Private drinking water wells in your area should be tested

The Lower Waihao Rural Water Scheme's (including Waikakahi East) water quality has exceeded the maximum acceptable value (MAV) for nitrate concentration and should not be consumed. Elevated nitrate levels are not confined to the Lower Waihao catchment.

This sheet contains information for those with private drinking water wells in the area. If this isn't you, please feel free to share this information with neighbours or friends who do have private drinking water wells.

Test your private well water

It's your responsibility to test your water quality if you source drinking water from a private well. It's possible that private wells will also have high nitrate concentrations.

It's also important you test your water source for microbiological contamination (*E. coli*) as well as nitrate and take steps to ensure your drinking water is safe. Boiling water will make it safe to drink if the problem is *E.coli* but won't make it safe if the nitrate level is raised.

Attached is a brochure with information on testing your water and securing your well head.

What are the drinking water standards for nitrate and *E.coli*?

Nitrate

The maximum acceptable nitrate concentration is 50mg/L. Should your water test above this concentration – you should not drink the water until it's re-tested and confirmed to be less than the MAV.

E.coli

The maximum acceptable value is less than 1 E.coli/100mls of water. Should your water test above this level, you should not drink it or use it for teeth brushing unless it is boiled first.

More information

A list of accredited laboratories to test your private well water is included in the attached brochure. For additional information about testing your private well call Environment Canterbury on **0800 324 636** or visit **ecan.govt.nz**

If you have any health concerns regarding your drinking water, contact your GP or healthcare provider for advice, or call Healthline on **0800 611 116,** anytime 24/7 for free health advice. For more information on nitrate in drinking water, you can visit **https://info.health.nz/keeping-healthy/nitrate-in-drinking-water**

Waimate District Council

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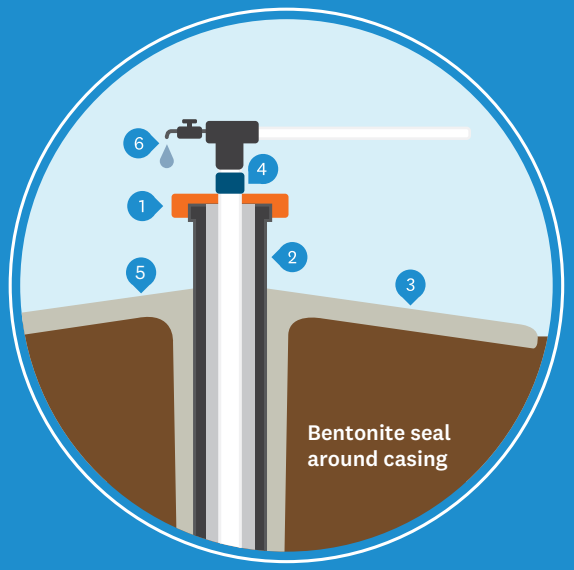
For a secure well head, follow these steps below:



› STEP 1

Well cap

Install a secure well cap and seal between the casing and any hoses or cables going down the well.

› STEP 2

Well casing

Ensure the well casing is elevated at least half a metre above the ground surface.

› STEP 3

Concrete apron

Seal between the well casing and the surrounding ground with a concrete apron. If you're drilling a new well, install a bentonite seal around the casing.

› STEP 4

Backflow preventer

Install a backflow preventer to stop contaminants siphoning back into your well.

› STEP 5

Area around well

Keep the area around the well head clear of animals, pesticides. fertilisers, compost and rubbish.

› STEP 6

Sample point

Have your groundwater supply tested if you suspect a problem with the water quality.

Test your water

Testing can be as easy as turning on the tap, taking a sample and sending it to a laboratory for analysis.

You should test your water supply for *E. coli* at least four times per year, as well as annually for nitrate. Use a clean container and send your sample to a laboratory for analysis.

Ministry of Health approved laboratories that can test for *E. Coli* and nitrate:

- Citilabs
- Eurofins
- Hills Chemistry.

You can view the list of approved drinking water laboratories on the Taumata Arowai website.

Need more information?

- **cph.co.nz/your-health/drinking-water**
- **ecan.govt.nz/drinkingwater**
- **taumataarowai.govt.nz**

or visit your local council's website.

Te Whatu Ora
Health New Zealand

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Do you get your household water from a private well?

If you do, it's up to you to check the water is safe to use.

Environment Canterbury
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Testing your water

There is potential for a range of contaminants to reach groundwater and surface water. Testing for these is important because drinking contaminated water can have serious health consequences.

Bacteria and viruses

Source: Primarily faecal material from grazing animals or septic systems; or from farm effluent spread on the land.

Recommended testing regime: Quarterly (especially following heavy rainfall).

Nitrates

Source: Farming activities, wastewater disposal and landfills.

Recommended testing regime: Annually (during Spring or Autumn, when nitrate levels tend to be higher).

Heavy metals and Organic Chemicals

Source: (Heavy metals – cadmium, lead, manganese, arsenic etc) Sheep dips and pesticides in some farming and horticulture areas (arsenic can occur naturally in some areas).

Source: (Organic chemicals – including petroleum compounds, solvents and other chemicals) Engine and machinery shops, other industries and landfills.

Recommended testing regime: One-off test for a full range of heavy metals and organic chemicals (more expensive than other testing regimes but only needs to be done once unless you notice a change in the water).

Water testing is not the only thing you need to do to protect your drinking water

Where a well emerges from the ground is known as the well head. It is very important that this area is protected to prevent bacteria and chemicals getting inside the well and contaminating the water.

The diagram on the overleaf illustrates a best case example of a secure well head. If your well head arrangement does not look like this and water testing detects contaminants, you should seek advice on how you might alter or replace your well head to prevent bacteria and chemicals passing through the well head and into your water supply.

Purchasing a property

If you are purchasing a property it is up to you to determine whether it has public water supply or its own private well. It is your responsibility to ensure you've got access to a clean supply of drinking water.

Previous land use

If you have a private well you should investigate what previous activities on the land might have had an influence on your well. Sheep dipping or horticultural spraying might have caused chemicals to leach into the soil and ground water. These can be harmful to your health so it is a good idea to have your well tested before you use its water.

The Listed Land Use Register (LLUR) is a publicly available database of sites where hazardous activities and industries have been located: **llur.ecan.govt.nz**

Q & A

How is testing done?

Generally this is a straight forward procedure. Contact a water research laboratory and they will provide you with everything you need to collect a sample. Once you have got a sample return it to the laboratory for analysis.

How are samples collected?

In most cases, samples can be taken from a kitchen tap.

Who pays for testing?

Testing private wells for contamination is the responsibility of property owners.

If a well is found to be contaminated – what then?

Contact your local council or seek advice from companies specialising in water treatment systems.

Where can more information be found?

Contact Environment Canterbury on **0800 324 636**