

SA River Murray Flow Report



Report #34/2024

Issued 12.00pm 23 August 2024

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 16 August 2024. The next Flow Report will be provided on Friday 30 August 2024.

Flow outlook



The flow at the South Australian border is approximately 5 GL/day and will increase to around 6 GL/day over the coming week **depending on river operations**.

The current flow at the border comprises the full August Entitlement Flow (4 GL/day), water for the environment and interstate trade adjustments.

The flow over Lock 1 is approximately 3.5 GL/day and the flow over the coming week will increase to around 4 GL/day.

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 on [WaterConnect](#).

Upstream flows

The environmental water release that commenced from Menindee Lakes in late May is complete. River users may have noticed a change in appearance and increase in odour of the River Murray in SA. The effects on water quality in SA could continue throughout August. A separate public advice will be issued by authorities if any health risks are detected.

Flow at the SA border is expected to remain in the range of 5-6 GL/day throughout the remainder of August.

More information on upstream conditions and forecasts can be found in the [Murray-Darling Basin Authority's Weekly Flow Report](#).

Water for the environment delivery

A low-level operation of the environmental regulator commenced earlier this week at the Pike Floodplain. The watering event is initially targeting a raise in water levels up to 15.1 m AHD (55 cm above the normal level at the Pike regulator). This will then potentially be increased up to 15.3 m AHD (75 cm above normal level at the Pike regulator) along with minor raising at Lock 5 by up to 10 to 20cm. Planning is underway to pump water to two sites at Pike to water regenerating lignum and black box.

At Katarapko floodplain, areas of the floodplain wetlands are undergoing a drying phase. A low-level operation is planned to commence in early September. This will involve raising water levels behind The Splash regulator by up to 2.0 metres (to 12.0 m AHD). A concurrent 10 cm raising of Lock 4 may also be undertaken. However, further monitoring and modelling is underway to confirm this operation.

Weir pool manipulation within normal operating ranges at the other SA locks and weirs is under consideration.

The floodplain environmental watering actions aim to sustain the significant improvements in condition and regeneration of trees, lignum and understorey vegetation and provide important habitat for frogs, waterbirds and other fauna. The decisions to proceed with these operations will depend on River Murray flows, conditions in the River and on the floodplain, and will be informed by the outcomes of environmental monitoring.

Water for the environment continues to be delivered as part of SA's entitlement flow. Flows at the SA border are expected to remain in the range of 5-6 GL/day throughout the remainder of August.

Murray Mouth

Dredging operations at the Murray Mouth continue. Dredging is undertaken to maintain connectivity (exchange of water) between the Coorong and the Southern Ocean. Dredging is currently being undertaken on the Young Husband Peninsula and in the Tauwiche channel. Dredging operations may be impacted by dredge maintenance activities, high tides and swells associated with the winter months.

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

Exclusion Zones established around the dredging operations are in place to ensure public safety. Refer to [Notice to Mariners No 61 of 2023](#).

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.76 m AHD and Lake Albert is approximately 0.83 m AHD.

The Lower Lakes are being managed to target a daily average lake level between 0.725 m AHD to 0.825 m AHD during August 2024.

Barrage operations are being undertaken to encourage flow to the Coorong Lagoons, with flows currently prioritised from Tauwiche barrage. 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. Automated gates at Tauwiche, Ewe Island, Mundoo and Goolwa barrages can be shut during reverse flow events and then opened when conditions allow for downstream movement of freshwater to the Coorong.

Gate openings at the barrages can now be viewed on [Water Data SA – Barrage dashboard](#).

Total daily flow releases from the barrages can also be found on [Water Data SA – Flows dashboard](#).

River Murray Flood Mapping

The changes in the SA River Murray Channel and floodplains since the 1956 flood and subsequent events have led to a shifting relationship between flow and water level, making accurate forecasting challenging. These changes include new infrastructure and development, shifts in floodplain vegetation and land use, movement of the river channel and changes in river bathymetry.

The effects of these changes were observed during the 2022-23 River Murray flood event. Following the event, the State Government committed funding for the purpose of updating DEW's River Murray flood models, tools and datasets with current conditions, and the latest observations of water levels and flood behaviour during the 2022-23 flood.

DEW has updated the River Murray hydrodynamic models from Wellington to Lock 7 using the best available data, resulting in updated flood inundation datasets. DEW is working on making these updated datasets accessible to river managers, emergency services and the community, providing them with up to date information to assess potential flood impacts and prepare for future events. Additionally, model updates and dataset development for the Lower Lakes are ongoing. The bathymetric surveys outlined below are an example of the new data being captured that will be used to inform these updates.

For more information contact Casey Henderson, Senior Project Officer on casey.henderson@sa.gov.au.

Water quality

Algal blooms within SA

The **Water Quality Alert for Lake Alexandrina** issued by SA Health has now been **lifted** as a result of recent water sampling showing that there is no longer a presence of a potentially harmful blue green algae bloom. Swimming, diving, fishing and other recreational activities can recommence at Lake Alexandrina. Further information can be found on the [SA Health website](#).

Algal blooms upstream of SA

A number of current alerts for blue-green algae have been issued by upstream authorities for the River Murray upstream of the SA border. Details of the current alert locations can be found on the [WaterNSW website – Algae Alerts page](#).

River Murray 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 hard waste (domestic or galley waste) can still be deposited at the Lock 3 facility at the present time.

Goolwa RVWDS Portaloo unit has been removed and is undergoing refurbishment. To prevent future issues and ensure correct operation, we kindly ask users to refrain from flushing foreign objects such as sanitary products, wipes, paper towels and cooking oil or fat. Flushing these items can cause serious damage to the equipment, including blockages and pump failures. Please only flush toilet paper to help maintain the equipment operational. Thank you for your cooperation.

The closest Portaloo disposal facilities are available at no charge at Coorong Quays, Hindmarsh Island by contacting them on 8555 7300. The remainder of the station is operating as normal. 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

Intermediate remediation of the LMRIA levees project

The Intermediate Remediation of the LMRIA Levees project is jointly funded by the Australian and South Australian governments, through the Disaster Recovery Funding Arrangements. This project will return sections of government and privately owned levees that were significantly damaged in the 2022-23 River Murray flood to their pre-flood height.

Intermediate remediation works update

- Statutory approvals for the intermediate remediation works and cultural heritage surveys of government and private levees have been completed.
- Sheet piles have been purchased and preparation works undertaken where required, including the testing of materials from quarry pits to determine suitability.
- Works have commenced at Pompoota, Mypolonga and Long Flat.
- The Department for Environment and Water (DEW) is working with the Department for Infrastructure and Transport (DIT), as the state infrastructure agency, on the procurement of contractors to undertake works.
- A request for tender was issued by DIT in July, with an anticipated award date in October.
- Early stages of procurement and preparation of land access agreements for works on private levees have commenced.
- The Levee Recovery team continues to engage regularly with landholders and irrigation trusts.

Where intermediate remediation works are required for government levees, they will remain closed until the works are progressively completed and subsequent safe access is determined over the next 12-18 months. Any government levee not requiring intermediate remediation work will remain closed pending the outcome of the condition assessment and a safety risk assessment to ensure they are safe for public access. The government levee banks are Cowirra, Neeta, Wall Flat, Pompoota, Mypolonga, Mobilong, Burdett, Long Flat, Monteith and Jervois. Access to private levees is at the landholder's discretion, however, access is not permitted where remediation works are being undertaken.

The safety of the public is of paramount importance and the Department for Environment and Water will keep the community informed of the progress of the project, including when levees may be accessible to the public, through its website and newsletter.

For more information please visit [Department for Environment and Water – Levees](#)

If you have any questions, please contact Lisa van der Linde, Communications and Engagement Officer on 0437 313 087 or Lisa.vanderlinde@sa.gov.au.

Environmental news – Waterbird bonanza at Lake Limbra

During autumn this year, water for the environment was delivered to Lake Limbra on the Chowilla Floodplain to provide habitat and food resources for the many young waterbirds that were observed during summer monitoring.

34 waterbird species were observed in recent monitoring, with approximately 2,000 birds consistently recorded on any given survey morning. Feathery users included deep-diving grebes, ducks and cormorants, large and small waders, and fringe-dwelling species. Freckled Duck, Musk Duck, Blue-billed Duck and Australasian Shoveler (threatened species) were seen using the lake, along with hundreds of swans.

Vegetation including black box woodlands, sedges, lignum, grasses and forbs have also benefited from the watering; and aquatic flora like the tiny, free-floating Lemna/Wolffia spp. has emerged in shallow waters.



Photo credit: Helga Kieskamp.

(Left to right, clockwise) 1. Pied stilt. 2. Pink-eared duck. 3. Australian shelduck. 4. Black swan. 5. Grey teal. 6. Hardhead.



Photo credit: Helga Kieskamp.

(Left to right, top to bottom) 7. Sedge. 8. Black Box. 9. Cooba. 10. Lemna.

Salinity

Salinity levels throughout the River Murray in South Australia are within their typical range. 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.

Survey on the use of pre-trade data in water market trading decisions

The Australian Government Department of Climate Change, Energy, Environment and Water (DCCEEW) is seeking the assistance of water market participants to understand the pre-trade data necessary for making informed trading decisions.

The *Water Amendment (Restoring Our Rivers) Act 2023* (<https://www.dcceew.gov.au/water/policy/restoring-our-rivers-act>) defines pre-trade data in relation to the trade or transfer, or proposed trade or transfer, of any type of eligible tradeable water right. This includes, but is not limited to, offers to buy or sell that occur before an agreement or contract for the trade or transfer is finalised.

The DCCEEW requests that water market participants complete a brief [Pre-trade data survey](#) to provide insights into the value of collecting pre-trade data. The survey is anonymous and is expected to take less than 3 minutes to complete. Responses are due by close of business on 28 August 2024.

Further information

- [SA River Murray Flows page - Department for Environment and Water](#)
- [2022-23 River Murray Flood event](#)
- [Government of South Australia - State Disaster Recovery](#)
- [SA Water quality alerts - SA Health](#)
- [Real-time SA water data](#)
- [Current SA daily water levels](#)
- [Daily flow and water level information at key SA Water sites on the River Murray](#)
- [SA daily salinity information](#)
- [SA Marine safety](#)
- [Real time information - whole of River Murray system](#)
- [Whole River Murray System weekly reports](#)
- [Flows in the River Murray System including water for the environment](#)
- [Water for the environment actions in the Murray-Darling basin catchments](#)
- [NSW fish kills](#)
- [NSW algal alerts](#)

Bureau of Meteorology

- [SA rainfall and river conditions](#)
- [Victorian rainfall and river conditions](#)
- [NSW rainfall and river conditions](#)
- [Climate outlooks](#)
- [Climate drivers](#)

ID	RM-Flow-Report_2024_08_23
Classification	Public I2 A2
Issued	23 August 2024
Authority	DEW
Master Document Location	R:\Water Group\RMO\WRO\04 Communications\Flow Advices\2024-25
Managed and Maintained by	Water Infrastructure and Operations Branch
Author	Water Infrastructure and Operations Branch
Reviewer	A/Director, Water Infrastructure and Operations