

SA River Murray Flow Report

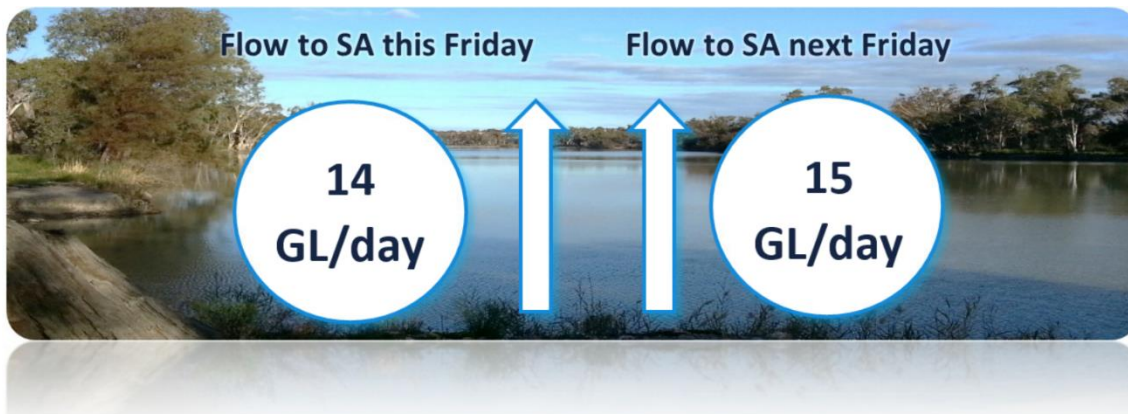


Report #24/2023

Issued 10:00 am 16 June 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 9 June 2023. The next Flow Report will be provided on Friday 23 June 2023.

Flow outlook



The flow at the South Australian border is approximately 14 GL/day and is forecast to increase to around 15 GL/day over the coming week. The current flow at the border comprises:

- full June Entitlement Flow (3 GL/day);
- water for the environment;
- interstate trade adjustments; and
- Unregulated flow.

The flow over Lock 1 is approximately 12 GL/day and will remain around 12 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.

Current water levels

Current water levels are updated daily and can be found at the following link: <https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx>

Salinity

Increased salinity levels are common during flood recessions. The Department is closely monitoring elevated salinity levels throughout the River Murray in South Australia. In general, salinity levels across the River Murray in SA for the week were at approximately 410-580 EC. It is understood that some irrigators have recorded higher salinity readings at isolated locations. These higher readings are more likely to be observed at the bottom of the water column.

Irrigators are encouraged to monitor the [daily salinity levels](#) provided by SA Water as part of their business operations.

PIRSA has provided salinity management advice for irrigators on its website:

https://www.pir.sa.gov.au/emergencies_and_recovery/storms_and_floods/river_murray_flood_2022

Upstream flows

More information on upstream conditions and forecasts can be found in the Murray-Darling Basin Authority's *Weekly Flow Report* here: <https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports>

Murray Mouth

Dredging at the Murray Mouth continues to be suspended due to high flows scouring sand out of the mouth. Conditions are continuing to be monitored, Tide Ratios analysed, and fortnightly surveys performed in order to provide accurate information to assist in determining when dredging may recommence.

Dredging operations are still not required in the Murray Mouth due to the positive impact from the 2022-23 SA River Murray flood event that produced an adequate open channel through the volume of sand that was naturally pushed out to sea. However, it is anticipated that at some point dredging will be required to recommence to ensure that the Murray Mouth remains open.

A wider and deeper Murray Mouth will have positive environmental benefits following the flood through enabling better exchange of water between the ocean and the Murray estuary and Coorong.

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.7 m AHD and Lake Albert is approximately 0.7 m AHD.

DEW and SA Water are currently working to maintain an average water level of 0.7 m AHD across Lake Alexandrina and Lake Albert until the end of June 2023.

Although this is the target, there will be times when the water levels can be higher or lower than the target. At these times, the barrages will be operated to either raise or lower water levels as required. Water levels and barrage operations are monitored closely by the South Australian Government, Murray-Darling Basin Authority and Commonwealth Environmental Water Office.

Gate openings at the barrages can now be viewed on Water Data SA here:

<https://water.data.sa.gov.au/Data/Dashboard/75>

Total daily flow releases from the barrages can also be found on Water Data SA here:

<https://water.data.sa.gov.au/Data/Dashboard/1>

River Murray River Vessel Waste Disposal Stations

As at 15 June 2023 all River Vessel Waste Disposal Stations (excluding Lock 3) are online and operational.

Additional minor repair works will be required across the stations over the next couple of months. This is expected to have a minimal impact on the operational status of the stations.

The Lock 3 River Vessel Waste Disposal Station has been out of commission since January 2020 due to a significant infrastructure failure. The nearest alternative waste facility is located at Waikerie. Normal boat waste (domestic or galley waste) can still be deposited at the Lock 3 facility at the present time.

You can report any River Vessel Waste Disposal Station issues on 1800 799 065.

If you have any questions, please contact the DEW Engagement Team on DEW.WIOCommunications@sa.gov.au

Levee embankments

The Department is continuing to work with PIRSA and impacted landholders and trusts to stabilise and dewater the Lower Murray Reclaimed Irrigation Area (LMRIA) levee network. LiDAR flights and data have now been completed for all levees, with stability assessments and reports completed for government owned levees. DEW is currently working with the LiDAR surveyors to develop LiDAR profiles for each levee which can then be provided to landholders. Short-term stability works, where required, to enable dewatering have either commenced or are completed.

Early planning and revisiting of sites has started for the intermediate stabilisation of levees to support levee function and help protect levees from wind seiche and fluctuating river levels during normal river operations.

Once intermediate works are complete and the areas have dried out, a full condition assessment will be undertaken to determine longer-term requirements.

Local Irrigation Trust members and contractors should take the necessary precautions when working on levees, particularly during periods of wet weather, as the integrity of levees cannot be guaranteed following the flood event. While flood recovery works are taking place, levee banks along the River Murray are closed to the public for recreational activities. This includes for walking, fishing, and mooring of river vessels.

Questions related to dewatering and recovery of agricultural areas can be directed to the PIRSA Recovery Hotline on 1800 931 314.

More information on the stabilisation of levee banks in the LMRIA can be found on the DEW website at <https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks>.

If you have any questions, contact the DEW Engagement Team on DEW.WIOCommunications@sa.gov.au

Environmental news – Tiny invertebrates making a big contribution to the Coorong

Benthic macroinvertebrates are an important food resource for both fish and birds of the Coorong, forming a crucial part of the region's food web. Did you know many of these macroinvertebrates also contribute significantly to the remediation of degraded sediments? For example, polychaete worms, like these sampled during summer monitoring, form burrows that can deliver oxygen from the surface layer (brown layer) of the sediment into deeper layers that are lacking oxygen (black layer).

One benefit of increased freshwater inflows into the Coorong and the widening of the Murray Mouth, is the provision of conditions that help to increase macroinvertebrate species diversity and overall abundance; which in turn provides the vital role of sediment remediation.



Photo 1: Polychaete worms' sample. Photo 2: Burrows formed by polychaete worms. Photo credit: John Kruger, DEW.

Water quality

Algal blooms

It is reasonably common for algal blooms to be reported at this time of year in the Murray-Darling Basin and a number of red and amber alerts for blue-green algae have been issued by upstream authorities in recent weeks. They include:

- River Murray at Fort Courage (**Amber alert**)
- River Murray at Curlwaa (**Amber alert**)
- River Murray at Merbein (**Amber alert**)
- Great Darling Anabranch at Silver City Highway (**Amber alert**)

While no algal-blooms are currently present within South Australia, people are advised to avoid contact with any obviously green water or scums if they are encountered as they may cause skin irritations in some people.

South Australian authorities closely monitor the situation upstream and SA Water increases sampling whenever a water quality event is detected to allow for timely action. SA Water, SA Health and DEW monitor the occurrence of blue-green algal blooms in South Australia. SA Water uses the water quality data to continually adjust operations to minimise impacts to water treatment plants and other users located along the River Murray.

Water quality alerts in South Australia can be found on the SA Health website:

<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/public+health/water+quality/water+quality+alerts>

More information on current alerts upstream can be found on the WaterNSW website here:

<https://www.waternsw.com.au/water-services/water-quality/algae-alerts>

Further information

2022-23 **River Murray Flood event** <https://www.recovery.sa.gov.au/active-recoveries/river-murray-flood>

2022-23 River Murray Flood **recovery - PIRSA** https://pir.sa.gov.au/emergencies_and_recovery/storms_and_floods/river_murray_flood_2022

Water quality alerts in SA

<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/public+health/water+quality/water+quality+alerts>

NSW fish deaths

<https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills>

NSW algal alerts

<https://www.waternsw.com.au/water-services/water-quality/algae-alerts>

Real-time water data at sites in SA

<https://water.data.sa.gov.au/>

Current daily water levels

<https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx>

Daily flow and level information at key SA Water sites on the River Murray

<https://www.sawater.com.au/water-and-the-environment/south-australias-water-sources/river-sources/river-reports-daily-flow>

Daily salinity information in SA

<https://www.sawater.com.au/water-and-the-environment/south-australias-water-sources/river-sources/river-reports-daily-salinity>

Real time information throughout the River Murray system

<https://riverdata.mdba.gov.au/system-view>

Whole River Murray System updates

<https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports>

Marine safety in SA

<https://marinesafety.sa.gov.au/>

Victorian rainfall and river conditions

<http://www.bom.gov.au/vic/flood/index.shtml>

NSW rainfall and river conditions

<http://www.bom.gov.au/nsw/flood/>

Climate outlooks

<http://www.bom.gov.au/climate/ahead/outlooks/>

Climate drivers

<http://www.bom.gov.au/climate/enso/>

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