

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

Responding to ongoing fish deaths in the Darling-Baaka at Menindee

A fish death event has been impacting adult Golden Perch within the Menindee Weir 32 weir pool since 10 February 2024. It is estimated more than 1,000 fish have died during the event. Daily mortalities appear to have peaked during the current incident around 26 February, with numbers of dead and distressed fish steadily declining since.

Water quality parameters that typically impact fish health have remained within or near normal range during this period. This includes dissolved oxygen, temperature, salinity and pH.

NSW Fisheries results to date of testing of fish samples

Samples collected of dead fish have shown no evidence of several known diseases in the Murray Darling Basin that may impact fish health. However, all deceased fish showed evidence of the external parasite *Lernaea* species, often referred to as anchor worm, which is common throughout the Basin and usually on fish that are suffering impacts from other environmental factors. *Lernaea* is not normally fatal to fish except in extreme circumstances and is unlikely to be the primary or sole cause of the fish deaths in this event.

At this stage NSW Fisheries have advised that there is no single factor that can be identified as the cause of these recent fish deaths. It is likely the combined impact of variable water quality over recent years, elevated temperatures over summer and the ongoing impacts of recent fish death events are contributing to broader impacts on the health of Golden Perch in the Menindee weir pool, making them susceptible to a range of diseases and parasites.

The detailed update on the [results of studies undertaken by NSW Fisheries is on our website.](#)

Ongoing testing

We are pursuing further scientific investigations into the causes of the fish deaths, with our NSW Government agencies conducting detailed water quality, toxicology analysis and sampling of sediments in the coming weeks.

Monitoring for pesticides and other chemicals

Testing for pesticide residue and other toxins completed in early February by NSW DCCEEW and the NSW EPA have not shown any adverse results. Testing is ongoing and as more results become available in coming weeks they will be shared.

Eating infected fish

NSW Food Authority recommends people do not consume or handle fish showing signs of poor health (such as cloudy eyes, ulceration, fish schooling in the shallows or swimming slowly) and to clean, wash and cook thoroughly any fish caught for consumption during this time. Fish that are found already deceased should never be consumed.

Lernaea are not harmful to humans, however the NSW Food Authority advice on ulcerated fish indicates that mildly affected fish are safe for human consumption, but heavily ulcerated fish should not be consumed due to the potential presence of other unknown pathogens.

Members of the public are encouraged to follow all advice provided by NSW Health in relation to this matter. Read more: <https://www.foodauthority.nsw.gov.au/consumer/special-care-foods/recreational-harvest-of-seafood>

Reducing the spread of anchor worm

To help reduce the spread of anchor worms, fishers are asked to make cleaning part of their routine by washing and drying vessels (including niche areas such as live wells, water inlets/outlets and anchor wells), trailers and fishing gear between use and particularly before moving to new waterways.

Is the drinking water safe?

Yes. Essential Water conducts sampling and testing of drinking water to ensure it continues to meet the Australian Drinking Water Guidelines. Essential Water use laboratories certified to Australian standards and NSW Health reviews the results. Essential water delivers a secure water supply for drinking.

Dissolved oxygen levels in the Menindee weir pool remain at good levels

The dissolved oxygen levels in the Menindee weir pool remain at good levels for fish health. Our series of in-river buoys installed between Lake Pamamaroo and Weir 32 provide 'real-time' enhanced water quality data and show that the dissolved oxygen is well within the healthy range. NSW Government and Commonwealth agencies are continuing to carefully monitor the situation and adjusting releases as required.

Continued water releases to support fish health

Fish in a stressed condition can be more susceptible to parasite infestations. As a precautionary measure, discharge from Lake Pamamaroo is continuing at 750 ML/day to maintain dissolved oxygen levels through the weir pool at Menindee.

The inlet from Lake Wetherell into Lake Pamamaroo was opened on 28 February. The water level difference between the two lakes has reached the stage where this inlet had to be opened to ensure the structural integrity of the regulator. There will be ongoing monitoring to assess if the water entering Lake Pamamaroo from Lake Wetherell is being drawn through the Lake Pamamaroo outlet and posing and increased risk to the water quality in the lower Darling River.

Menindee Lakes system forecast inflow

Ongoing rainfall in parts of the northern Murray-Darling Basin over the past 6 months has resulted in continued inflows to Menindee Lakes. Since the start of 2024 approximately 150 GL of water has entered Menindee Lakes to date, which are currently holding 944 GL (54.5 %).

Significant rainfall in January - February across the Northern catchments have shown strong streamflow responses. Updated flow forecasting indicates that the Menindee Lakes may receive additional inflows of around 40-60 GL to the end of April. (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).

Emergency Operations Centre notified and ready to act

The Emergency Operations Centre led by NSW Police have been notified and they are on standby should a mass fish death event occur. A contractor has been stood up to be available to remove dead fish from the river as soon as possible if a mass fish death event were to occur in the reach.

Keeping up to date

Anyone wishing to receive this and other related updates from NSW Government can subscribe by emailing water.enquiries@dpie.nsw.gov.au and mention you would like Menindee updates.

Additional information

- To notify the NSW Department of Climate Change, Energy, the Environment and Water of potential blackwater events email: waterqualitydata@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 DCCEE 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/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>