

## CONCERNS FROM THE MEDICAL OFFICER OF HEALTH OF THE DISTRICT HEALTH BOARD

When considering a referendum on closing a small drinking-water supply the Wairoa District Council is required to consult with the Medical Officer of Health at the District Health Board and to make their views available to the public.

Wairoa District Council consulted with Dr Nick Jones, the Medical Officer of Health for Hawke's Bay. He raised the following concerns:

- The ability of residents to afford to install household systems.**  
Council's response is that most households already have roof water systems with on-site tanks and the existing supply provides a top up to those systems
- A clear indication of the number of households affected.**  
Council has reviewed the numbers of households connected to the supply and anticipates that 61 households will be affected.
- Whether there would be a reduction in the quality of water households received.**  
Council considers that there would not be a reduction in the quality of water because the community supply becomes contaminated from time to time and most households are using a mix of roof water and the community supply.
- Would firefighting be affected.**  
Firefighting will not be affected because the existing supply will be maintained for firefighting purposes.
- Whether there would be benefits to consumers like a reduction in household rates.**  
Council cannot reduce rates because it still needs to maintain the existing supply for firefighting purposes.

## COSTS OF INSTALLING A HOUSEHOLD SUPPLY

Most residents already collect roof water for household use and the community supply only supplements this. They would not have any additional cost for the collection of water. However if their tank ran out of water in the summer months they would need to have water delivered to their house in a tanker. This could cost around \$450 per tanker load.

Houses that don't currently have a roof water collection system, would need to install a collection tank and a pressure pump. A tank could cost up to \$3000 and a pump up to \$300. The cost for a plumber to install the tank and pump could cost up to \$1000. Therefore, the cost of installing a roof water collection system could be up to \$4500 to \$5000.

This would not provide a safe potable supply. A household treatment system consisting of filters and UV light disinfection (the most common household treatment system) would cost up to \$1000 plus the cost of having it installed by a plumber.

The cost of installing a complete system of a tank, pump and treatment equipment could be up to \$7500.



Collection Tank



Pressure pump



Plumber



Filter & treatment equipment

## QUALITY AND ADEQUACY


As outlined above, the quality of any existing household supply would be similar to the quality of the existing community supply. The adequacy or quantity of any household supply is likely to be less than what is currently provided by the community supply. This is demonstrated by the current situation where many household roof water tanks are supplemented by the community supply. If household roof water tanks were not able to supply a sufficient quantity of water during summer months they would need to be replenished with tankered water.

## WHAT HAPPENS NEXT?

This information is provided to you because if Council is intending to hold a referendum on closing the Mahanga community drinking-water supply, it is required under the Local Government Act 2002 to make information about the supply available to the public in a balanced and timely manner.

## CONTACT

If you have any queries about any of the information provided above, please contact the Wairoa District Council.

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## INFORMATION FOR THE PUBLIC ON THE WAIROA DISTRICT COUNCIL'S INTENTION TO HOLD A REFERENDUM ON THE FUTURE OF THE MAHANGA DRINKING-WATER SUPPLY

*For a number of years the Wairoa District Council has been considering the best way to resolve water quality issues at the Mahanga drinking-water supply. The Government requires all water supplies that provide potable water to meet the requirements of the drinking water standards. The Mahanga supply needs to be upgraded with water treatment equipment if it is to meet the requirements.*

The issues associated with the supply were discussed at a public meeting in 2013. Then Council applied for Ministry of Health subsidy funding to upgrade the supply but was not successful.

Because no other sources of funding are available, the cost of any upgrade would need to be met by the community.

Alternatively, the Local Government Act 2002 includes a provision (section 131) which gives the Council the power to close the water supply. Council can only do this if:

-  the supply provides water to fewer than 200 permanent residents
-  it has consulted with the Medical Officer of Health
-  it has made information about the supply available to the public in a balanced and timely manner

Before Council can close a drinking-water supply, it must first:

- review the likely effect of the closure on the public health of the community and on the environment in the district.
- assess the likely capital cost and annual operating costs of an alternative household water supply if the community supply is closed down
- compare the quality and adequacy of the existing community water supply with the likely quality and adequacy of any alternative household supply

When the above has been achieved, the Council can hold a binding referendum of those connected to the supply to determine if the drinking-water supply should be closed.

This notice serves to provide information to the public about the supply and Councils intention to hold a referendum on closing the supply. The referendum will determine whether the community would prefer to retain and upgrade the supply or to have the supply closed. If the supply is closed, households would need to meet their own water requirements.

## BACKGROUND INFORMATION ABOUT THE MAHANGA DRINKING-WATER SUPPLY

The Mahanga drinking water supply provides water to 61 properties. The marae, and the Gisborne Boys High School Outdoor Education Camp in the community are not connected to the supply.



61 PROPERTIES



50 PERMANENT RESIDENTS



HOLIDAY RESIDENTS DURING SUMMER

Water is provided from two separate bores, one located in the road reserve of Blake's Approach, the other on an area of land adjacent to Blake's Approach. Each of these bores have their own reticulation network and storage tank, and are not connected at any point. These parts of the water supply are referred to as the Lower Supply and Upper Supply.

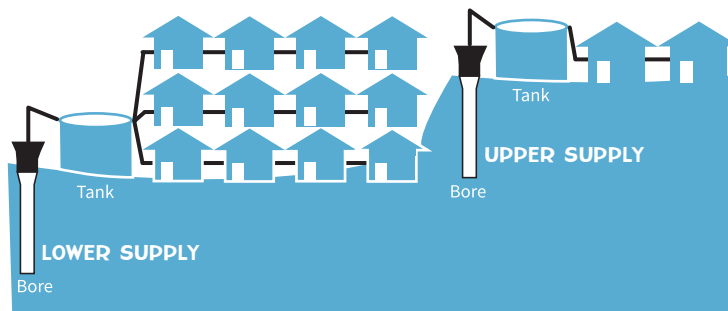
Most of the houses, which are directly connected to the Council water supply use a combination of roof collected rain water and Council supplied water.

Water from the bores is pumped to a concrete tank which holds several days supply. Water then gravity feeds to the houses.

The upper supply bore pumps water to a 25m<sup>3</sup> concrete tank that

is on an easement on private land. It supplies a small number of properties. The tank is in very poor condition.

Water quality from the bores is considered to be reasonable however some samples taken from the bore have returned positive results for E. coli indicating that the water has some level of contamination and should be treated before drinking. Consumers are advised to boil water from the supply and a reminder notice is sent to each household every six months.



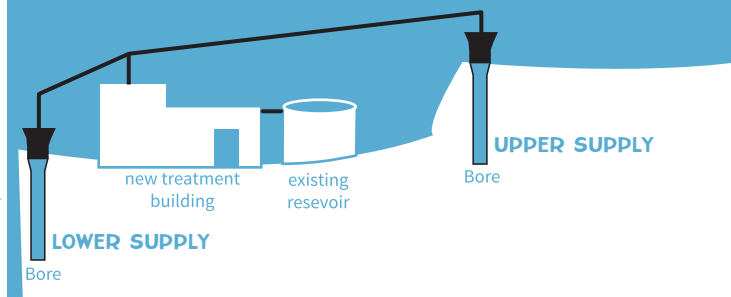
## WHY DOES COUNCIL NEED TO MAKE CHANGES TO THE MAHANGA DRINKING-WATER SUPPLY?

In 2007 the Government passed a new Act for drinking-water supplies called the Health (Drinking Water) Amendment Act 2007. It requires all supplies to 'take all practicable steps' to comply with the New Zealand drinking water standards. The Mahanga supply was required to do this by July 2016. If the Mahanga supply is to comply with the standards it will need to be upgraded and treatment equipment installed.

In 2015 Council engaged an engineering consultant to prepare a preliminary design report for the Mahanga supply. The report identified what would need to be upgraded at the supply and the cost of doing this. It proposed taking water from both existing bores to a single new treatment building, filtering and disinfecting the water to ensure that it would be safe and comply with the drinking-water standards before it was supplied to the existing reservoir. From the reservoir, it was proposed that water would gravity feed to the lower supply houses and would be pumped to the upper supply houses.

The cost of making these improvements is estimated to be \$235,000. This includes an allowance of \$35,000 to improve the reliability of the bore supplies. Council has not yet determined how this would be funded. However if it was loan funded by property owners, this would cost around \$328 per annum. If more properties were added, this figure would reduce. It is expected that annual maintenance costs associated with a proposed water supply upgrade would increase from the current \$409.10 per

annum to a maximum of \$606.10 per annum. This means property owners will be paying an extra \$525 per annum for a safe and reliable water supply.



## WHAT ARE THE OPTIONS?

During the course of discussions with the community many residents have given a clear indication that they did not want to pay to upgrade the drinking-water supply.

As the water supplier, Council is required under the Act to ensure that the supply provides potable, safe water. Therefore, the supply must be upgraded if it is to continue supplying water to the community.

Alternatively, Council can hold a referendum on closing the supply. The Council can close the supply if 75% or more of voters agree with the supply being closed.

## WHAT WOULD BE THE OUTCOMES OF CLOSING THE SUPPLY?

### Public health

Residents of Mahanga would be required to provide their own drinking water supplies. This could be done by installing a household bore or collecting water from house roofs. The current community water supply has been demonstrated to be contaminated with E. coli, an indicator of faecal contamination and consumers are advised to boil it before drinking. Household bores could be expected to provide water that was of a similar quality. Roof collected water can also be easily contaminated by birds or rodents and cannot be considered to be safe to drink without treatment, usually filtration and disinfection. Many households in Mahanga already collect roof water into an on-site tank and supplement it with the community supply.

Closing the supply is unlikely to make a significant difference to the quality of water that people consume. Council considers that there will not be any impact on public health if the supply is closed.