

Community update on response to fish deaths in Menindee

With the Emergency Operations Centre (EOC) standing down on Friday 31 March 2023, the coordination of operations has now returned to the control of individual agencies. NSW and Commonwealth Government agencies are continuing to monitor conditions, take samples and test water, and take actions to try to improve conditions, including dissolved oxygen (DO) levels, in the Murray-Darling Basin.

Established contacts and processes for clean-up in the event it is required in the future are also in place.

Is the drinking water safe?

Yes. Essential Water has increased 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. Results of recent testing confirm the quality had not been impacted by event and therefore safe for customers to drink.

There is no need for community concern as there are multiple viable solutions to maintain water supply to the Menindee township and surrounds, if alternatives are required. The frequency of water quality testing has been increased, which will ensure immediate action if a switchover for supply is required.

What is the EPA advice on the water quality?

On 21 March 2023 WaterNSW collected six water samples from the Darling River for the NSW Environment Protection Authority (EPA).

Water sampling was undertaken to check for contaminants following a major fish death event that commenced on 16 March 2023 on the stretch of the Darling River between Weir 1 and Weir 32 at Menindee.

Water samples were checked for pesticides, nutrients and metals, as well as the presence of algae and algal toxins to inform community about the safety and use of the water in the river.

Pesticides were not detected in the water samples.

Elevated levels of Total Nitrogen and Total Phosphorus were detected, which may result in algal blooms if these nutrients remain elevated.

Algae, including blue green algae, have been detected in all samples at levels ranging from within the Green to Amber Alert Classification. An Amber Alert is currently in place for this part of the Darling River. This test indicates that the river water is unsuitable for potable use (i.e. not suitable for drinking without treatment) and may be unsuitable for stock watering.

Metal concentrations were within guidelines for recreational use. Copper was above the water quality guideline for protection of aquatic ecosystems, but well below concentrations known to be

harmful to fish. All other metals were below water quality guidelines for the protection of aquatic ecosystems.

The EPA and WaterNSW are continuing to monitor water quality in the Darling River, downstream of Menindee, following the recent fish kill event and will share results that differ from these.

Further details of the test results can be found on the EPA [website](#).

What does an Amber Alert mean?

An Amber alert indicates that the river water is unsuitable for potable use (i.e., not suitable for drinking without treatment) and may be unsuitable for stock watering.

There are no restrictions on recreational use, for example swimming and canoeing. Contact with river water should be avoided if a scum on the water surface can be seen.

We know graziers are well versed in managing water for their stock. Local Land Service provides water testing kits to support them in tracking the quality of the water for their stock.

Is there currently harmful levels of blue-green algae in the Menindee Lakes and Darling River?

There are currently no red alert warnings in place for harmful blue-green algae in the Menindee Lakes.

Test results received in recent weeks following the Menindee fishkill event in mid-March, identified the presence of blue-green algae, but not at levels requiring a red alert.

These results for blue green algae from sampling conducted on 21 March and 30 March are available on the WaterNSW [website](#).

The results are from a total of 10 sites where wider testing was conducted by the Environmental Protection Agency (EPA).

Results on the WaterNSW [website](#) at additional Menindee lakes sites are from routine blue-green algae sampling undertaken by WaterNSW in late February.

In the absence of algae concentrations at red alert level, WaterNSW sampling occurs monthly, as well as in response to requests from landholders and local government, or as otherwise required.

Are there health guidelines to provide advice for people using water from rivers?

Yes. NSW Health advise that surface water from farm dams, rivers and creeks should not be used for drinking or cooking without appropriate treatment. This applies to any location in NSW.

Surface water may be acceptable for non-potable uses such as washing clothes, irrigation, gardening, toilet-flushing, but we recommend that water used for bathing is at least disinfected before use.

NSW Health warns that heavy rainfall and flooding increases the risk of contaminated water which could contain disease causing micro-organisms, chemicals or algal blooms, entering surface waters such as rivers and creeks. Blue-green algae may cause skin irritation. Water quality may be affected during drought as flow and the amount of water is reduced.

Further information can be found on the NSW Health [website](#).

What impact will the dead/decaying fish have on water quality?

Decaying fish create bacteria that could make people and animals unwell.

People should not drink untreated water and are advised not to swim, fish, use dead fish for bait or consumption and not allow pets to come into contact with the water in areas of large fish kills, as it may contain high levels of bacteria.

How do I manage my livestock if blue-green algae blooms are present?

We know graziers are well versed in managing water for their stock. Local Land Service provides water testing kits to support them in tracking the quality of the water for their stock.

Early identification of blue-green algae blooms in livestock water sources is important. Prompt removal of livestock from the water source and access to an alternative safe water supply for stock is important if water if algae levels are too high.

There are currently no red alerts for Menindee and there have been no reports of issues in relation to livestock access to water. However, if livestock owners have concerns, they can request a water sampling kits from Local Land Services.

Water NSW provides up to date information on [algae alerts](#).

Is water carting continuing?

Yes. Water carting remains available for eligible residents at this time. The community will be advised as we transition to business as usual.

What if I need an alternative raw water supply?

For Menindee residents, not on the Main Weir Pool who require raw water, there is a standpipe available for access to raw water drawn from Stephens Creek. This raw water is as good or better quality than water from the Menindee weir pool prior to the fish kill.

This water is NOT for drinking.

The standpipe is located between Wilcannia west road and the railway crossing on the Broken Hill side of the turn-off. There is a circular drive through at the location with easy access.

There is currently no lock on the standpipe and is available for use by the community to fill IBC's or other tanks.

What has happened to clean up the dead fish?

Over ten tones of dead fish have been removed from the river and buried as landfill. The clean-up operation is now complete.

Processes for clean-up in the event it is required in the future, are also in place.

Is the water low in oxygen further down the river at Pooncarie?

There have been reports of isolated small fish death events associated with low oxygen water making its way through the system. Dissolved oxygen at Pooncarie and further downstream has remained at critical levels for native fish, however; the water quality within the Wentworth weir pool itself has remained well above these thresholds.

Is the Wentworth Emergency Operations Centre (EOC) still operating?

No. The coordinated emergency response on the lower Darling-Baaka River has concluded following recent results of ongoing monitoring and assessments of water quality and conditions.

Throughout this week, experts reported promising improvements from water testing results, including dissolved oxygen levels, which informed the decision to stand-down the Wentworth EOC on Wednesday 5 April 2023.

Responsible agencies are continuing to meet regularly and operate throughout the Murray-Darling Basin and beyond.

In the unlikely event that conditions deteriorate, there is a capacity to immediately stand-up an EOC and initiate an emergency response.

What water quality monitoring is being undertaken?

Various agencies are monitoring dissolved oxygen and water temperature, with both remote monitors and field samples, with occasional field data on pH and electrical conductivity levels.

Water quality monitoring will continue across the Easter weekend.

Will there be further fish deaths?

Water quality within the Lower Darling-Baaka continues to show steady improvement over the last week. There have been no new reports of fish deaths in and around Menindee township.

Releases of oxygenated water are continuing from Lake Pamamaroo and Lake Menindee to boost dissolved oxygen levels and provide refuge for native fish.

With our responsibility to balance these releases against the need to maximise water in the Lakes for storage, flows are being gradually reduced and adjusted.

More information on water releases can be found on the [WaterNSW website](#).

Monitoring is ongoing to minimise the risk of water quality deteriorating in different parts of the river.

Where else can I find information?

Information about the monitoring, management and maintenance of water quality, including detailed community updates from the Department of Planning and Environment, is available online: www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/managing-drought-recovery/blackwater

Observations of changes to water, including struggling fish or deaths can be reported directly to DPI Fisheries on 1800 043 536.

Fish deaths in Menindee

Community update 6 April 2023



For more information about fish kills, as well as recent reports of observations and causes, visit:

www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills

These types of events can be distressing to members of the community, and anyone who requires health, welfare or other support can contact local community support services. A comprehensive list of services can be located online: www.service.nsw.gov.au/transaction/customer-support-service-infoxchange-service-seeker