

Community update for Menindee and Lower Darling-Baaka

Inflows and water quality in the Barwon-Darling river

Significant inflows into the Northern Murray-Darling Basin are bringing hypoxic (low oxygen) water through the system which can lead to fish deaths. With extremely hot temperatures above 40 degrees in recent weeks combined with the large flow front of hypoxic water coming from the north, the risk of deteriorating water quality is very high.

There have been confirmed fish deaths at Walgett and Brewarrina in the past two weeks and we are expecting more over the Christmas and New Year break, particularly in stretches of the river where there are no refuges for native fish, as the front of the hypoxic water moves down the river.

The flow is peaking at Bourke at 23,000 ML/day. Inflow to the Darling River from the Culgoa River has decreased to around 760 ML/day. Discharge at Louth and Wilcannia is increasing.

Dissolved oxygen at Brewarrina is still critical but the levels at Walgett have returned to good levels above 5.0mg/L. While the flow peak has passed Warraweena (40km upstream of Bourke), with dissolved oxygen remaining stable around 1.5mg/L concerns remain for possible fish deaths.

Dissolved oxygen is at a good level above 5.0mg/L at the Moorabin gauge (Wilcannia).

The water level at the Nelia Garri gauging station has started to rise. The fixed depth dissolved oxygen sensors at Nelia Gaari, downstream of Lake Wetherell main weir, Menindee town and Weir 32 gauging stations show levels are above 4 mg/L through the Menindee weir pool but dropping toward 3 mg/L overnight at the Weir 32 gauge. The opening of the Lake Pamamaroo inlet has not adversely impacted dissolved oxygen at the downstream of main weir monitoring site.

Actions being taken

Unfortunately, there are limited options available to manage hypoxic water, particularly given the high flow volume in excess of 30,000ML/day at some locations. When the water reaches the Menindee Lakes, state and federal agencies will work together to manage inflows to maintain water quality in the Weir 32 weir pool to the best possible levels with the water management options available.

These options include at Menindee where we intend to utilise the characteristics of lakes Tandure and Pamamaroo to assist in improving dissolved oxygen in the water, before it is released from Lake Pamamaroo into the weir pool. If low dissolved oxygen becomes an issue, manipulating Pamamaroo

inlet and outlet to manage flows will be considered. Should a mass fish death occur, an incident response plan is in place.

Current water quality at Menindee and fish health

Water quality monitoring continues to show that dissolved oxygen levels in the Darling River at Menindee are staying above critical thresholds for fish health.

The buoys in the Menindee weir pool are showing that destratification of the water column is occurring and dissolved oxygen levels remain above 6 mg/L.

The continuous dissolved oxygen sensors in the Lower Darling River at Pooncarie and Burtundy remain above critical thresholds for fish health (currently above 6mg/L).

Discharge from Menindee Lakes – MDBA call on water

The MDBA has resumed its call on water from the Menindee Lakes and is currently calling 750 ML/day at Weir 32. MDBA is working with NSW agencies to manage its call in response to any water quality issues as water from the Northern Basin arrives at the lakes. The trial of calling MDBA operational water from Lake Cawndilla via the Great Darling Anabranch will also resume in the near future.

WaterNSW – Operational update

Inflow forecasting from the most recent rainfall across the Northern catchments indicate that the Menindee Lakes may receive additional inflows estimated at 300 – 400 GL by early February 2025.

Flow from the initial rainfall more than a month ago has now passed Wilcannia and has started to enter Menindee Lakes. Peak inflow is now expected around early January 2025. Currently, sufficient airspace is available within Menindee Lakes to safely capture the expected inflows. Management of the inflows will be undertaken to ensure the upper lakes are filled to Full Supply Level at the completion of the inflow event, with any volume surplus to this requirement passed into Lake Menindee.

Please note that inflow forecasting is undertaken using the best available data at the time. There are several variables which may impact the final volume, with uncertainty of the final volume reducing as water flows toward the Lakes. WaterNSW will continue to provide updates on the forecast inflows to Menindee Lakes.

Blue-green algae

Satellite imagery from 23 December shows algal numbers in Lakes Pamamaroo and Tandure are low. There are higher algal numbers in Lake Menindee. There is no evidence in the satellite image of

the discharge from Lake Pamamaroo seeding the Menindee weir pool. There are high numbers of blue green algae in the Darling River extending from Wilcannia to the top end of Lake Wetherell. This will be pushed into Lake Wetherell over the coming week as the river level continues to rise.

Additional information

- To notify the NSW Department of Climate Change, Energy, the Environment and Water of potential blackwater events email: water.enquiries@dpie.nsw.gov.au
- To view community updates issued, visit [Community updates and frequently asked questions | Water \(nsw.gov.au\)](#)
- To report dead fish, fish struggling or gasping at the water surface, or crayfish leaving the water please call the **NSW DPI Fisheries Phonenumber 1800 043 536** or fill in a fish kill protocol and report form at: <https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills-2019-2020/info-sheet>
- Information on recent fish deaths is available at: [Fish kills in NSW](#). When reporting, please include the name of the river/waterbody, location and date of your observation and provide photographs. If possible, please also record what species are affected and an estimate of number of each species observed.
- Further information on blackwater events can be found at the DCCEEW Water website at: [Hypoxic blackwater | Water \(nsw.gov.au\)](#)
- Additional information is also available on the Murray-Darling Basin Authority website at: <https://www.mdba.gov.au/climate-and-river-health/water-quality/fish-deaths>
<https://www.mdba.gov.au/water-management/infrastructure/menindee-lakes>
- Operational updates are available at: [WaterInsights - WaterNSW](#)
- Water quality data collected after the fish deaths at Menindee is available on the Environment Protection Authority web page at: <https://www.epa.nsw.gov.au/working-together/community-engagement/updates-on-issues/menindee-fish-kill>
- Real-time water quality data from DCCEEW-BCS monitoring buoys can be accessed from the Darling-Baaka River Health Project dashboard.
<https://sss.tago.run/dashboards/info/6574473bc8b74d0008344b05?anonymousToken=00000000-5ee2-f600-e0f3-6100270c936d>
- WaterNSW buoy data can be found here <https://waterinsights.watarnsw.com.au/12104-lower-darling-regulated-river/river-data>