

SA River Murray Flow Report

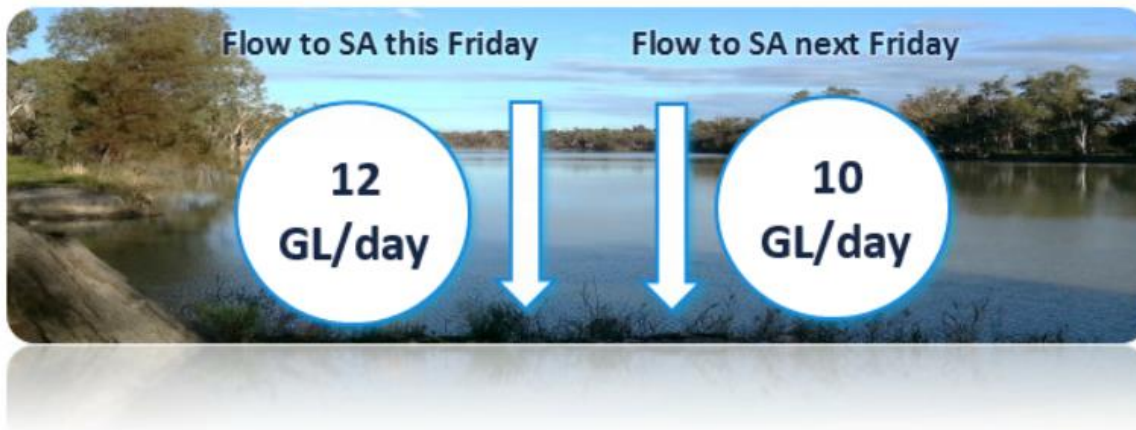


Report #21/2023

Issued 10:00 am 26 May 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 19 May 2023. The next Flow Report will be provided on Friday 2 June 2023.

Flow outlook



The flow at the South Australian border is approximately 12 GL/day and is forecast to decrease to around 10 GL/day over the coming week. The current flow at the border comprises:

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

The flow over Lock 1 is approximately 12 GL/day and will decrease to around 9 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 have remained at approximately 380-480 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.

SA Water has spent most of this month preparing the Sawfish dredge for commissioning. 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 0.6 m AHD and Lake Albert is approximately 0.6 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 25 May 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.

Murray Bridge may experience a short period of time where it is offline to facilitate a permanent repair to the power supply. Once the dates are confirmed DEW will ensure that the public is notified prior to the works commencing.

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.

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. Now that LiDAR, stability assessments and short-term works, and dewatering are well under way, DEW will be revisiting short-term stabilisation sites to assess the levees' intermediate stabilisation requirements and conduct repairs and works to protect the levees from high flows and wind seiching during

the coming winter. A full condition assessment will be undertaken after intermediate works are completed and the areas have dried-out.

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. PIRSA is leading the recovery planning process for the LMRIA as part of the State Recovery Plan.

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 – Rare plant thrives after flood

In desperate need of water, the rare plant species spiny lignum (*Duma horrida ssp. horrida*) enjoyed a long drink during the flood event. These plants are being monitored on the Pike Floodplain and have responded with a flush of green in stark contrast with their pre flood yellow/brown appearance. In the following months, this species will be kept under observation to see if they set seed and/or send up new shoots from their rhizomes (root mass) underneath the soil.



Spiny lignum prior to 2022 SA River Murray flood

Photo: DEW



Spiny lignum after 2022 SA River Murray flood

Photo: 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 Anabranche at Silver City Highway (**Red 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	http://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood .
2022-23 Flood recovery	https://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood/recovery
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/

ID	RM-Flow-Report-2023 05 26
Classification	Public I2 A2
Issued	26 May 2023
Authority	DEW
Master Document Location	R:\Water Group\RMO\WRO\04 Communications\Flow Advices\2022-23
Managed and Maintained by	Water Infrastructure and Operations Branch
Author	Water Infrastructure and Operations Branch
Reviewer	Director, Water Infrastructure and Operations