## **SA River Murray Flow Report**



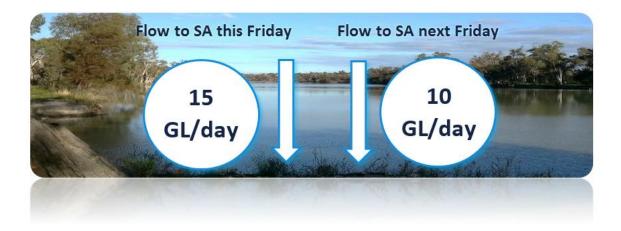


Report #20/2023

Issued 10:00 am 19 May 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 12 May 2023. The next Flow Report will be provided on Friday 26 May 2023.

#### Flow outlook



The flow at the South Australian border is approximately 15 GL/day and is forecast to decrease to around 10 GL/day over the coming week. The current flow at the border comprises:

- full May Entitlement Flow (3 GL/day);
- water for the environment;
- interstate trade adjustments;
- · Additional Dilution Flow (ADF); and
- Unregulated flow.

The flow over Lock 1 is approximately 14 GL/day and will decrease to around 9 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: <a href="https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx">https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx</a>

## **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 decreased to approximately 380-480 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: <a href="https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports">https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports</a>

## **Murray Mouth**

Dredging at the Murray Mouth continues to be suspended due to high flows scouring sand out of the mouth. Conditions are continuing to be monitored, Tide Ratios analysed, and fortnightly surveys performed in order to provide accurate information to assist in determining when dredging may recommence.

In the meantime, the Sawfish (a new dredge commissioned to replace the previous two dredges before the flood) has now been moved to the Tauwitchere channel in preparation for commissioning which will take place during May 2023. This does not mean that dredging has commenced again however will ensure that the dredge is well prepared for when dredging operations are required.

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 0.6 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: <a href="https://water.data.sa.gov.au/Data/Dashboard/75">https://water.data.sa.gov.au/Data/Dashboard/75</a>

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

## **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 18 May 2023 the following River Vessel Waste Disposal Stations are online and operational:

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

The Lock 6, Mannum and Murray Bridge stations have been assessed for damage and repair works are underway. Based on assessments and works completed to date, indicative timeframes for recommissioning are as follows:

Lock 6

Mid - late 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 <u>DEW.WIOCommunications@sa.gov.au</u>

#### Levee embankments

The Department is continuing to work with PIRSA and impacted landholders and trusts to stabilise and dewater the Lower Murray Reclaimed Irrigation Area (LMRIA) levee network. Now that LiDAR, stability assessments and short-term works, and dewatering are well under way, DEW will be revisiting short-term stabilisation sites to assess the levees' intermediate stabilisation requirements and conduct repairs and works to protect the levees from high flows and wind seiching during the coming winter. A full condition assessment will be undertaken after intermediate works are completed and the areas have dried-out.

Local Irrigation Trust members and contractors should take the necessary precautions when working on levees, particularly during periods of wet weather, as the integrity of levees cannot be guaranteed following the flood event.

PIRSA is leading the recovery planning process for the LMRIA as part of the State Recovery Plan.

Questions related to dewatering and recovery of agricultural areas can be directed to the PIRSA Recovery Hotline on 1800 931 314.

More information on the stabilisation of levee banks in the LMRIA can be found on the DEW website at <a href="https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks">https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks</a>.

If you have any questions, contact the DEW Engagement Team on <a href="mailto:DEW.WIOCommunications@sa.gov.au">DEW.WIOCommunications@sa.gov.au</a>

# **Environmental news - River Red Gum and Black Box trees thrive following the flood**

Two of our most iconic tree species on the Chowilla Floodplain are responding well after receiving their biggest drink in decades! Many trees are flowering profusely and producing seed, providing valuable food resources for floodplain wildlife. It's also encouraging to see widespread germination of these species across the floodplain. Significant recruitment events like this are important to maintain red gum and black box populations into the future.







Black Box seedling. Photo credit Grace Hodder (DEW)

## **Water quality**

#### **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)
- 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:

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

More information on current alerts upstream can be found on the WaterNSW website here: <a href="https://www.waternsw.com.au/water-services/water-quality/algae-alerts">https://www.waternsw.com.au/water-services/water-quality/algae-alerts</a>

#### **OFFICIAL**

#### **Further information**

2022-23 River Murray Flood event <a href="http://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood.">http://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood.</a>

2022-23 Flood **recovery** <a href="https://www.sa.gov.au/topics/emergencies-and-safety/river-murray-">https://www.sa.gov.au/topics/emergencies-and-safety/river-murray-</a>

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** <a href="https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills">https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills</a>

NSW **algal alerts** <u>https://www.waternsw.com.au/water-services/water-quality/algae-alerts</u>

**Real-time water data** at sites in SA <a href="https://water.data.sa.gov.au/">https://water.data.sa.gov.au/</a>

Current daily water levels <a href="https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx">https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx</a>

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 <a href="https://www.sawater.com.au/water-and-the-environment/south-australias-">https://www.sawater.com.au/water-and-the-environment/south-australias-</a>

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 <a href="https://www.mdba.gov.au/water-management/regular-reports-murray-data-">https://www.mdba.gov.au/water-management/regular-reports-murray-data-</a>

storages/weekly-reports

Marine safety in SA <a href="https://marinesafety.sa.gov.au/">https://marinesafety.sa.gov.au/</a>

Victorian rainfall and river conditions <a href="http://www.bom.gov.au/vic/flood/index.shtml">http://www.bom.gov.au/vic/flood/index.shtml</a>

**NSW** rainfall and river conditions <a href="http://www.bom.gov.au/nsw/flood/">http://www.bom.gov.au/nsw/flood/</a>

Climate outlooks <a href="http://www.bom.gov.au/climate/ahead/outlooks/">http://www.bom.gov.au/climate/ahead/outlooks/</a>

Climate drivers <a href="http://www.bom.gov.au/climate/enso/">http://www.bom.gov.au/climate/enso/</a>

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