SA River Murray Flow Report



Government of South Australia Department for Environment and Water

Report #48/2023

Issued 12:00 pm 1 December 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 24 November 2023. The next Flow Report will be provided on Friday 8 December 2023.

Flow outlook



The flow at the South Australian border is approximately 18 GL/day and will remain around 18 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 22 GL/day and will decrease to around 20 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: <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 this 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 resumed 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.

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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 0.87 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 0.7 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 <u>DEW.WIOCommunications@sa.gov.au</u>

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 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 <u>DEW.WIOcommunications@sa.gov.au</u>

Environmental news – First Nations tour the Pike Floodplain

On Thursday the 9th of November, the Department for Environment and Water led a group of First Nations people and staff members of the River Murray and Mallee Aboriginal Corporation (RMMAC) on a tour of the Pike Floodplain to learn more about the 2022 environmental watering event and to see how the floodplain has responded to the 2022-23 River Murray flood.

It was a sunny day and perfect weather for the group to visit key sites on the Pike Floodplain like Snake Creek, the Tanyaca regulator and Bank B. The Department for Environment and Water ecologists shared some of the highlights from recent monitoring, including information about fish, frogs, waterbirds, turtles and even rakalis (native water rats) taking advantage of the water and habitat as well as the thriving floodplain vegetation.

Everyone had a great time learning about the Pike floodplain.

To learn more about the Pike Floodplain environmental water delivery, visit the 2022-23 summary factsheet at <u>https://cdn.environment.sa.gov.au/environment/images/2022_Pike_Floodplain_operation_outcomes.pdf</u>



Photos: First Nations people and staff members of the RMMAC toured the Pike Floodplain recently. Photo credit: Xiomara Ruiz, DEW.

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 (**Red 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)

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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: 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 <u>daily salinity levels</u> 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

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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
	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	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
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