



Safe water at artesian fountains

Why don't they have chlorine?

Guide to filtration and ultraviolet (UV) treatment at the Buick Street and Dowse Square public fountains.

Is the water available at the Buick Street and Dowse Square public fountains still artesian water?

Yes. The artesian water is sourced from the Waiwhetu Aquifer.

We've relied on the natural filtration of the Waiwhetu Aquifer to remove or disable potentially harmful waterborne organisms for almost four decades.

However, the changes in the water quality in the Waiwhetu Aquifer (recorded from late 2016) is a clear indication that relying on the natural filtration processes may be a public health risk.

The water is now being treated with filtration and UV light.

Why is this treatment required?

In Havelock North (August 2016), an outbreak of gastroenteritis was caused by harmful organisms in the water supply. A total of 5,500 people became sick, 45 people were hospitalised, and there is a possible link to three deaths. We now know that relying on the Waiwhetu Aquifer's natural filtration processes is no longer sufficient, and is a public health risk.

Regional Public Health supports the filtration and UV treatment to the Buick Street and Dowse Square public fountains as a way of managing potential public health risk.

Is the water available at the Buick Street and Dowse Square public fountains treated with chlorine?

No. The water is now being treated with filtration and UV-treatment systems.

The public fountains were temporarily closed while the treatment solution was installed.

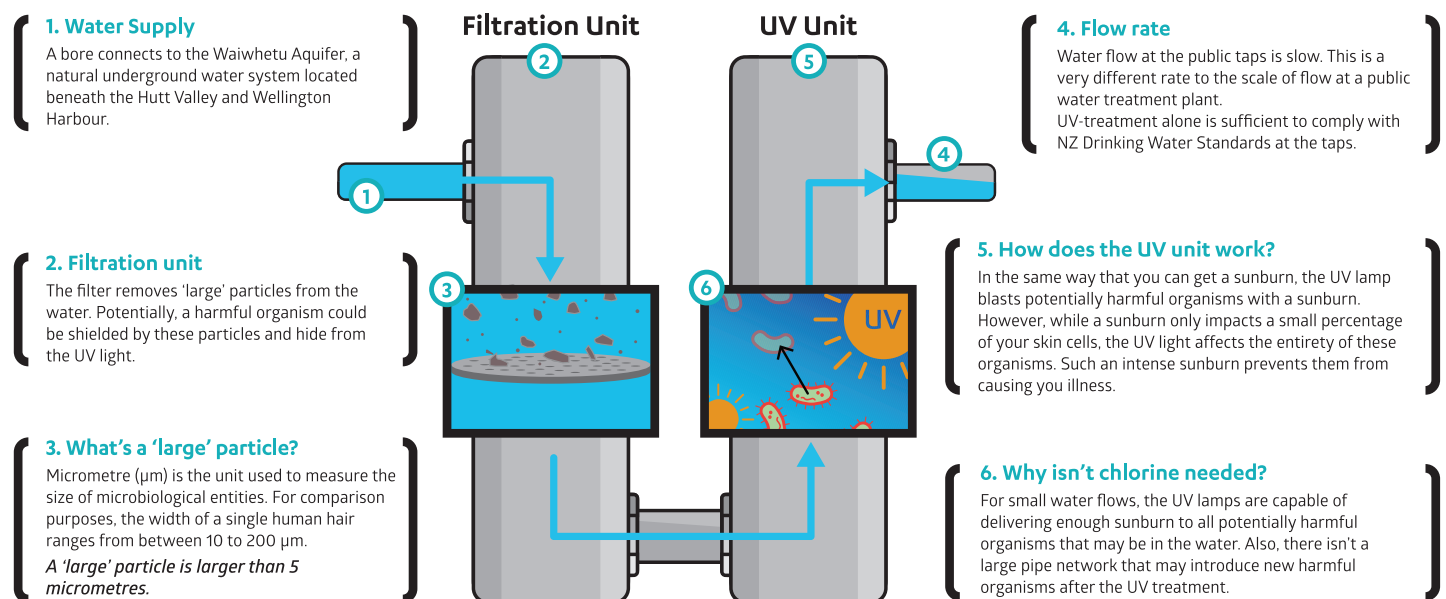
Buick Street reopened on 26 June 2017 and Dowse Square reopened on 9 August 2017.

Change in water quality

Drinking water for many Lower Hutt residents has been chlorine free for almost four decades. We've relied on the natural filtration of the Waiwhetu Aquifer to remove or disable potentially harmful waterborne organisms.

The change in water quality in the aquifer recorded from late 2016 indicates that this is no longer sufficient to protect public health.

Filtration and UV treatment



Wellington Water has a rigorous and thorough monitoring programme to ensure our water is safe to drink.

How do we know that the water at the Buick Street and Dowse Square public fountains is safe to drink?

UV treatment is widely used for both public and private drinking water supplies.

With the amount of water taken from the public taps, the UV units with filtration provide effective barriers against contaminants such as giardia, cryptosporidium, campylobacter and *E.coli*. This treatment is compliant with the Drinking Water Standards of New Zealand 2005 (Revised 2008).

What tests are done?

We work closely with Regional Public Health's Drinking Water Assessors to ensure our monitoring and oversight of Wellington region's drinking water supply manages any public health risk.

Water samples are taken at the Buick Street and Dowse Square public fountains every four days – to test for *E.coli* and other bacterial and water chemistry indicators.

Water samples are taken before the water is filtered and treated with UV light, as well as after the treatment process. Comparing the samples ensures effective treatment.

Why do we have chlorine in our drinking water at home?

Chlorine is highly effective at killing most harmful bacteria that may exist in the water or in the water supply pipes.

Wellington Water has recommended that chlorination for drinking water supply continues for Lower Hutt. This will be decided by Greater Wellington Regional Council at its Council meeting on 10 August 2017.

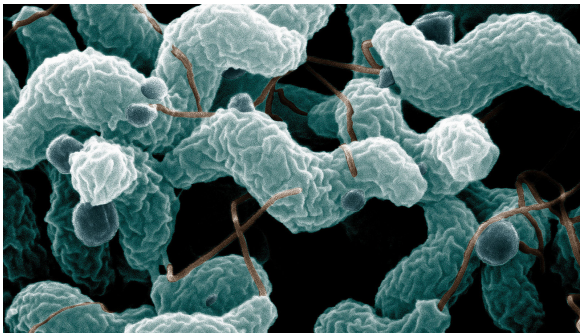


Snapshot

- » The Drinking Water Standards of New Zealand recognise three classes of micro-organisms that may cause disease: bacteria, viruses, and protozoa
- » Most bacteria don't make us sick. Some bacteria are good. Some bacteria are potentially harmful organisms – also known as pathogens
- » We need to treat drinking water from the Waiwhetu Aquifer to protect public health

The Ministry of Health's *Don't Bug Me* video series gives a great insight into common types of protozoa, bacteria, and virus that may affect drinking water.

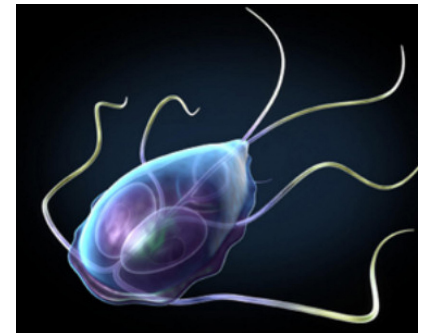
www.health.govt.nz/publication/drinking-water-dvd-series



Campylobacter



E.coli



Giardia