431.4	9.80	9.86	10.98
Overland Corner	425.9	-	6.30	10.41
Waikerie	383.6	-	-	9.20
Lock 2	362.1	6.10	6.14	8.32
Cadell	332.6	-	-	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	0.83	3.11
Mannum PS	149.8	0.75	0.79	1.33
Murray Bridge	115.3	0.75	0.72	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: 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 <u>CEWH Environmental</u> <u>Watering.</u>

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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