# WATER UPDATE

#### FOR HASTINGS / FLAXMERE / BRIDGE PA / HAVELOCK NORTH / PAKIPAKI

## DRINKING WATER UPDATE

The contamination of Havelock North's water last year has dramatically changed the way Hastings (and the rest of New Zealand) views the security and quality of groundwater sources used for town supplies. Water age-testing carried out by GNS Science has also contributed to our changing view. What have been, up until now, considered 'secure' aquifer sources (with water that we can use without treatment) may no longer be able to retain that status.

With new infrastructure and testing now in place to address water quality from Brookvale Bore 3, the minds of Council and our residents are turning to the wider water network and the future management of our drinking water supplies.

## HOW WE GOT HERE

A Government Inquiry into how the campylobacter which caused the outbreak of gastroenteritis in Havelock North in August got into the water is close to completion. The most probable cause has been identified through extensive scientific testing as a pond just off the nearby Mangateretere Stream. Contaminated water ponded and seeped into the aquifer through what was previously believed to be protected by a confining layer. That meant it was sucked into the water supply while Brookvale Bore 1 was in operation.

The official findings of the inquiry have not yet been published, however Council has been fully involved in the process and has been considering changes and options for the future based on lessons learned from the inquiry process, and the changes in our ground water sources that have shown up through age-testing and extensive water quality testing.

#### CHLORINATION & OTHER TREATMENT

The immediate response to the outbreak was to chlorinate the Havelock North supply and issue a Boil Water Notice. These actions immediately suppressed the contamination and gave Council the time to close down the Brookvale 1 and 2 bores and join Havelock North to the Hastings/Flaxmere supply. Since then, Council has designed and built a treatment plant for Brookvale Bore 3. The treatment plant includes filters, UV treatment and chlorination – a level of treatment normally used for supplies fed by rivers or other surface water.

At the same time, chlorination was introduced to the Hastings, Flaxmere and Pakipaki supply (also supplying Havelock North) in response to test results.



Up until August last year, Hastings was one of the few areas in the country to have a non-chlorinated, untreated water supply. Most of the New Zealand population drinks treated and chlorinated water. Chlorination is a valuable tool as it not only helps treat source water for bacteriological contamination, but it protects against network contamination from backflow or broken pipes. Had chlorine been in the water supply in August 2016, it is likely no one would have become sick.

A question frequently asked by the community is "when can chlorination be removed?". The answer to this question may depend on a number of things, including:

- The result of further water quality and water age testing;
- Decisions from the relevant health authorities;
- The outcomes of the Government Inquiry; and
- Possibly the level of other treatment the community is willing to invest in.

It may be possible to remove chlorination in the future if Council invests in UV treatment (and possibly other treatment tools) across the urban water supply network. Options are currently being investigated.

Fluoride is currently not being added to the water supply. Council staff are investigating options for adding it alongside chlorine.

Council is very keen to hear your views via the Annual Plan consultation process on the level of treatment proposed and the issue of chlorination.

Please make a formal submission at myvoicemychoice.co.nz.



### SO WHAT NOW?

With chlorination and the new treatment plant treating the Brookvale supply; it is now time to look ahead. To help with that, Council is working with the Water Safety Joint Working Group (made up of members from Hawke's Bay District Health Board and the Hastings, Napier and Hawke's Bay Regional councils), and using the services of Tonkin and Taylor (the environmental and engineering firm which discovered the cause of the contamination), an independent water safety advisor and a independent water supply advisor. Where changes Council proposes to make are not mandatory, the community will be consulted on options.

Money has been put into the 2017/18 Annual Plan (\$12 million) to pay for possible additional treatment, possible new water sources and network enhancements to make the network more resilient. Some of that money was already in the Long Term Plan budget over the next 10 years and has been brought forward.

## **•** THINGS BEING DONE

- Planning for UV treatment at Wilson Rd and the Frimley Rd bores after higher levels of 'young' water was found during testing
- Network improvements for capacity and resilience (including Te Mata Rd and Heretaunga St West mains replacement and expansion capacity)
- Enhanced water safety testing and investigations
- Engaging independent expert advisory resources to support and review investigations and options
- A joint working group formed to provide a multi-agency focus on drinking water across Hawke's Bay
- A review of water operations to address inquiry findings, shortcomings already identified, and ensure adequate skills, resourcing and systems are in place
- Reassessment of catchment areas and consideration of risks to water safety
- Further investigation into the age of the water in the aquifer

## ♦ THINGS BEING PLANNED

- Review of previous water strategies and infrastructure to inform future decisions
- Looking at alternative source options, including an entirely new water source in a different part of the aquifer
- Treatment requirements and options, including consideration of UV and filter treatment at the Eastbourne bores
- New pipes to improve how water is moved around the network

## ♦ HOW WILL THIS BE PAID FOR?

Improvements to Hastings' water supplies will be paid for by ratepayers whose properties are connected to the supply. The cost of the immediate improvements to the Hastings/Flaxmere/Bridge Pa/Havelock North/Pakipaki supplies will begin to be factored into this year's proposed Annual Plan. The first planned step is an increase of \$29 to the domestic water rate in 2017/18 (which will bring the total water rate to \$257 per year). The Long Term Plan will consider the results of investigation work and inquiry findings to set future expenditure and funding requirements.



