SA River Murray Flow Report





Report #41/2024

Issued 12:00 pm 11 October 2024

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 4 October 2024. The next Flow Report will be provided on Friday 18 October 2024.

Flow outlook



The flow at the South Australian border is approximately 10 GL/day and is expected to increase to approximately 14 GL/day by next Friday, **depending on river operations**.

The current flow at the border includes the full October Entitlement Flow (5.5 GL/day), along with water for the environment, interstate trade adjustments and adjustment for deferred entitlement flows, which are stored and accumulated for critical human water needs during dry periods.

The flow over Lock 1 is approximately 8 GL/day and is expected to increase to around 11 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 on WaterConnect.

Upstream flows

Water releases downstream of the Yarrawonga Weir and from Lake Eildon on the Goulburn River have commenced and are resulting in increased flows at the South Australian border. Forecast flows are anticipated to increase from early October and are expected to reach approximately 14 GL/day in mid-October, noting that flow forecasts may be subject to change dependent on river operations and catchment rainfall.

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 is underway at the Pike Floodplain. The target height of 15.1 m AHD (55 cm above the normal level at the Pike regulator) has now been reached. Raising of Lock 5 is not required to undertake this operation but may be considered if greater water exchange on the floodplain is required. Planning is underway to pump water to 2 sites at Pike to water regenerating lignum and black box.

At Katarapko floodplain, a low-level operation is underway and water levels have now been raised behind The Splash regulator to the target of 2.0 metres (to 12.0 m AHD). Similar to Pike, raising of Lock 4 is not required to undertake this operation but may be considered if greater water exchange on the floodplain is required.

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Water for the environment is currently being delivered via pumping to 4 sites on the Chowilla Floodplain.

The floodplain environmental watering actions are aimed at supporting the significant improvements in condition and regeneration of trees, lignum and understorey vegetation and providing important habitat for frogs, waterbirds and other fauna. The management of these operations may be adapted depending 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. In addition, water for the environment is now arriving at the border from releases in the Murray and Goulburn rivers as part of the spring pulse. Although the spring pulse will remain in channel, it is expected to support fish breeding, increased river productivity and benefits to the lower lakes and Coorong. Flows at the SA border are expected to increase up to 14 GL/day due to the arrival of water for the environment.

Potential weir pool lowering

Weir pool lowering within the normal operating range at Locks 1 and 2 (up to 10 cm below normal pool level) is currently being considered for weirs 1 and 2. A minor lowering would aim to achieve a range of benefits for floodplain and wetland vegetation and wildlife, and support Murray Cod and callop breeding. Any lowering would be planned to coincide with increasing flow conditions associated with the arrival of the spring pulse to minimise impact to extractors and navigation while optimising outcomes for fish. All weir pool level manipulation is subject to the availability of water for the environment and necessary approvals.

In stream salinity will be closely monitored ahead of, during and after any lowering event.

As planning progresses, further details on these operations will be provided in future Flow Reports.

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. The dredge is now positioned at the Tauwitchere channel on the Hindmarsh Island side. Dredging operations may be impacted by severe weather, significant swell and dredge maintenance activities.

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 <u>Notice to Mariners</u> No 61 of 2023.

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.71 m AHD and Lake Albert is approximately 0.72 m AHD.

The Lower Lakes are being managed to target a daily average lake level between 0.75 m AHD and 0.85 throughout October.

During adverse weather conditions and high tides, 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. 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.

Water quality

Algal blooms upstream of SA

Numerous amber alerts for Blue Green Algae remain upstream of the Border. An amber alert indicates that the water should be considered unsuitable for potable use and that the water may be unsuitable for stock watering. Water users should use caution and avoid water where signs of Blue Green Algae are present. 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.

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

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:

- Works are nearing completion at Pompoota and Long Flat.
- Works are continuing to progress at Mypolonga and Wall Flat.
- Preparation work and sheet piling at Burdett is nearly complete.
- 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 for the remaining 4 government levee banks was issued by DIT in July, with an anticipated award date in late-October.
- The procurement for works on private levees and the preparation of associated land access agreements are progressing.
- The first stage of conditions assessments for the LMRIA levees has been completed with the second stage of further investigations and testing in progress.

Public access to levees

Where intermediate remediation works are required for government levees, they will remain closed until the works are progressively completed and safe access is determined over the next 9-12 months. Any government levee not requiring intermediate remediation work will remain 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. 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 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 <u>Department for Environment and Water – Levees</u>

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

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.

Environmental news – Lignum monitoring results

Monitoring has been recently conducted to look at the condition of lignum (Duma florulenta) between Lock 1 and Lock 6. A total of 34 sites were visited, with over 8500 lignum plant observations made by our dedicated ecologists! Seven sites showed improvement from the survey carried out in 2023, and while the majority of sites maintained condition between surveys, there was a decrease in the condition of lignum at four sites.

Larger plants were generally in much healthier condition than smaller ones. These large lignum plants and patches of lignum provide excellent habitat for waterbirds, frogs, and small bodied fish.

Weir pool manipulation is having a positive impact on the condition of lignum in certain areas along the river in South Australia, showing that fluctuating water levels are important for a healthy floodplain system.



Ecologists conducting lignum monitoring. Photo credit: Peter Hamnett.

Waterbird Aerial Survey 2024

From the 1st of October to the 29th of November, the Centre for Ecosystem Science at the University of NSW will be conducting the 2024 Eastern Australian Waterbird Survey.

The Eastern Australian Waterbird Survey is one of the largest wildlife surveys in Australia, surveying major wetland sites in the Murray-Darling Basin, providing invaluable information on the ecosystem health of wetlands and rivers. 2024 will be the 42nd year the survey has run.

If you are in the Coorong and Lower Lakes or the Riverland areas on the below dates, keep an eye on the sky, as the survey's single engine Cessna 208 plane will be flying over:

- 15th October Southern Coorong / Naracoorte & SE
- 16th October Naracoorte & SE
- 22nd October Riverland
- 5th to 7th November Coorong and Lower Lakes and the Riverland

Further information can be found on the aerial survey of waterbirds can be found at:

https://www.unsw.edu.au/research/ecosystem/our-research/rivers-and-wetlands/eastern-australian-waterbird-survey

For more information or enquiries, please contact ecosystemsurvey@gmail.com

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 algal alerts

Bureau of Meteorology

- SA rainfall and river conditions
- Victorian rainfall and river conditions
- NSW rainfall and river conditions
- Climate outlooks
- Climate drivers

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