

Community update on response to fish deaths in Menindee and Lower Darling-Baaka

Pulse flows of water commenced yesterday to address water quality conditions

Our water monitoring has shown that while we have been sending pulses of good quality water down the river to support fish health, there are ongoing concerns about deteriorating water quality conditions between Lake Pamamaroo and Weir 32 due to variable weather conditions and persistent algae. We have seen dissolved oxygen (DO) levels close to 2mg /L at one of our monitoring sites after destratification, although the other sites have good levels of DO.

To help maintain water quality and reduce the potential for a large fish kill event, a pulse flow will commence today for 7 days at 750 ML/day from Lake Pamamaroo and 350 ML/day from Lake Menindee. A flow of 750 ML/day for 7 days is enough total volume to completely replace the water in the Weir 32 weir pool (between Pamamaroo outlet and Menindee outlet) and therefore improve water quality to reduce the risk of low DO and algae. 750 ML/day is also the volume that prevents stratification from forming.

NSW Government and Commonwealth agencies continue to carefully monitor the situation and are adjusting releases of good quality water from Lake Pamamaroo to help prevent hypoxic conditions in the Weir 32 weir pool. Monitoring will continue throughout the Christmas/New Year break.

This has included four pulses on 10-13 November, 23-25 November, 6-7 December and 13-16 December of up to 1000 megalitres per day when deadly destratification events were threatening, which successfully improved dissolved oxygen throughout the water column and assisted fish health.

As mentioned in the previous community update, given the dynamic nature of water quality in this stretch of river due to current weather conditions, we have needed to act rapidly by altering flow rates from both Lake Pamamaroo and Lake Menindee to prevent or lessen the water quality impacts and risk of fish deaths. This means we have been unable to provide three days' notice of any possible changes to flows rates.

Emergency Operations Centre on standby

An Emergency Operations Centre is on standby should a mass fish death event occur, and a contractor has been stood up to be available to remove dead fish from the river immediately which is vital because the process of fish decaying uses up more dissolved oxygen in the water.

Anticipated inflows to the Menindee Lakes

Increased flows from upstream as a result of recent rain across the top of the Murray-Darling Basin is expected towards the end of December or early January 2024. These inflows will not only help improve water quality but provide increased drought security as we head into summer.

Lake Wetherell

There are no reports of fish deaths or fish struggling in the last week and even with low dissolved oxygen in Lake Wetherell, fish are able to move upstream and into Lake Tandure and other upper lakes where DO is likely to be better.

Update on actions recommended by the Chief Scientist

- A new mass fish death response plan has been endorsed by the State Emergency Management Committee to ensure a rapid and coordinated approach.
- The newly established independent expert panel on Barwon Darling River connectivity will deliver its first draft report by early 2024 on improving flows before, during and after drought.
- We have four newly installed depth profile telemetered buoys, 20 real-time sensors being installed by 2023-24 and another 20 across the Basin by 2024-25 to boost water quality monitoring.
- We are considering Section 324 temporary water restrictions to restrict low priority licences as drier conditions escalate.
- We are carrying out investigations for temporary and permanent fish passage with a \$2 million contribution from the Commonwealth.
- Surveys to inform fish relocation and carp removal are underway.
- New technology to put oxygen into the water, similar to what is occurring in Western Australia is being trialled in the new year.
- A newly created role to commence in early 2024 that will be based permanently in Menindee to assist in implementing government projects and coordinating responses on the ground.

Have your say: Review of the NSW Murray and Lower Darling Regulated Water Sharing Plan

- The Office of the NSW Chief Scientist and Engineer's [independent review into the 2023 fish deaths in the Darling-Baaka River at Menindee](#) recommended prioritising the review of the *Water Sharing Plan for the Murray and Lower Darling Regulated River Water Sources*

2016 with a focus on the adequacy of Plan provisions for meeting environmental and water quality objectives.

- This is your chance to comment on whether the plan has achieved its environmental, social, economic and cultural outcomes. You are also invited to suggest any areas for improvement.
- [Water sharing plan reviews \(Home\) \(nsw.gov.au\)](#)
- The consultation closes on Sunday 25 February 2024.

Additional information

- To notify the NSW Department of Planning and Environment – Water of potential blackwater events email: waterqualitydata@dpi.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 DPE Water website at: <https://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/managing-drought-recovery/blackwater>
- Additional information is also available on the Murray-Darling Basin Authority website at: <https://www.mdba.gov.au/publications/mdba-reports/water-management-101-factsheets>
- 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>