SA River Murray Flow Report



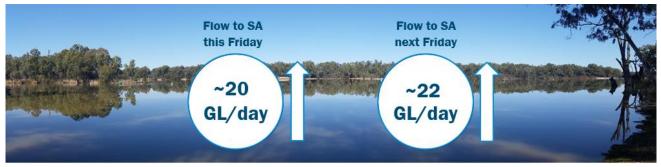
Government of South Australia Department for Environment and Water

Report #49/2023

Issued 12:00 pm 8 December 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 1 December 2023. The next Flow Report will be provided on Friday 15 December 2023.

Flow outlook



The flow at the South Australian border is approximately 20 GL/day and will increase to around 22 GL/day over the coming week **depending on river operations**.

The current flow at the border comprises the full December Entitlement Flow (7 GL/day) plus water for the environment and interstate trade adjustments.

The flow over Lock 1 is approximately 15 GL/day and the flow next week is yet to be determined.

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

Upstream flows

The Department for Environment and Water is monitoring river levels in Victoria and New South Wales following rain last week, however, it is too early to predict how it will affect the River Murray in South Australia. 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 updated 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: <u>https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports</u>

Murray Mouth

Dredging operations at the Murray Mouth continue after resuming on 27 November 2023 after a break of just over a year due to high flows scouring sand out of the mouth. Dredging is undertaken to maintain connectivity (exchange of water) between the Coorong and the Southern Ocean.

Barrage releases, combined with dredging, help to maintain flow connectivity of the River Murray Channel to the Murray Mouth and assists in exporting salt from the river system.

Exclusion Zones established around the dredging operations are in place to ensure public safety. Refer to <u>Notice to</u> <u>Mariners No 61 of 2023</u>.

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.78 m AHD and Lake Albert is approximately 0.76 m AHD. The difference is due to wind effects.

The Lower Lakes are being managed to target a daily average lake level between 0.7 m AHD to 0.8 m AHD during December 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: <u>https://water.data.sa.gov.au/Data/Dashboard/75</u>

Total daily flow releases from the barrages can also be found on Water Data SA here: <u>https://water.data.sa.gov.au/Data/Dashboard/1</u>

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.

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

Field inspections of the levees continue with reinforcement of levee stabilisation works, where required, being prioritised. Dewatering is now complete in 19 of the 20 irrigation areas impacted by the 2022-23 River Murray flood, with dewatering at Placid continuing to progress.

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

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.

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 <u>https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks.</u>



Weir pool lowering in 2023-24

Small scale weir pool manipulations at Locks 1 to 6 are now concluding. After approximately 60 days at their lowered levels, they have started being raised back to normal pool levels today. Water levels will be increased at a slow rate of approximately 2 to 3 cm per day over the next 1 to 8 days until normal pool levels have been reinstated.

The 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, supported the good flowing conditions in the River Murray Channel contributing to a range of benefits for floodplain and wetland vegetation and wildlife.



Photo 1: Ecologists retrieving a fyke net at the Devlin's Pound wetland to monitor tadpoles and fish making use of the off channel habitat. Photo credit: Casey O'Brien, DEW.



Photo 2: DEW staff undertaking gauging in the Chowilla anabranch creeks to ensure good flowing conditions for Murray Cod during the weir pool lowering at Lock 6. Photo credit: Casey O'Brien, DEW.



Photo 3: Limnodynastes tadpole monitoring check. Photo credit: Casey O'Brien, DEW.



Photo 4: Crested tern feeding a juvenile of the same species at Renmark North. Photo credit: Casey O'Brien, DEW.

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

Environmental news – Weir pool frog monitoring

DEW has been putting AudioMoths out at ecological monitoring sites influenced by recent weir pool manipulation along the SA River Murray. Audio Moths are small audio recording devices that capture frog, bird and other calls. The calls are later identified to determine species presence and abundance.

The monitoring data collected will help us learn how weir pool manipulation influences frog populations.

Stay tuned for the findings on the frog's calls!



Photos: Setting up AudioMoths along the SA River Murray. Photo credit: Casey O'Brien, DEW.

Environmental water flows

The Murray-Darling Basin Authority (MDBA) provides a monthly update showing flows in the River Murray System including the total volume of water for consumptive use and water for the environment.

Monthly updates are available at: <u>https://www.mdba.gov.au/news-and-events/newsroom?news%5B0%5D=media-type%3ARiver%20Murray%20flows</u>

Water quality

Algal blooms

A number of alerts for blue-green algae have been issued by upstream authorities in recent weeks. They include:

- Darling River upstream Pomona (Amber alert)
- Darling River at Pomona Boat Ramp (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)
- 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: <u>https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/public+health/water+quality/water</u> <u>+quality+alerts</u>

More information on current alerts upstream can be found on the WaterNSW website here: <u>https://www.waternsw.com.au/water-services/water-quality/algae-alerts</u>

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	<u>https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health</u> <u>+internet/public+health/water+quality/water+quality+alerts</u>
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 Riv	
	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
Flows in the River Murray System includi	
	https://www.mdba.gov.au/news-and- events/newsroom?news%5B0%5D=media- type%3ARiver%20Murray%20flows
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/nsw/flood/ http://www.bom.gov.au/sa/flood/index.shtml?ref=hdr

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