

OUR WATER SUPPLY

THE FACTS – KEEPING PEOPLE SAFE

HOW WELL DO YOU KNOW YOUR WATER SUPPLY?

Water is one of our most important assets. Residents, industry, businesses and farms depend on a supply of safe, affordable water.

Clutha District Council looks after 22 water schemes that supply water to 15 towns and more than 2,000 rural properties, providing water for households and for livestock. Approximately a third of the water we produce is used for domestic consumption, and the rest is largely used for livestock.

To make sure water is safe for consumption, Council processes and treats all water before it is supplied, and then regularly tests the water to make sure the treatments are working. Council is

required to share this information with the Otago Regional Council which issues Resource Consents that permit Clutha District Council's water activities.

There are two pieces of legislation that control the quality of Council-supplied water, the Health Act 1956 and the Drinking Water Standards 2006 (Revised 2008). These deal with not only water quality, but with monitoring and data collection too.

Council is also required to have Water Safety Plans to guide the safe management of supplies and identify any potential risks.



TESTING OUR WATER

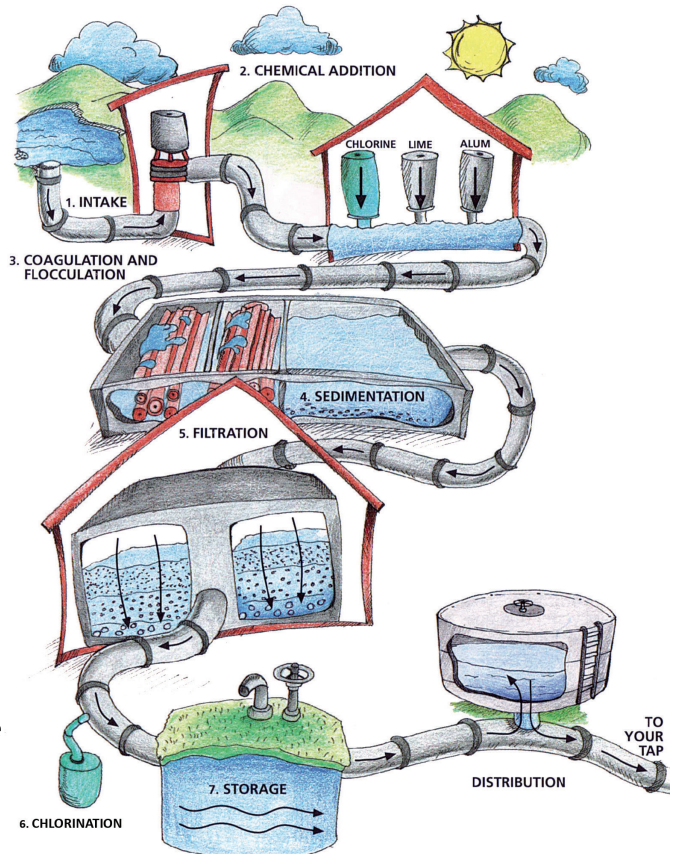
To keep us all safe, it is important that the quality of the water being supplied to everyone in the Clutha District is regularly monitored. Council uses an external contractor to look after the day-to-day management and operations of the water supply network in Clutha District. Our water treatment plants are operated by trained staff, and samples are sent to a IANZ (International Accreditation New Zealand) accredited laboratory for analysis.

The next page explains how water is treated and how frequently our plants are checked.



EXAMPLE OF WATER TREATMENT

1. Intake: Water is taken from the source. Logs, fish, and plants are screened before the water is drawn into the treatment plant. If the source is groundwater, the “screening” is done by ravelas as the water travels under the earth’s surface. Sometimes very little treatment is required for groundwater.
2. Chemical Addition: Chlorine, aluminium sulphate (alum), and/or polymers are added to the water. These kill germs, improve taste and odour, and help settle solids still in the water.
3. Coagulation and Flocculation: Here, the alum and other chemicals from the chemical addition step cling to substances in the water. This is called coagulation. It causes the particles to stick together and form larger particles called floc.
4. Sedimentation: The water and the floc particles flow into a sedimentation basin. Here the floc settles to the bottom, and is removed.
5. Filtration: The water then flows through filters. There are a variety of filter types, from layers of fine sand and gravel to modern membranes. The filters are used to remove any particles remaining in the water.
6. Chlorination: A small amount of chlorine is added to kill any remaining germs, and to keep the water safe as it travels to the public.
7. Storage: The water is stored in a closed tank or reservoir. This allows time for the chlorine to mix throughout the water so that disinfection takes place before the water flows out for distribution.



OUR WATER TREATMENT PLANTS

TREATMENT PLANT	TREATMENTS	E. COLI SAMPLING FREQUENCY	FLUORIDE SAMPLING FREQUENCY
Balclutha	Chlorination, UV ¹ , coagulation, sedimentation, filtration, fluoride ²	Twice weekly	Weekly
Clydevale-Pomahaka ³	Chlorination	Twice weekly	N/A
Evans Flat	Chlorination	Weekly	N/A
Glenkenich	Chlorination, direct sand filtration	Twice weekly	N/A
Kaitangata	Chlorination, coagulation, sedimentation, filtration, fluoride	Twice weekly	Weekly
Lawrence	Chlorination, UV, coagulation, sedimentation, filtration	Weekly	N/A
Milton	Chlorination, coagulation, membrane filtration, fluoride	Twice weekly	Weekly
Moa Flat	Chlorination, coagulation, direct sand filtration	Twice weekly	N/A
North Bruce	Chlorination, direct sand filtration	Twice weekly	N/A
Owaka ³	Chlorination	Weekly	N/A
Puerua	Chlorination, coagulation, sedimentation, filtration	Twice weekly	N/A
Stirling	Chlorination, coagulation, sedimentation, filtration	Twice weekly	N/A
Tapanui	Chlorination, coagulation, sedimentation, filtration, fluoride	Twice weekly	Weekly
Waitahuna	Chlorination, coagulation, sedimentation, filtration	Twice weekly	N/A
Whitelea Road	Chlorination, coagulation, sedimentation, filtration	Weekly	N/A

¹ Ultra Violet (UV) light is used to prevent any organisms present from reproducing, and so limiting their ability to harm people. It works on protozoa (cryptosporidium and giardia), bacteria and to some extent on viruses.

² Fluoride is added to boost the natural level of fluoride in water to a level that helps protect against tooth decay. The decision to add fluoride is taken by the local DHB.

³ The water for these schemes is groundwater-sourced, and less treatment is needed to make the water safe for use.



BOIL WATER NOTICE

Occasionally an unforeseen event may mean that Council needs customers to take extra measures to make sure water is safe to use. When this happens, Council issues a Boil Water Notice which will contain the steps that you need to take.

A Boil Water Notice requires that all water to be consumed (including water for teeth cleaning, and washing fruit and vegetables) should be boiled for 1 minute before it is used.

Boil Water Notices are published in several ways:

- Radio - MoreFM and Hokonui radio stations
- Council website (www.cluthadc.govt.nz)
- Council's Facebook page
- To the media as a media release
- Water scheme online email service

Council also provides online newsletter services which will send you an email about any issues on your water scheme. To sign up for this service, go to the Council website and search for 'Online Newsletters', then choose which newsletters you would like to receive.

LETTING COUNCIL KNOW

Like any service, Council's water supply can occasionally have a problem. It might be discoloured water, or the sudden appearance of a leak in a pipeline, or something else. If you discover a problem please contact us as soon as possible so that we can investigate, repair the problem, and get the service back to normal.

LIKE MORE INFORMATION?

More information about Council-operated water supplies can be found from:

- Council's website
- Council's Long Term Plan 2018-28
(available on the website and at Council's Service Centres)
- Contact Council's Service Delivery Department on 0800 801 350

REPORT A WATER PROBLEM TO COUNCIL

Call 03 419 0200 or 0800 801 350 (Toll Free in NZ)

After Hours or Emergency call 0800 801 350

Email help.desk@cluthadc.govt.nz