Passing the test



Our lab tests water samples from a number of points throughout the network.

Your drinking water may taste slightly different when we switch over to the new water treatment plant later this year. This is because there are minerals in groundwater that may affect its taste for some people.

"The groundwater contains many naturally occurring minerals, including moderate levels of calcium which is essential for the development and maintenance of strong and healthy bones," says water quality advisor Colin Fricker, who is a Fellow of the Royal Society of Public Health and has over 30 years' experience in microbiology and water quality. "The groundwater is of far superior quality to the previous river source used at Warkworth and is of a standard similar to bottled water sources. The residents of Warkworth can look forward to a plentiful supply of high-quality, wholesome drinking water which is completely

The new Warkworth Water Treatment Plant is supplied by two bores instead of the Mahurangi River.

"The quality of water taken from these bores is much higher than water taken from the river, so the treatment processes required to ensure that the Warkworth community is supplied

with 'Aa'-graded drinking water are not as complex as what we have at the existing water treatment plant," water supply operations manager Priyan Perera says.

Water drawn from the bores is kept enclosed in pipes throughout the treatment process and is not exposed to open air until it comes out of your tap. This reduces the chance of contamination. The bores themselves are also more secure sources than the Mahurangi River, which is not a protected catchment.

Testing is a vital part of ensuring that the drinking water we provide is safe and always meets the Ministry of Health's drinking water standards. Every day, we carry out an average of 250 tests on water samples from a number of points across the entire water supply network, from raw water right through to treated water. In addition, our automated computer network analyses the water quality at our treatment plants 24 hours a day.

We also have a number of safety measures in place to protect the water network if our monitoring finds anything unusual. You can be confident that the water flowing from your taps always meets drinking water standards.

8,400 is the current population of

Warkworth and the surrounding areas.

Did you know?



By 2040 this is expected to grow to 35,000.

CONTACT US

ssues, we'd love to hear from you To get in touch, please email our communications team at communications@water.co.nz





Watercare **

WARKWORTH MATTERS



From left: Watercare stakeholder engagement manager Brent Evans, Rodney Local Board Chair Beth Houlbrooke, Watercare project manager Rory Buchanan and Watercare's water supply operations manager Privan Perera, inside the new water treatment plant at Warkworth. Currently under construction, the plant is expected to go into service at the end of the year.

Major investments for growing Warkworth

There are currently around 8,400 people living in the Warkworth area. This number is expected to more than triple by 2040 to 35,000. As the population grows, it is important we continue to provide reliable, safe and efficient water and wastewater services to the area.

The new \$16 million water treatment plant at Warkworth will supply the area with 'Aa'-graded drinking water from two secure bores instead of the Mahurangi River.

Expected to go into service at the end of the year, it is the largest water treatment plant outside of the Auckland metropolitan area. Water supply operations manager Privan Perera says it's a significant milestone for Watercare and the local community.

"The new plant is a state-of-the-art facility, with the latest technology and designed to the highest standard. It effectively doubles our treatment capacity in Warkworth and means we'll be able to cater for the area's rapidly growing population."

As with the existing plant, no fluoride will be added to the treatment process at the new plant.

The plant's staged consent allows its capacity to be increased as the populations of Warkworth and the surrounding areas grow. While

there is ample water supply for existing bore users, the effect of the bores is closely monitored according to conditions of the resource

We're also investing \$193 million in the area's wastewater network to ensure local communities continue to have reliable wastewater services that also cater for future population growth. A new wastewater treatment plant at Snells Beach will use advanced technology to produce very high-quality treated wastewater, and an upgraded ocean outfall will discharge treated wastewater about 600 metres off the coast, to the south of Martins Bay into the Hauraki Channel, instead of into Mahurangi Harbour. A new pipeline and pump stations are also planned to take wastewater from Warkworth to Snells Beach to increase the capacity of the wastewater network.

The Snells Algies area will continue to have 'Aa'-graded and compliant water supplied by bores and treated at the Snells Algies Water Treatment Plant.

For more information about our projects, visit www.watercare.co.nz and click on "Projects around Auckland".

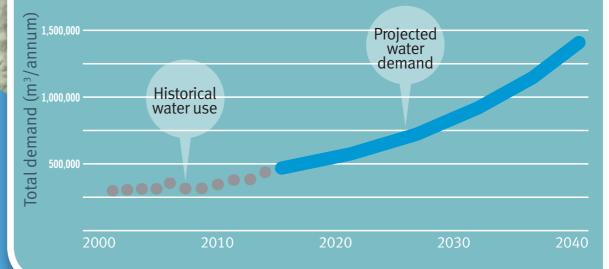


More than \$200 million is being invested in water and wastewater infrastructure in Warkworth, Snells Beach and Algies Bay. Warkworth **Water Treatment Plant** Warkworth and water supply network Treatment Warkworth and Snells New \$16m Warkworth Water Treatment Plant Supplied by two bores instead of the Mahurangi River Wastewater Highly automated with new technology, including two different technologies (chlorine and UV) for disinfecting the * Routes to be finalised. • Staged consent so the plant's capacity can be increased as the area's population (and demand) grows • Decommission the old plant on Brown Road Upgrade the area's water supply Warkworth/ **Snells Beach** wastewater infrastructure This project will be completed in stages over five to the new water six years as development takes place. treatment pl New Snells Beach Wastewater Treatment Plant at existing site • New pipeline and pump stations between Warkworth and Snells Beach Wastewater Treatment Plant (route to be finalised) • Upgraded ocean outfall (about 600 metres off the coast, to the south of Martins Bay into the Hauraki Channel) **Treated** • Close existing Warkworth Wastewater Treatment wastewater will Plant when new plant is complete no longer be million discharged into Cease discharge of treated wastewater the Mahurangi into Mahurangi Harbour with new coastal outfall

Planning for the future

The population of Warkworth and the surrounding area is expected to grow to 35,000 people by 2040. This will increase demand for drinking water, so it is important that we invest in the infrastructure now to support future growth.

Warkworth annual water demand forecast



How do bores work?

Rain soaks down into the cracks and gaps in soil, rocks and sand. We call this water 'groundwater' because it is below the surface of the ground. A bore is simply a hole drilled down to access this water. We draw the water up to the surface using a pipe and pumps.

Other communities in the Auckland region that use treated drinking water supplied from groundwater or springs are Muriwai, Algies Bay, Snells Beach, Bombay, Waiuku and Onehunga.

Did you know?

The two bores supplying the Warkworth Water Treatment Plant are between 175 and 200m deep.

