SA River Murray Flow Report





Report #45/2023





This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 3 November 2023. The next Flow Report will be provided on Friday 17 November 2023.

Flow outlook



The flow at the South Australian border is approximately 28.5 GL/day and will decrease to around 27 GL/day over the coming week **depending on river operations**.

The current flow at the border comprises the full November Entitlement Flow (6 GL/day) plus unregulated flow, water for the environment and interstate trade adjustments.

The flow over Lock 1 is approximately 26 GL/day and will decrease to around 25 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.

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

Upstream flows

The Department for Environment and Water is monitoring river levels in Victoria and New South Wales following rainfall over the recent weeks. The Murray-Darling Basin Authority has announced unregulated flow to the SA border once more due to the rainfall event. Forecasts are showing that the flow to SA should hold up at around 20-30 GL/day until mid-November.

The department will continue to monitor the situation and provide regular information on river flows to South Australian communities.

The Murray-Darling Basin Authority is also providing the department with updates on dam operations and river flows interstate.

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 and fortnightly surveys performed in order to provide accurate information to assist in determining when dredging may recommence.

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

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.80 m AHD and Lake Albert is approximately 0.77 m AHD. The difference is due to wind effects.

The Lower Lakes are being managed to target a daily average lake level between 0.75 m AHD to 0.85 m AHD during November 2023.

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.

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

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.

Morgan Waste Disposal Station is currently out of service. Repairs are scheduled for the week commencing on 13 November. Updates will be provided as further information becomes available.

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

Lower Murray Reclaimed Irrigation Area Levee embankments

Overtopped levees - 10 November 2023 update

Field inspections of the levees continue with reinforcement of levee stabilisation works, where required, being prioritised.

Reinforcement work at six of the seven levees impacted by the overtopping event in September has been completed. Placid levee bank, which breached following overtopping, has been disconnected from the river and is being dewatered.

DEW and PIRSA continue to progress levee stabilisation works and dewatering along the Lower Murray with 18 of the 20 2022-23 River Murray flood-impacted irrigation areas dewatered. Pumps remain at 4 of these locations to manage seepage.

Levee access

All government-owned levee banks along the Lower Murray from Mannum to Wellington remain closed to public access until further notice. While flood recovery works are being undertaken and until full condition assessments have been completed, recreational activities along the levee banks, such as walking, cycling and fishing are not allowed.

The government-owned levee banks are Cowirra, Neeta, Wall Flat, Pompoota, Mypolonga, Mobilong, Burdett, Long Flat, Monteith and Jervois.

Privately-owned levees along the Lower Murray are managed and maintained by private landowners and access to their levee banks is at their discretion. However, access to private levee banks where the department is undertaking flood recovery work is not permitted.

OFFICIAL

If you have queries about levee stabilisation works or would like to discuss your particular circumstances, please contact DEW through the following channels:

Birgitte Sorensen, Manager, Levee Recovery on 8463 6942 or Birgitte.sorensen@sa.gov.au

Lisa van der Linde, Communications and Engagement Officer on 0437 313 087 or Lisa.vanderlinde@sa.gov.au

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 LMRIA levee stabilisation works can be found on the DEW website at https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks.

Weir pool lowering in 2023-24

Small scale weir pool manipulations at Locks 1 to 6 are underway to achieve a range of benefits for floodplain and wetland vegetation and wildlife. This includes minor weir pool lowering, within the normal operating range, at Locks 1 to 5, and a weir pool lowering of up to 16 cm below normal pool level at Lock 6.

Lowering the weir pools will assist with reducing elevated floodplain groundwater levels, flushing salt to the sea and supporting drying out of floodplains which have been inundated for an extended period of time. In stream salinity will be closely monitored ahead of, during and after any lowering event.

The weirs were lowered by 2-3 cm per day over 1-8 days until they reached their target heights. This limited any erosion risks and meant any water level increases in the downstream weir pools were minimal. The weir pools will be held at these lowered water levels for approximately 60 days before returning to normal pool levels. The actual duration of the weir pool lowerings will be dependent on river conditions (flow and water quality). As planning continues, updates on these operations, including their durations, will be provided in future Flow Reports.

If you would like to receive email updates with further information please send your request to DEW.WIOcommunications@sa.gov.au

Environmental news – An uncommon sighting

A great crested grebe (*Podiceps cristatus australis*) was photographed a couple of weeks ago enjoying a glide at the junction of Picannini Lagoon and Bookmark Creek, next to Jane Eliza Avenue in Renmark, South Australia.

This graceful waterbird with ornate head plumage has also been spotted at Chowilla, Narrunga Wetland and near Goolwa barrage by DEW and Murraylands and Riverland Landscape Board staff who noted that sightings have been a few and far

over the last decade. Potentially, post-flood resources are bringing more of these distinctive birds to the floodplains, wetlands and river channel.

Take a look at their interesting head plumage and let us know if you have spotted one recently.



Figure 1: Great crested grebe at Picannini Lagoon (Photo: David R. Rosenthal)

Water quality

Algal blooms

A number of 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 Merbein (Amber alert)
- River Murray at Buronga (Amber alert)
- River Murray at Curlwaa (Amber alert)
- River Murray at Lock 8 (Amber alert)
- Darling River upstream Pomona (Red alert)
- Darling River at Tapio (Amber alert)
- Darling River at Pooncarie (Amber alert)
- Darling River at Ellerslie (Amber alert)
- Darling River at Burtundy (Amber alert)
- Darling River at Tolarno (Amber alert)
- Great Darling Anabranch 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

Salinity

Salinity levels throughout the River Murray in South Australia have returned to their typical range following elevated levels experienced during the flood recession.

Nonetheless, it is possible that some irrigators may record 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

Further information

River Murray high flows https://www.environment.sa.gov.au/topics/river-murray-flows

2022-23 River Murray Flood event https://www.environment.sa.gov.au/topics/river-murray-floods

2022-23 River Murray Flood recovery

https://www.recovery.sa.gov.au/active-recoveries/river-murray-flood

https://pir.sa.gov.au/emergencies and recovery/storms and floods/river mur

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

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/

SA rainfall and river conditions http://www.bom.gov.au/sa/flood/index.shtml?ref=hdr

Climate outlooks http://www.bom.gov.au/climate/ahead/outlooks/

Climate drivers http://www.bom.gov.au/climate/enso/

ID	RM-Flow-Report_2023 11 10
Classification	Public I2 A2
Issued	10 November 2023
Authority	DEW
Master Document Location	R:\Water Group\RMO\WRO\04 Communications\Flow Advices\2023-24
Managed and Maintained by	Water Infrastructure and Operations Branch
Author	Water Infrastructure and Operations Branch
Reviewer	A/Director, Water Infrastructure and Operations