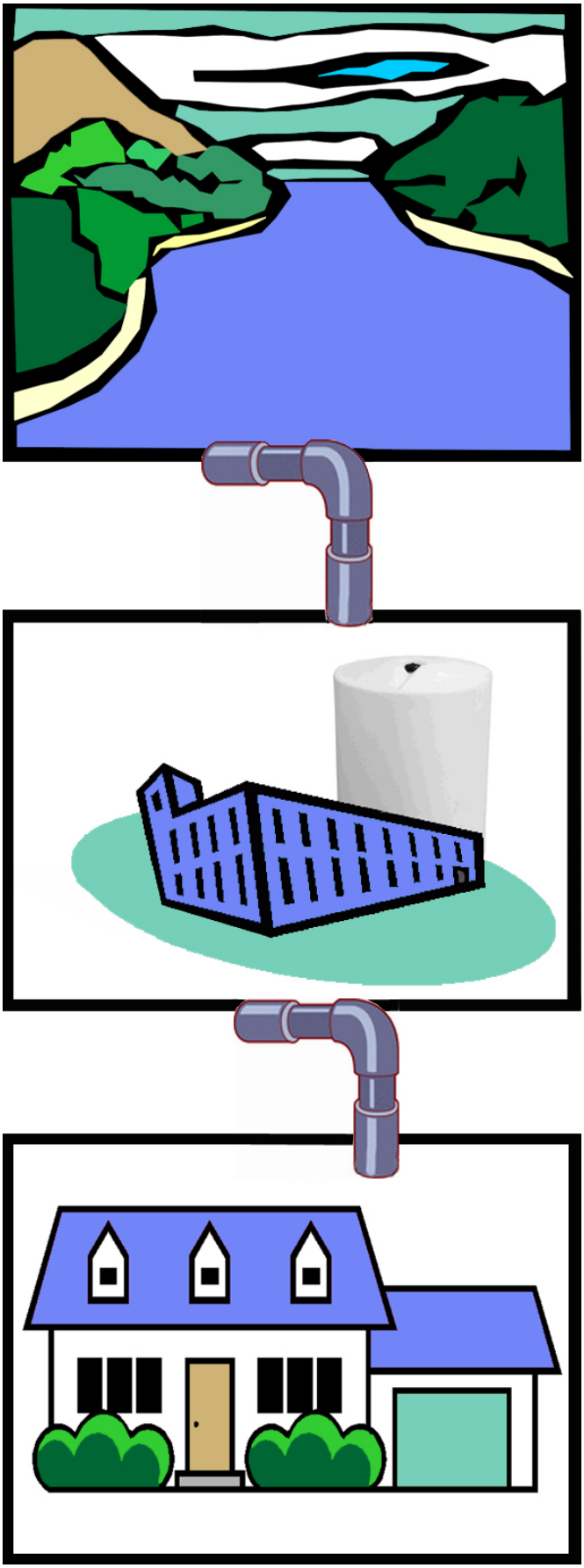
The Sources of Taste in Council Drinking Water

Most of New Zealand councils supply safe drinking water to their ratepayers. However on rare occasions the taste of the water can change causing some concerns. This could be caused by a number of factors, some of which are described here. It is worth checking with neighbours to see if they have noticed an unusual taste or odour. If they have not, it is more likely to be from inside your home.



The Source Water

Algae by-products can affect council supplies that are sourced from surface water such as lakes and rivers. These by-products taste 'earthy' and can be detected by a small percentage of the population.

Metals in the bore waters such as iron and manganese can taste metallic. Other minerals in the water add tastes as well but without them the water would be tasteless.

The Water Treatment Process

Chlorine is added at the treatment plant to disinfect the water. At elevated levels this can taste metallic. To remove chlorine simply allow a jug of water to stand for a few hours in the fridge.

Biofilm grows inside the pipes of every water distribution network and can create musty odours and/or tastes in areas of low flow. Sometimes the council will flush the system through a hydrant to freshen it up.

Inside Your House

Header tanks (in older buildings that are not on mains pressure) can get contaminated, check this first and if needed empty and clean the tank.

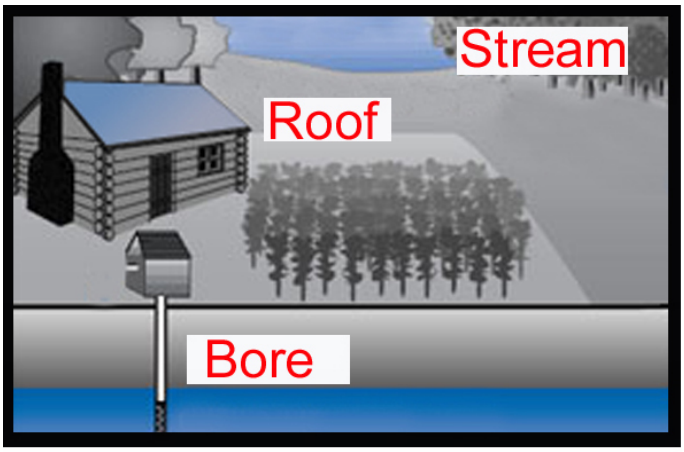
Internal metal pipes can leave a metallic taste especially in the morning. Flush a mug full of water before taking your first drink.

New plastic pipes can cause the water to taste of plastic but this soon fades as the pipes gets older.

If you notice an antiseptic taste in hot drinks this may be due to harmless phenolic compounds called TCP. These are formed when chlorine reacts with rubber or plastic inside plumbing, hoses, zips, and kettles as well as filter fittings. Often the taste comes from incorrectly plumbed dishwashers or washing machines. Ask a plumber to check for you.

The Sources of Taste in Non-Council Drinking Water

Water that has not been supplied by councils is usually sourced from Streams, Bores or the rooves of the property. Each has its own distinctive taste and odour issues as described below.



The Source Water

Streams, Creeks and Rivers can all be tainted by rainfall as it washes contaminants from surrounding land into the waterway. This can include harmful pathogens, algae, pesticides, and anything else in the catchment area. Often these will cause the water to taste bad.

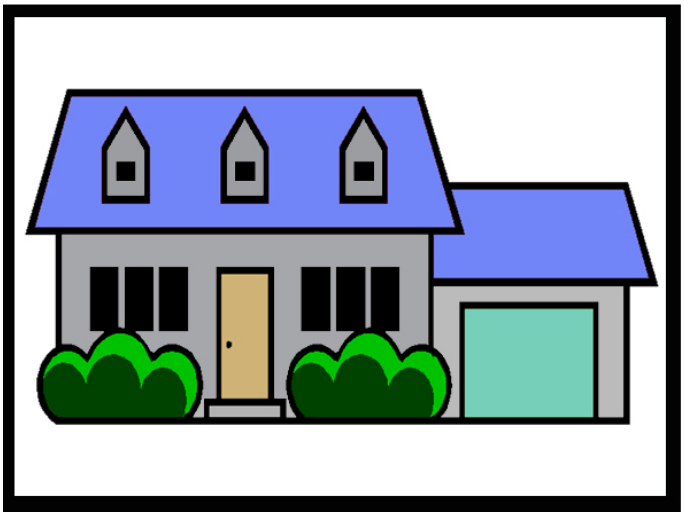
Water captured from a roof can also become contaminated with pathogens and strong tasting compounds. These include metals from the roof itself, algae and small animals from the guttering, as well as any plant material that blows onto the roof. First flush diverters can reduce this material from getting into storage tanks.

Bore water is usually the most secure source of water as it is difficult to contaminate with pathogens. Tastes can occur if the water contains metals.

The Water Tank

Water tanks can contribute to bad tasting water by accumulating organic matter at the bottom. This can lead to musty or sulphur tasting water depending on what is in the tank. Regular cleaning can reduce this.

During dry periods water carriers deliver water and this can sometimes be sourced from a chlorinated area. In this situation the chlorine will react with the organic material in the tank and will cause a strong metallic taste.



Inside Your House

Bore water in New Zealand is usually acidic but is neutralised by concrete tanks. When stored in plastic tanks the water stays acidic and can dissolve metal pipes leaving a metallic taste. Copper pipes can lead to blue stains on basins.

New plastic pipes can cause the water to taste of plastic but this soon fades as the pipes get older.

Treatment is available for all these conditions. Look up Water Treatment in the Yellow pages.