

SA River Murray Flow Report

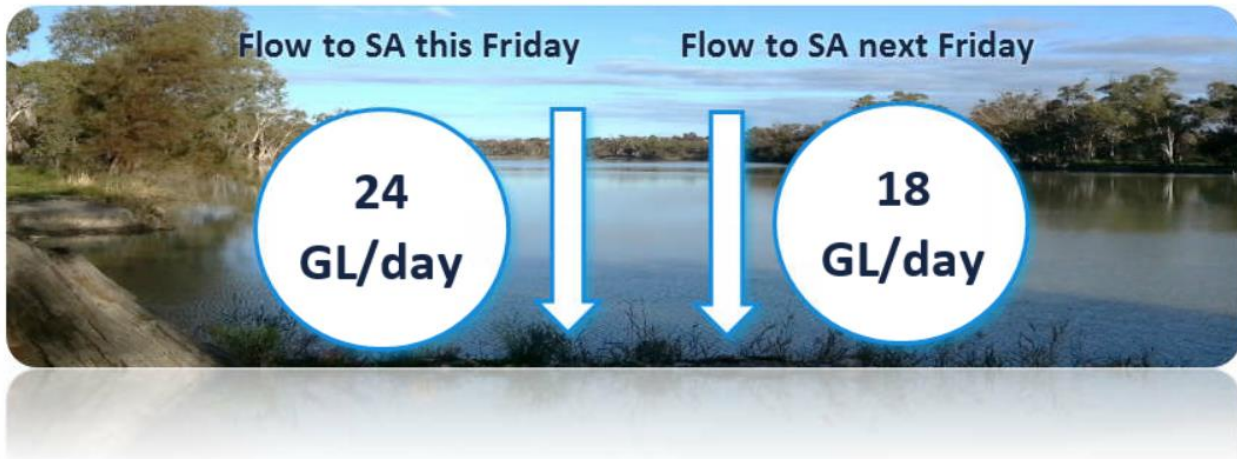


Report #17/2023

Issued 10:00 am 28 April 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 21 April 2023. The next Flow Report will be provided on Friday 5 May 2023.

Flow outlook



The flow at the South Australian border is approximately 24 GL/day and is forecast to decrease to around 18 GL/day over the coming week. The current flow at the border comprises:

- full April Entitlement Flow (4.5 GL/day);
- water for the environment (see below *Environmental News*);
- interstate trade adjustments;
- Additional Dilution Flow (ADF); and
- Unregulated flow.

The flow over Lock 1 is approximately 24 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.

Current water levels

Current water levels are updated daily and can be found at the following link: <https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx>

Salinity

Increased salinity levels are common during flood recessions. The Department is closely monitoring elevated salinity levels throughout the River Murray in South Australia. In general, salinity levels across the River Murray in SA for the week have remained approximately between 400-550 EC. It is understood that some irrigators have recorded 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.

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

Upstream flows

More information on upstream conditions and forecasts can be found in the Murray-Darling Basin Authority's *Weekly Flow Report* here: <https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports>

Murray Mouth

Dredging at the Murray Mouth continues to be suspended due to high flows scouring sand out of the mouth. A wider and deeper Murray Mouth will have positive environmental benefits following the flood through enabling better exchange of water between the ocean and the Murray estuary and Coorong.

Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.6 m AHD and Lake Albert is approximately 0.7 m AHD.

DEW and SA Water are currently working to maintain an average water level of 0.7 m AHD across Lake Alexandrina and Lake Albert until the end of June 2023.

Although this is the target, there will be times when the water levels can be higher or lower than the target. At these times the barrages will be operated to either raise or lower water levels as required. Water levels and barrage operations are monitored closely by the South Australian Government, Murray-Darling Basin Authority and Commonwealth Environmental Water Office.

Gate openings at the barrages can now be viewed on Water Data SA here:
<https://water.data.sa.gov.au/Data/Dashboard/75>

Total daily flow releases from the barrages can also be found on Water Data SA here:
<https://water.data.sa.gov.au/Data/Dashboard/1>

River Murray River Vessel Waste Disposal Stations

As water levels recede, DEW is recommissioning each disposal station when it is deemed safe and possible to do so. The process to recommission includes regaining safe access to the site, inspecting the infrastructure for any damage, repairing any damaged infrastructure, reinstating equipment, and the reconnection and testing of services.

As at 27 April 2023 the following River Vessel Waste Disposal Stations are online and operational:

- **Swan Reach**
- **Renmark**
- **Loxton**
- **Berri**
- **Waikerie**
- **Morgan**
- **Blanchetown**
- **Walker Flat**
- **Goolwa**

The other stations have been assessed for damage and repair works are underway. Based on assessments and works completed to date, indicative timeframes for recommissioning of the remaining stations are as follows:

- | | |
|-------------------------|------------------------------|
| • Lock 6 | Late April – Early May 2023* |
| • Mannum, Murray Bridge | TBC |

**Note – these times may be subject to change dependent on further damage being identified, reconnection to services, etc. Updates will be provided as further information becomes available.*

Final commissioning of the River Vessel Waste Disposal Stations is dependent on a number of factors outside the control of the Department including SA Power Networks, removal of adjacent temporary levee banks (where applicable) and safe

road access. Until the river vessel waste disposal stations can be recommissioned, commercial options remain available for businesses to utilise temporarily at houseboat owners and operators' expense while the disposal stations are closed.

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.

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

Levee embankments

With the River Murray flood situation now in the recovery phase, the stabilisation of the levee network and dewatering process is the highest priority for producers in the Lower Murray region. The Department is working with impacted landholders and trusts to determine which feasible short-term works may be required to stabilise the levee embankments and/or allow dewatering to occur. Further information on the stabilisation of the levee banks in the LMRIA area can be found at <https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks>.

PIRSA is leading the process of recovery planning for the LMRIA as part of the State Recovery Plan. Should you have any questions in relation to dewatering and recovery of the agricultural areas post-flood, please contact PIRSA on the Recovery Hotline on 1800 931 314.

DEW is unable to guarantee the integrity of levees following the flood event. Any Local Irrigation Trust members and contractors accessing the levees for works are encouraged to take all necessary precautions when working on the levees, particularly during or following wet weather.

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

Environmental news – Vulnerable turtles return to nesting sites

After the first rain event of the season, broad shelled turtles (*Chelodina expansa*) have returned to known nesting sites at the Pike Floodplain. Autumn is when female broad shelled turtles leave rivers and creeks to nest, laying approximately 20 eggs in to a small hole dug in to the ground. The eggs of this vulnerable South Australian species can take over a year (up to 500 days) to incubate and hatch.



Photo credit: Sam Walters (DEW)

Water quality

Blackwater & Menindee Lakes fish deaths

Blackwater occurs naturally when floods wash leaves, grass and cropping material off riverbanks and floodplains into waterways. High levels of organic matter in waterways, combined with warm weather, can cause oxygen levels in the water to drop. This is known as hypoxic (low oxygen) blackwater, which can have a blackish colour and a strong, unpleasant smell. In addition, when dissolved oxygen levels in water drop below critical levels, it can cause fish and crustaceans to die.

Fish deaths have been observed in the Lower Darling between Menindee main weir and Weir 32. Species that have been recorded have been mainly Bony Bream and Carp with smaller numbers of Golden Perch and Murray Cod.

Information on fish deaths in NSW can be found on the NSW Department of Primary Industries website here: <https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills>

In South Australia, mainly Carp and Bony Bream deaths are continuing in the Coorong from being flushed out to sea during ongoing barrage discharges. **There is currently no hypoxic blackwater present in the South Australian section of the River Murray.**

In response to these recent events PIRSA, with support from DEW, SA Water and the Murray-Darling Basin Authority and other relevant government agencies, continue to closely monitor blackwater, dissolved oxygen levels and fish death events upstream and plan mitigation measures should it reach South Australia.

To report sightings of large numbers of dead or distressed fish, please contact the 24-hour Fishwatch hotline on 1800 065 522.

Algal blooms

It is reasonably common for algal blooms to be reported at this time of year in the Murray-Darling Basin and a number of red and amber alerts for blue-green algae have been issued by upstream authorities in recent weeks. They include:

- River Murray at Fort Courage (**Red alert**)
- River Murray at Curlwaa (**Amber alert**)
- River Murray at Merbein (**Amber alert**)
- River Murray at Buronga (**Amber alert**)
- Great Darling Anabranch at Silver City Highway (**Red alert**)

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:

<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/public+health/water+quality/water+quality+alerts>

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>

Further information

2022-23 **River Murray Flood event**

<http://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood>

2022-23 Flood **recovery**

<https://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood/recovery>

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>

Daily **salinity** information in SA

<https://www.sawater.com.au/water-and-the-environment/south-australias-water-sources/river-sources/river-reports-daily-salinity>

Real time information throughout the **River Murray system**

<https://riverdata.mdba.gov.au/system-view>

Whole River Murray System updates

<https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports>

Marine safety in SA

<https://marinesafety.sa.gov.au/>

Victorian rainfall and river conditions

<http://www.bom.gov.au/vic/flood/index.shtml>

NSW rainfall and river conditions

<http://www.bom.gov.au/nsw/flood/>

Climate outlooks

<http://www.bom.gov.au/climate/ahead/outlooks/>

Climate drivers

<http://www.bom.gov.au/climate/enso/>

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