SA River Murray Flow Report



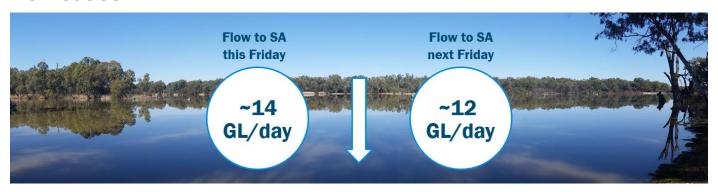


Report #48/2024

Issued 12:00 pm 29 November 2024

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 22 November 2024. The next Flow Report will be provided on Friday 6 December 2024.

Flow outlook



The flow at the South Australian border is approximately 14 GL/day and is expected to decrease to approximately 12 GL/day by next Friday, **depending on river operations**.

The current flow at the South Australian border includes the full November Entitlement Flow (6 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 current flow over Lock 1 is approximately 15 GL/day, but it is expected to decrease to 13 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

In November, flows at the South Australian border peaked at approximately 16.3 GL/day, which was driven by environmental water releases from the Murray and Murrumbidgee River systems. Flows are now expected to decrease to approximately 12 GL/day by next Friday, 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

The draw down of the low-level operation of the environmental regulators at the Pike and Katarapko Floodplains is continuing with the water level being gradually lowered back to the normal operating level. Pumping is continuing at one site higher on the floodplain at Pike to water regenerating lignum and black box and to provide habitat for birds and frogs.

Water for the environment is also currently being delivered via pumping to 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 based on the outcomes of environmental monitoring.

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Water for the environment continues to be delivered as part of SA's Entitlement flow. In addition, water for the environment is being delivered at the border from releases in the Murray and the Murrumbidgee rivers as part of the spring pulse. Although flow is currently around 15,000 ML/day and remaining in channel, the spring pulse is expected to support Murray cod and golden perch breeding, increased river productivity and provide benefits to the Lower Lakes and Coorong. Similar spring flows in 2019 were followed by a significant Murray Cod recruitment event. Environmental water will continue to arrive over the next 2 weeks from releases in the Murray and Murrumbidgee. The upstream releases have recently ceased and flow to South Australia will gradually recede. In the absence of water for the environment, SA would currently be receiving Entitlement flow only (6,000 ML/day in November).

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 operations have continued on the Tauwitchere channel, with plans to reposition the dredge closer to the mouth. This work has further improved the flow between the Tauwitchere and Goolwa channels and the mouth. 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> <u>No 61 of 2023</u>.

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.81 m AHD and Lake Albert is approximately 0.80 m AHD.

The Lower Lakes are being managed to target a daily average lake level between 0.775 m AHD and 0.875 throughout November.

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

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.

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 works have been completed at Pompoota and Long Flat.
- On ground works continue to progress at Mypolonga and Wall 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 for the remaining 4 government levee banks was issued by DIT in July, with an anticipated award date in November.
- The procurement for works on private levees and the preparation of associated land access agreements are progressing.
- The first stage of condition assessments for 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 6-9 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 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

New information requirements for Water Trade Forms

The following information is now required in relation to applications to trade or transfer water:

- Strike date (date the price was agreed) must be recorded where requested.
- Reason for trade must be accurately specified.

Furthermore, in accordance with the Water Amendment (Restoring our Rivers) Act 2023, new obligations became mandatory on 1 July 2024 for persons making trade applications to ensure that information is comprehensive and accurate, and to keep records regarding reason for trade and trade price for a minimum of five years. For more information, please visit the <u>Australian Government Department of Climate Change, Energy, the Environment and Water website</u> and see the <u>Frequently Asked Questions</u> developed by the Inspector-General of Water Compliance.

Environmental News - Why 2024-25 could be a great year for Murray cod

2019-20 was a banner year for Murray Cod breeding, and 2024-25 could also be a good year, with flow conditions looking similar to what we saw back then.

The fish that spawned back in 2019-20 are now five years old and are still contributing strongly to the Lower Murray cod population.

These 5-year-old fish, most of which are around 500–650 mm now, make up about 20 per cent of the local cod population according to monitoring undertaken by the South Australia Research and Development Institute (SARDI) for The Living Murray (TLM)/ Commonwealth Environmental Water Holder (CEWH).

While the exact reasons for this successful breeding event are unclear, the mid-October 2019-20 delivery of environmental water created a 'spring pulse' of over 15,000 ML/day and was likely a key factor.

It is well understood that flowing water habitats are crucial for Murray cod, particularly during their early life stages, and the combination of high and low velocity flow habitats are important for their survival.

This year's 'spring pulse' is looking similar to the flow conditions of 2019-20, with flow peak at around 17,000 ML/day in late October.

The Department for Environment and Water worked with water holders and tributary managers upstream to ensure the best possible delivery of a spring pulse to South Australia.

Will this support a successful spawning and recruitment event for Murray cod in spring 2024?

We'll have to wait and see, but this spring pulse presents a fantastic opportunity to replicate those successful breeding conditions from 2019-20 and hopefully deepen our understanding of this incredible fish.







The Murray cod that spawned back in 2019-20 are now five years old and are still contributing strongly to the Lower Murray cod population. Photo credit: SARDI.

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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