SA River Murray Flow Report





Report #27/2025

Issued 12 pm 4 July 2025

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 27 June 2025. The next Flow Report will be provided on Friday 11 July 2025.

Flow outlook



The flow at the South Australian border is approximately 5.5 GL/day and is expected to remain at that flow rate to next Friday.

The current flow at the South Australian border includes the full July Entitlement Flow (3.5 GL/day), along with water for the environment and adjustment for deferred entitlement flows, which are stored and accumulated for critical human water needs during dry periods.

The flow over Lock 1 this Friday is approximately 4.5 GL/day and is expected to increase to 5.0 GL/day by next Friday.

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, rainfall and storages

Rainfall across the Murray-Darling Basin this week has been patchy, with higher rainfalls across the eastern Basin of up to 25mm in eastern Queensland and 50mm in eastern NSW. Rainfall of up to 10mm was recorded in south-central Queensland, with rainfall levels of 1-10mm recorded in central and southern NSW, Victoria and South Australia. Further rainfall information can be found at http://www.bom.gov.au/climate/maps/rainfall/

The current flood warning for SA Inland Rivers (Cooper Creek and the Diamantina River flowing into South Australia) from the Bureau of Meteorology (BOM), which is currently affecting properties and townships, such as Innamincka, in the north east of South Australia, is not within the catchment of the Murray-Darling Basin. Both the Cooper Creek and Diamantina River catchments terminate in Lake Eyre. These catchments are distinctly different to the Murray-Darling as they are unregulated.

Rainfall in Queensland throughout March and early April has resulted in significant flow in the Upper Darling Catchments. The estimated inflows into Menindee lakes has been approximately 915 GL since early April. More recent rainfall has resulted in a revised inflow forecast for another 100-200 GL expected to flow into the Menindee Lakes to the end of August. The current estimated volume is able to be regulated into Menindee Lakes and will not result in an increase in flow to South Australia. Further information will be provided as the flow progresses through the Darling River catchment.

As of 3 July 2025, Dartmouth Dam storage has continued to reduce to 2,573 GL or 67% of capacity, and Hume Dam storage has continued to increase to 1,180 GL, or 39% of capacity. Transferring water from Dartmouth to Hume aims to manage the risk of spills

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if conditions become wet, while ensuring downstream of Hume demands can still be met if the season turns out dry. Storage in the Menindee Lakes has increased to 1,290 GL, or 75% of capacity, with sufficient airspace to capture the estimated inflows from the Upper Darling catchment.

Lake Victoria storage has increased to 405 GL, or 60% capacity. Releases from Lake Victoria are currently contributing to approximately 10% of the flow to South Australia.

Flows at the South Australian border averaged around 5.3 GL/day over the past week.

This forecast remains subject to change, depending on river operations and catchment rainfall. More information on upstream conditions and forecasts can be found in the <u>Murray-Darling Basin Authority's Weekly Flow Report</u>.

Water quality

Algal blooms within SA

Coorong North Lagoon

Following the very high tides experienced on Tuesday 27 May, algae was observed in the North Lagoon, with some fish deaths reported in a number of channels on Friday 30 May. Testing of water in the Coorong North Lagoon has confirmed the presence of the Karenia mikimotoi strain of algae, that has affected parts of South Australia's coastline.

Water testing in the Coorong is being undertaken weekly to understand how the situation is progressing and to inform any potential future management options. Government agencies, including DEW, PIRSA, the Environment Protection Authority (EPA) and SA Health continue to monitor the situation.

The Coorong region remains open. Visitors are advised to check signage and avoid contact with discoloured water, foamy water, or water where marine life is dead or in poor health. Exposure to discoloured or foamy water can cause short-term skin or eye irritation and respiratory symptoms, including coughing or shortness of breath. These symptoms usually resolve within several hours of leaving the area.

Swallowing water affected by the algal bloom can cause gastrointestinal symptoms, including vomiting, diarrhoea and abdominal cramps. For further information visit the <u>SA Health – Water quality alerts</u> page.

For the latest information please visit https://www.environment.sa.gov.au/news-hub/news/articles/2025/06/sa-harmful-algal-bloom-update

Goolwa Channel

A Water Quality Alert for Goolwa channel (encompassing Goolwa to Point Sturt) issued by SA Health remains current due to the detection of elevated levels of *Cylindrospermopsis*, a type of blue-green algae (cyanobacteria).

The alert advises the public to avoid ingestion or direct contact with water in Goolwa Channel, including by swimming and diving. Unlike other forms of blue green algae, the species detected there generally does not form scums, so is not easily visible to the naked eye.

The Water Quality Alert does not apply to Lake Albert or Milang.

This alert and other information can be found on the <u>SA Health – Water Quality Alerts web page</u>.

DEW, SA Water, SA Health and PIRSA continue to monitor the location and movement of the algae. Some level of blue-green algae on a large open water body like the River Murray is normal for this time of year when weather conditions are favourable.

Algal blooms upstream of SA

WaterNSW has issued amber alerts for blue-green algae (BGA) at Lake Menindee, with various other Menindee Lakes and lower Darling-Baaka sites under amber or green alerts. A red alert from WaterNSW indicates a toxic algal bloom, making the water dangerous for humans and animals. Water users should exercise caution and avoid areas where signs of blue-green algae are visible. Details of the current NSW alert locations can be found on the <u>WaterNSW website – Algae Alerts page</u>.

Victoria's Goulburn-Murray Water has issued BGA warnings for Lake Eppalock, Cairn Curran Reservoir, Tullaroop Reservoir, Hepburns Lagoon and at Lake Boga. Details of the current VIC alert locations can be found on the <u>Blue-Green Algae Warnings - Goulburn Murray Water</u> page.

Water for the environment delivery

Approximately 1 to 2 GL/day of Water for the environment is expected to continue arriving in South Australia in July. The majority of the environmental water arriving in June will be return flows from releases from Hume, the Menindee Lakes and the Goulburn. This water will help to ensure that all 11 fishways on the barrages can continue to pass small volumes of freshwater to the Coorong, allowing movement and migration for our native fish, and it will support continuing small volumes of barrage releases. In addition, the environmental water will continue to contribute to improving water levels in the Lower Lakes over this period. Water for the environment continues to be delivered as part of SA's Entitlement flow.

Water for the environment is also currently being gravity fed to a number of sites managed by the Murraylands and Riverland Landscape Board.

Planning for the delivery of water for the environment throughout 2025-26 is currently in progress. This includes planning for the operation of the 3 major floodplain regulators (Chowilla, Pike and Katarapko) and associated weir pool raising at Locks 6, 5 and 4. The floodplain operations are expected to commence from late July. Raising of Lock 2 during spring is also being planned. These environmental watering operations are subject to suitable river flows occurring in late winter and spring, and relevant approvals.

Murray Mouth

Dredging is continuing around the Murray Mouth and Tauwitchere Channel.

Barrage releases, combined with dredging throughout most of the year, 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 <u>Notice to Mariners</u> <u>No 61 of 2023</u>.

Barrage operations and water levels in the Lower Lakes

As of 3 July 2025, the water level in Lake Alexandrina is approximately 0.73m AHD and Lake Albert is approximately 0.75m AHD, noting that lake levels can fluctuate considerably depending on wind conditions.

The Lower Lakes are managed, as far as practicable, to target a daily average lake level between 0.7m AHD and 0.8m AHD throughout July.

During adverse weather conditions and high tides, SA Water operates the barrages to minimise the risk of seawater entering Lake Alexandrina, therefore minimising any negative salinity impacts from reverse flow events. Barrage gate operations are adjusted to release water when tidal conditions permit.

Barrage operations will continue to be undertaken dependent on upstream flows, lake levels and variable weather conditions.

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 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.

You can report any River Vessel Waste Disposal Station issues on 1800 799 065.

If you have any questions, please contact the DEW WIO Engagement Team on DEW.WIOCommunications@sa.gov.au

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 <u>daily salinity levels</u> provided by SA Water as part of their business operations.

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 the flood damaged sections of government and private levees to their pre-flood height.

Intermediate remediation works update:

- On-ground remediation works have been completed at Pompoota, Long Flat, Wall Flat, Mypolonga, Burdett and Mobilong.
- On-ground works at Neeta, Toora, and Placid are continuing to progress, with works at Neeta anticipated to be completed shortly. On-ground works at Cowirra are currently scheduled to commence next week.
- 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 on the remaining private levees that were severely damaged during the 2022-23 River Murray flood. A request for tender was issued by DIT in June.
- The department is continuing to review the geotechnical assessment reports which were received in May/June.

Government levees in the LMRIA are temporarily closed to the public.

Where intermediate remediation works are required for government levees, they will remain temporarily closed until the works are progressively completed and safe access is determined, which is likely to be mid-to-late 2025. Any government levee not requiring intermediate remediation work will remain temporarily closed pending the outcome of a full 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.

Recreational activities

Recreational activities are not permitted on the levees while they are closed, including:

- walking and running
- cycling
- fishing
- driving vehicles
- mooring houseboats and other vessels.

Designated council houseboat mooring sites can be obtained from the relevant local council website.

Access to private levees is at the landholder's discretion, however, access is not permitted where remediation works are being

The safety of the public is of paramount importance and DEW will keep the community informed of the project's progress, 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 <u>Lisa.vanderlinde@sa.gov.au</u>

Water Markets Intermediaries Code and statutory trust accounting obligations

From 1 July 2025, the Australian Government's new mandatory *Water Markets Intermediaries Code* (The Code) applies to water markets intermediaries operating in the Murray-Darling Basin. The Code seeks to provide protections to water markets participants, aligning standards with those that exist in other similar markets. Alongside the commencement of the Code, statutory trust accounting obligations also came into effect on 1 July 2025.

The Australian Competition and Consumer Commission (ACCC) is responsible for enforcing the Code and trust accounting requirements. The ACCC has published guidance materials on its website, and can be contacted at watercode@accc.gov.au.

For more information, water market participants can also visit the Department of Climate Change, Energy, the Environment and Water <u>water markets reform website</u> or email the water markets team at <u>water.markets@dcceew.gov.au</u>

Environmental news – Flora friends at Pipeclay Billabong in Chowilla – After 16 years!

Have you ever dreamt you could walk on water? The *Azolla rubra* plant makes it look like you might just be able to. Blanketed on top of Pipeclay Billabong's water surface in the Chowilla Floodplain, you will find *Azolla rubra*, a vibrant red-hued aquatic fern... as well as some other special guests!

Amongst the carpet of *Azolla*, emerges the wavy marshwort and swamp lily. These special guests were not spotted in Pipeclay Billabong since before the natural 2022-23 flood!

Wavy marshwort (*Nymphoides crenata*) grows in slow-flowing freshwater and showcases its bright yellow flowers with round, waterlily-like leaves. The leaves have very distinctive wavy outer edges, hence its common name. It has not been observed within the South Australian Murray region as far as we know since 2009 - that is about 16 years ago, so it was a special surprise!

Swamp lily (Ottelia ovalifolia) is found on the floodplain more regularly. This species produces two types of flowers, one above and one below the water. Submerged flowers self-pollinate without opening, whilst the single cream flowers you can see emerging across the billabong opens their three petals to facilitate cross-pollination.

One other mention is ribbonweed (*Vallisneria australis*). This fascinating species has distinctive male and female plants. Female plants produce solitary female flowers connected to long stalks and sit at the water's surface at maturity. Male plants produce small male flowers in clusters at the base of the plant which in time break and float to the water's surface to say a special hello to their female counterparts.

We look forward to seeing these interesting species and their beautiful flowers next season, between November to April. Check out the photos taken by DEW's ecologists at Pipeclay Billabong in April 2025.



Left to right, top to bottom: 1. Swamp lily (Ottelia ovalifolia). 2. Ribbonweed (Vallisneria australis). 3. Red gums and Azolla rubra at Pipeclay Billabong. 4. Wavy marshwort (Nymphoides crenata). Photo credit: O Cirocco, DEW.

Further information

- SA harmful algal bloom update
- 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 algal alerts

Bureau of Meteorology

- SA rainfall and river conditions
- <u>Victorian rainfall and river conditions</u>
- NSW rainfall and river conditions
- Climate outlooks
- Climate drivers

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