

# Gosford City Council is dedicated to understanding and addressing discoloured water issues...

## Discoloured water in your area Important Information:

If you experience discoloured water or need to request specialist stain remover, please contact Gosford City Council on the following numbers:

During business hours: 4325 8222  
8.00am - 5.00pm Monday - Friday

Out of hours: 1800 680 828  
After 5.00pm Monday - Friday and weekends

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Although town drinking water supplies are generally colourless, from time to time the water's colour or appearance can change. Sometimes it can take on a yellow or brown tint to almost black, other times it can appear milky white or blue. This is known as discoloured water.

Discoloured water and other water quality issues are commonly experienced by water supply authorities in Australia and throughout the world. Addressing these issues to provide adequate, reliable and safe drinking water to customers is an ongoing concern for all water suppliers.

Recently, the incidence of discoloured water has increased. This is, in part, a result of the ongoing drought which has restricted Council's normal maintenance programs of flushing mains to remove accumulated materials within the water supply system.

### Colours and Causes

Yellow to reddish/brown and black water is usually caused by minerals such as iron and manganese. While these elements are always present in the water in extremely low levels, an increase in temperature or changes to the chemistry of the water can cause them to become visible and discolour the water.

Ageing pipes and fittings that are not cement lined can corrode, causing the water to take on a reddish/brown appearance.

Discoloured water can also occur as a result of water main breaks, construction and maintenance work, daily and seasonal variations in demand, or fire fighting. All of these events increase the velocity of water in the system or change the direction of flow. This can agitate sediments and cause the water to discolour.

Water that appears milky or white occurs when air becomes trapped in the pipes, usually after a main break has been repaired. It is harmless and will not stain your laundry.

Blue stains in the water may be caused by corrosion of internal plumbing. This is common if the hot water cylinder is made from copper.

### Where it Occurs

Discoloured water is more common in suburbs at the furthest ends of a water supply system. At the

furthest, flattest ends of its journey, the water travels at a lower speed and heavier particles, such as iron and manganese, tend to accumulate, eventually discolouring the water.

Areas within the Gosford local government area (LGA) that are more likely to experience discoloured water include suburbs around Tascott, Narara, Wyoming and across the Peninsula area.

Weekenders and infrequently used houses in any suburb may also experience discolouration after a lengthy period of not using the water system.

Galvanised piping, usually found in older homes, is also a cause of discoloured water and Council recommends replacing them wherever possible. A local plumber can provide the necessary advice and assistance.

### When it Occurs

Discoloured water is more common in summer because higher water temperatures result in slightly higher pH levels of the mains supply. These higher pH levels cause iron and manganese to accumulate faster than usual.

Periods of increased demand can also push accumulated pockets of discoloured water through the system. During summer, this increases the likelihood of discoloured water incidents.

# Discoloured Water: Frequently asked questions

## Q. Is discoloured water safe to drink?

A. Although discoloured water may appear unpleasant, regular tests performed by Council and independent National Association of Testing Authorities (NATA) registered laboratories indicate that discoloured water is not a hazard to health.

While boiling water will not remove the particles that cause discolouration, leaving a bottle of discoloured water in the fridge with no lid for 1-2 hours will allow the materials to settle to the bottom and any chlorine to dissipate. Clear water can then be poured from the top into a clean glass for drinking.

## Q. What should I do if I experience discoloured water?

A. If you experience discoloured water, Council recommends that you do not use the water or do laundry for about two hours. This will give the sediment time to settle and will allow time for clouds of discoloured water to pass by in the system.

After this time, check the water from the tap nearest your water meter is clear by running it for up to one minute. If it is clear, fully open up your back tap until it runs clear. This should take no longer than 5-10 minutes. Make sure you capture as much of this water as possible to water the garden or flush the toilet.

If the water is still not clear notify Council. You should also contact Council if you are experiencing repeat discoloured water incidents and provide details of where and when the event occurred. This will help Council to analyse the information to determine further action.

## Q. Is there anything I can install in my home to prevent discoloured water?

A. Many homes now have small filters or aerators on tap outlets, however it is unlikely that they will prevent discoloured water. These devices can quickly become blocked, so it is important to check and clean them regularly to avoid bacteria build up.

There are also many water filters available that are designed to filter out contaminants from the water. Council recommends changing filters regularly to avoid bacteria growing on the filter and then passing through to your taps. Consult the manufacturer to determine how effectively your filter can remove individual elements and for any maintenance requirements.

Filters on your washing machine do not necessarily prevent laundry from becoming stained, as the pH level of the water in a washing machine can rise considerably when washing powder is added. When pH levels rise, any metals present in the water tend to come out of solution and can stain washing.

## Q. What should I do if my washing is stained?

A. If your washing becomes stained as a result of discoloured water, soak the items immediately in a soaking agent such as Napisan. Do not dry them until you are sure the stains have been removed.

If the stains remain after soaking your laundry, continue to keep it in water and contact Gosford City Council to obtain a specialist stain remover.

To avoid your laundry from becoming stained by discoloured water, check the water before washing by running the tap in your laundry or at the water meter. Do not wash until the water is clear.

## Q. Can I be compensated for clothing that cannot be cleaned?

A. If you have followed Council's instructions to remove stains, and kept all items and related receipts, you may be eligible for compensation. Compensation claims should be made in writing and directed to Council's Risk Manager at PO Box 21 Gosford NSW 2250. All claims will be assessed on their individual merits.

## Q. Can I be refunded for extra water I have to use to re-wash laundry and flush taps?

A. Water consumption in the Gosford area is metered and, therefore, charged at the meter. However, if you feel you have been forced to use more town water due to repeated discoloured water events and wish to seek compensation, please forward a detailed claim to Council's Rates Clerk at PO Box 21 Gosford NSW 2250. All claims will be assessed on their individual merits and a partial refund may be available.

## Q. I have had to buy bottled water because I can't or won't drink the water, can I be compensated?

A. Council does not compensate customers who choose to buy bottled water. Council and independent testing indicates that the water supplied by Council is not a health hazard, and this is supported by the NSW Department of Health. Discoloured water is typically short-term and clears naturally or through intervention by Council, however, for aesthetic reasons Council does not recommend drinking water when it is heavily discoloured.

## Q. Why was I not warned about receiving discoloured water?

A. There are over 1000km of water mains and 60,000 properties forming a complex water supply network across Gosford City. This makes it difficult to determine exactly where and when discoloured water is likely to occur. However, Council endeavours to notify customers of unexpected events or planned activities that may result in discoloured water as soon as possible via radio, newspapers, Council's website or individual letters.

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### Water That Tastes And Smells Different

The water supplied to the Gosford community is drawn from a number of sources, including Mangrove Dam, Mangrove Creek, Mooney Dam, Mardi Dam, Hunter Water, ground water and streamflows.

Water collected from diverse sources can contain varying levels of organic matter that may affect taste and smell. Although this water may taste or smell different, it is not discoloured water.

To minimise any difference in taste and smell Council may mix different water supplies.

### Council's Response To Discoloured Water

Gosford City Council is dedicated to understanding and addressing

discoloured water issues. It has designed a water quality management program called Water Quality 2010 to assist in reducing the incidence of discoloured water and minimise the impact these events have on the community.

### Water Quality 2010

Water Quality 2010 is an extensive water quality management program developed to protect, manage and maintain the delivery of safe and reliable drinking water. It is a 5-point plan comprising of capital works, maintenance activities, monitoring and analysis programs, enhancements to system management and operation, and a communications information strategy.

Some of Council's key priorities include:

- optimising the operation of the Peninsula system
- cleaning trunk and distribution mains
- addressing infrastructure shortcomings
- implementing a more extensive monitoring program
- implementing advanced treatment processes
- reducing the risk of pipe and valve failures.

Many of these actions will take some time to complete, and the benefits may appear gradually over time, however works are being prioritised to ensure the most commonly affected areas are targeted first.