

PFAS community update

December 2024 | Blue Mountains catchment

NSW Health and Sydney Water have advised drinking water in the Blue Mountains meets the existing Australian Drinking Water Guidelines and is safe to drink.

Visit nsw.gov.au/pfas to learn more.

WaterNSW, as the operator of dams in the Blue Mountains, is working closely with NSW Health and Sydney Water to ensure drinking water remains safe.

Upgrade to Cascade Filtration Plant

Sydney Water has commissioned an advanced PFAS treatment system at the Cascade Filtration Plant.

Installation is already underway, with full operation expected by the end of 2024. The innovative, mobile system uses Granular Activated Carbon and ion exchange resin, proven filtration techniques that aim to significantly reduce PFAS in drinking water.

Read more at nsw.gov.au/pfas

Treatment results from Sydney Water are expected to be available in early 2025.

Water is being transferred from Oberon Dam to the Cascades dams

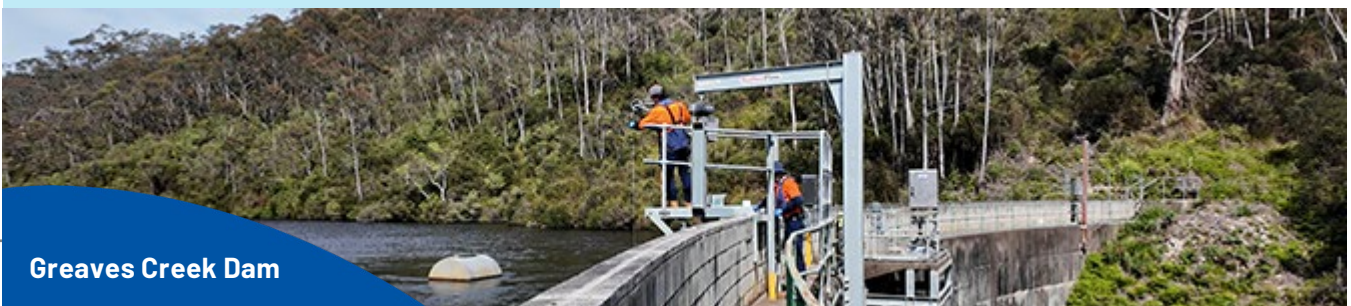
Medlow Dam and Greaves Creek Dam remain disconnected from the Blue Mountains water supply system after early water quality tests indicated elevated levels of PFAS. Supplementary water transfers from Oberon Dam began on 30 September 2024 to provide additional water and blend supply. This additional water from Oberon Dam has recorded near-zero levels of PFAS.

Proposed Australian Drinking Water Guidelines released

On Monday 21 October 2024, the National Health and Medical Research Centre (NHMRC) released proposed guidelines for public consultation which outline new and lower recommended trigger values of PFAS in our drinking water. Importantly, the NHMRC has confirmed that our drinking water remains safe to drink while it meets existing drinking water guidelines. More information is available at nsw.gov.au/pfas.

Investigation progress

WaterNSW targeted PFAS-related investigations into the source of the PFAS are ongoing, ensuring information on the presence of PFAS in the catchment stays up to date. PFAS contamination investigations are complex, due to the long-lasting nature of PFAS



in the environment. Our investigation covers the entire Cascades supply system and is drawing on information spanning a number of decades.

Sampling and monitoring water and soil throughout the catchment

We've tested more than 250 samples of water and soil from 37 different sites, including water testing at various depths in the Blue Mountains dams, as part of our sampling regime.

Rigorous protocols are ensuring accurate data

When testing for PFAS, we are seeking to accurately detect the presence of very small amounts. The amounts identified in the current Australian Drinking Water Guidelines equate to about one drop of PFAS in an Olympic sized swimming pool, approximately 2.5 million litres.

Potential for contamination of samples from everyday sources like sunscreen, makeup, shampoo or water-resistant clothing is high, as it used in these and many other household products, including some types of disposable gloves frequently used to prevent contamination.

To ensure accurate detection, our testing follows strict protocols and is performed by highly-skilled and experienced professionals. Our monitoring teams comply with these strict protocols around collection, transport and analysis and are ISO [9001 certified](#), while all partner laboratories are [NATA](#) accredited.

'Blank' samples using water supplied by the lab that contain no PFAS are used as a control. The 'blank' is handled in the same way as other samples, and any contamination is detected. To date, zero WaterNSW samples have been found to be cross-contaminated, ensuring accurate data.

Results of our sampling are published monthly at [watarnsw.com.au/pfas](https://www.watarnsw.com.au/pfas)

Investigating firefighting history

WaterNSW is working with the Rural Fire Service and Fire and Rescue NSW to explore

historical land use activity where PFAS may have been used for firefighting.

This includes review of the local Rural Fire Services fire station, speaking to staff and Transport for NSW construction sites, as well as a review of drainage pathways and historical data sharing. This will improve knowledge of historical localised activities that had potential for contamination.

Residential sewerage and stormwater drainage pathways

have been traced to better inform investigation and analysis. A **contaminated site investigation specialist** with expertise in PFAS investigations has been engaged to provide tailored advice and ensure every avenue of enquiry is explored. This work includes the development of a conceptual site model to better understand the potential movement of contaminants in soil and water through the catchment. This is detailed and specialised work that takes time.

Offline Dams

Medlow Dam and Greaves Creek Dam remain disconnected from the Blue Mountains water supply system. All dams are designed to naturally fill and then spill as necessary, and WaterNSW is working hard with the NSW Environment Protection Authority (EPA) which is monitoring the impacts downstream of the offline dams.

The downstream areas of Greaves Creek Dam and Medlow Dam do not connect to the Cascades dams or Blue Mountains water supply system.

Source water quality

To protect the quality of source water supplied to Sydney Water for treatment as drinking water, WaterNSW continues to:

- keep Medlow Dam and Greaves Dam disconnected from the supply network
- frequently test the Cascades dams and Oberon Dam source water

- transfer water from Oberon Dam, which has recorded near-zero levels of PFAS, to supplement and blend supply (commenced 30 September 2024)
- work with Sydney Water to ensure we continue to supply water safely and efficiently
- ensure we are ready to adapt to any changing conditions and/or new information as it becomes available.

We anticipate the investigation report to be available in mid-2025, though exact timings will be influenced by the nature and extent of the contamination and investigation detail

Thank you to the community members who attended joint drop-in sessions with WaterNSW, Sydney Water and NSW Health.
If you'd like to ask a question, email us at engagement@waternsw.com.au

Frequently asked questions

What are PFAS?

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals. Widely used in industrial and consumer products since the 1950s, they are effective at resisting heat, stains, grease and water.

PFAS can be found in stain and water protection, non-stick cookware, paper coatings, food packaging, cosmetics, sunscreen and more. Some PFAS have also been used in fire-fighting foams.

These same properties of resistance also mean they don't break down fully in the environment, and can travel long distances in water.

PFAS and drinking water

All water supplied as drinking water must meet the current [Australian Drinking Water Guidelines](#). The current guidelines specify that:

- For PFOS and PFHxS, the limit is a combined total of less than 0.07 micrograms per litre (µg/L).
- For PFOA, the limit is less than 0.56 µg/L.

WaterNSW supplies untreated water, sometimes described as 'raw water' or 'source water', to Sydney Water who treat and supply the water to your tap ready to drink. The Fish River Water Supply System is an exception.

How is the catchment monitored?

Sydney's drinking water catchment is 16,000 square kilometres – about half the size of Belgium.

Water quality monitoring across the catchment follows a targeted, risk-based approach to ensure Australian Drinking Water Guidelines are met. Consistent with government regulatory frameworks, the approach is based on expert advice from NSW Health and other authorities such as the Environment Protection Authority.

What testing is done?

WaterNSW conducts routine testing across the Greater Sydney catchment to ensure the best quality water is pumped to Sydney Water, where it is further tested and treated to meet Australian Drinking Water Guidelines. Water goes through multiple levels of testing to ensure it is safe and meets the Australian Drinking Water Guidelines.

How is WaterNSW sharing results of PFAS testing?

Results are published on the WaterNSW website at waternsw.com.au/pfas

