

# Where does Huntly get it's water from?

Huntly gets its water from the Waikato River. The water intake is below the Mangawara stream in Taupiri. This stream has high levels of manganese, a naturally occurring mineral.

Manganese will oxidise (react) when it is exposed to the air and moisture. That is what gives the Mangawara stream its deep rust red colour. You may have noticed it when you travel over the bridge before the urupaa.



### How does the water get to the tap?

After the water is taken from the river, it is pumped to the water treatment plant in Jackson Road. The treatment plant removes things like bacteria, algae and pollutants and then the water is treated to make sure it is safe for drinking. We do this by using filter beds and UV light, as well as chlorination and fluoridation.

The water is then pumped to the town's reticulation system and five reservoirs. A reticulation system is a series of underground pipes that are used to distribute water. A reservoir is where water is stored. Some parts of Huntly get their water directly from the treatment plant, while others get it from the reservoirs.



### Why does the tap water sometimes look brown?

There are a couple of things that cause this but, put simply, it's from the manganese in the stream where we get the water from, and when something causes movement or a change of pressure in the pipes. This can happen when the river levels are low.

- Manganese from the Mangawara stream ends up on the inside of the pipes. Manganese is a naturally occurring mineral. The water treatment plant takes some of the manganese out but there is still dissolved manganese in the water when it leaves the treatment plant. The dissolved manganese reacts with the chlorine (used as part of the disinfection process at the treatment plan) and builds up in the pipes. It then drops off when there are pressure changes, high flows or when we flush the pipes. It is then swept up by the flow of the water, causing the water to look brown.
- We can only produce a certain volume per hour so, when the river levels are low, we need to move water between the reservoirs to make sure people have enough water. This causes a change in pressure, which stirs up the manganese.

There are times when it is caused by other things. Anything that causes movement, or a change in water flow (which changes the pressure) will stir up the manganese deposits and disturb the sediment. Sometimes, if a water main or pipe breaks, it can cause this to happen.

## Is the water safe to drink when it's brown?

Yes, the water is safe to drink. We do regular testing to make sure it meets the Government's drinking water standards and there is no risk to your health. But we know the colour of the water is off-putting and it isn't pleasant, and we want to make it better for you.



# What is Council doing to improve the water?

#### We're flushing the pipes more often

We've changed our maintenance programme and are flushing the pipes more often. We've noticed that this has helped, and hopefully you have too. Flushing the pipes regularly stops the manganese from building up. However, anything that causes movement or a change in pressure can stir up the manganese deposits. Council aims to have enough water for 48 hours in our water reservoirs but if there are water leaks or if the weather is hot and people use more water, we need to redirect water from our reservoirs, and this can stir up the sediment and change the water colour.



#### We're using a specialist unit to cleanse the system

We have partnered with Detection Services to use their innovative NO-DES unit, a water pipe scouring system. This technology connects hydrant-to-hydrant, using reverse-flow flushing to remove iron and manganese deposits from water lines. The process filters out debris with minimal water loss, enhancing network efficiency. The unit will target key areas in Huntly, to improve water quality across the network.



#### We've upgraded water lines

We have upgraded water lines on Harris Street which has helped with the issues in Huntly West and we will be doing network upgrades in the East over the next 12 months.

• Note: Our pipes are old but it's really expensive to change them and we don't want to cause hardship to our ratepayers, so Council has to carefully plan when they are replaced. We have a maintenance schedule that prioritises which pipes need to be fixed or replaced first. We've got more than 857 km of water pipes in the district, so it takes time.

### We will be upgrading the water treatment plant in the future

Council plans to upgrade the water treatment plant so that it can be better at dealing with the manganese deposits.

### If it is caused by manganese in the Mangawara stream, why can't Council get water from somewhere else?

Huntly is a few kilometers down from the Mangawara stream, which makes it difficult - it would be really expensive and hard to move the water intake to a location that is upstream. We are looking at changing the Water Treatment Plant so that it can remove the manganese and other minerals during the treatment process.

# What should we do if the water looks brown?

We recommend running the cold water tap for a bit, to see if it clears. If the water still looks brown, please let us know. You can do this via the Antenno app or by phoning 0800 492 452. We can then get our team working on fixing the problem, as quickly as possible. In the meantime, you don't need to stop using the water. We know it looks unpleasant but it is still safe to drink.

### Summary

- Huntly's water comes from the Mangawara stream which has high levels of manganese.
- The manganese builds up in our pipes. Pressure changes in the pipes can disturb the sediment.
- The water is safe to drink.
- We've got a plan in place to improve the water. We've made some changes and we've got more changes coming.





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