

Let's talk

BACKFLOW PREVENTION

“ A boundary backflow prevention device protects the water supply from potential contamination. ”

What's happening?

Following the adoption of Council's Backflow Prevention Policy, we are ensuring that every property connected to the council's water supply has the appropriate backflow prevention device to protect drinking water from contamination. To achieve this, we conducted a desktop risk assessment and are now verifying findings through on-site physical surveys before installing the correct device. New Zealand has strict legislation to prevent backflow from occurring and to safeguard the safety of drinking water.

What's backflow?

Backflow occurs when water flows backwards into the public water network. This unwanted reverse flow can cause contaminants, such as harmful bacteria or chemicals, to enter the water supply, seriously affecting the quality and safety of drinking water.

Why is backflow a concern?

Health Risks: Contaminated water can introduce harmful pathogens, chemicals, and toxins into the drinking supply, leading to illnesses such as gastrointestinal infections, skin irritations, or even more severe health conditions.

Water Quality: Backflow can degrade the overall quality of drinking water, causing unpleasant tastes, odours, or discoloration.

What causes backflow?

Water flows to your property under the correct pressure, but if this pressure changes, water could be drawn back into our network. The two main causes of backflow are:

1. A sudden drop in pipe pressure, which siphons water back into the network.
2. If the water supply is directly connected to equipment, such as a boiler or a private bore at a higher pressure, water is forced back into the network.

What is a backflow prevention device?

A backflow prevention device protects the water supply from potential contamination. The type used (e.g. reduced pressure zone, double-check valve) depends on the degree of risk. The device is usually attached to the water meter on the customer side of the point of supply.

How do I know if my property needs one?

The selection and installation of backflow prevention devices are guided by a risk categorisation system, which evaluates the potential hazard posed by backflow contamination. Risks are categorised into high, medium, and low, based on the potential effects on human health and the environment. Every property connected to the council's water supply will get a device installed in stages, starting with high-risk properties.

How is a properties level of risk categorised?

The selection and installation of backflow prevention devices are guided by a risk categorisation system that assesses the potential hazards of contamination. Risks are classified as high, medium, or low, based on their potential impact on human health and the environment. We use a risk matrix to assess contamination risks. If the consequences are significant, we install a device, even if the likelihood is minimal, to mitigate any residual risk.

Risk Categories Defined by NZ Legislation and Standards

High Risk: Situations where backflow could result in severe health effects or significant contamination, such as the introduction of toxic chemicals, pathogens, or other substances that may cause serious illness, hospitalisation, or widespread public health impacts. Examples include industrial facilities, dairy agricultural activities, medical laboratories, and properties with chemical storage or processing systems.

Medium Risk: Situations where backflow could result in moderate health effects or contamination, potentially causing minor illnesses or localised impacts on the water supply. Examples include commercial properties, restaurants, or properties with in-ground irrigation systems or swimming pools etc.

Low Risk: Situations where backflow poses minimal risk to health or the environment, with little to no likelihood of contamination. Examples include standard residential homes without additional risk factors.

How many properties require a device?

Approximately 9,000 properties in the Whakatāne District currently do not have adequate backflow prevention devices. Most of these present a low risk from backflow, so a simple, non-testable device is required.



Scan the QR code or go to
whakatane.govt.nz/backflow

Where are these devices installed?

The device is usually installed at the property boundary, either in a meter box or above ground in a cage. The type of boundary backflow device required will be determined by the degree of risk from the activities occurring on each property (as defined in the New Zealand Building Code).

Who owns the devices?

The council will own and be responsible for the devices, including testing, maintenance, and replacement.

Not a one size fits all...

The type of boundary backflow device required will be determined by the activities happening on each property and the risk (categorised either high, medium, or low).

High to medium risk properties include the likes of farming, industrial and commercial properties, and domestic properties with swimming pool, bore, in-ground irrigation system, and some home-based businesses e.g, hair salon.

Low risk are those urban domestic connections (general households).

Is there a cost to me?

Most urban residential properties connected to the Council water supply will have non-testable dual-check valve installed, which does not require annual testing, so there are no ongoing costs to property owners. However, properties classified as medium and high-risk, including rural domestic properties with animals fed through troughs, will require a testable backflow prevention device, which must be tested every year as mandated by NZ legislation. This will incur a yearly fee for testing and/or maintenance if needed. The council will formalise a process for collecting this payment and will contact affected homeowners.

A device is being installed on my property, what can I expect?

Our contractors may need to talk to you to ensure they're installing the correct devices for your property's needs and risk level. There may also be a temporary water shutdown for your property. You'll receive a written notice at least 48 hours in advance if your property is affected.

Do new builds require backflow devices?

Yes, developers are required to install backflow prevention devices at their cost in all new developments. This will be included at the building consent stage.