



# Summary

# Waimate 2020

## Executive Summary

The Local Government Act 2002 places a specific requirement on local authorities to make assessments of water and sanitary services available to communities within the district under its jurisdiction. The assessment for the Downlands Rural Water Scheme is included for the first time.

This document describes the means by which such services are sourced by residents, including the extent by which the local authority provides the services and a description of the processes involved. The document also highlights quality issues and risks associated with the services provided or indeed the absence of such services.

The main centre of population within the district of Waimate is the town of Waimate itself, housing a population of some 2700 people representing over a third of the total population of the district of around 7000. Other centres of population include the coastal townships of Glenavy, Willowbridge, Makikihi and St. Andrews.

Council operated reticulated water schemes cover part of the rural areas of the district, these incorporate outlying townships such as Glenavy and Willowbridge. There remain many farms and settlements outside these areas however, these source water from privately managed water schemes (such as the Hakataramea and Cattle Creek water supply schemes) or from private bores or watercourses.

Other properties reliant on private sources are located within townships such as Willowbridge. In these areas a connection to a public water supply is available, but this option is not always taken up due to the inability of individuals to afford the connection costs or a personal preference not to do so. These areas are not served by sewerage reticulation either and this enhances the likelihood of the contamination of water supplies to these communities. Bores have been known to run dry in such areas and the ground water has been found to be contaminated.

None of the water supplies in the district comply fully with the requirements of the NZ Drinking Water Standards. Steps are taken however to strive towards compliance with the microbiological requirements of those standards and sampling results from the urban scheme would indicate compliance although the testing regime followed and plant installed is insufficient to warrant an improvement in the grading afforded to the plant by the Ministry of Health (MOH).

There are no operational and maintenance manuals for any of the rural water schemes as yet and records of maintenance and leak repairs have been introduced with the implementation of the Bizeasset data management system within the district.

It will be noted that instances of microbiological contamination have been recorded in recent times on all schemes other than the urban supply and the Hook Waituna Rural Water Supply. No testing other than bacteriological testing has been carried out for some years on any scheme however. Now, schemes are covered within recently completed Asset Management Plans and Risk Management Plans are in preparation.

All rural water supplies are sourced from surface water courses, each is provided with disinfection by chlorination in one form or another. The schemes were set up under the Water Race Bylaws in the 1960's and their general condition in some areas is a reflection of their age.

The township of Waimate itself is served by two deep wells, the only such wells in the district. Both wells could be expected to achieve 'secure' source status under current guidelines. Well pumps deliver water direct into the urban network which dates back to the early 20th century with flows in excess of instantaneous demand being conveyed to a reservoir on Mill Road above the township.

The document identifies risks and allocates grades to each water supply in accordance with MOH publication 'How to Prepare and Develop Public Health Risk Management Plans for Drinking Water Supplies' which offers grading categories from 'low' to 'extreme'. The risk of contamination instances due to reticulation and catchment management practices and a lack of investment have been identified, and in certain areas these risks have been classified as being 'extreme'.

The Ministry of Health grading for each of the water supply schemes is given under their respective descriptions in Section 4. Clearly, considerable investment is required to raise the standards, particularly in the rural sector. There are currently proposals in place at the present time to effect improvements in order to achieve compliance with the NZ Drinking Water Standards (Aug 05) which are to become mandatory in the near future. The 'unsatisfactory – high level of risk' or 'completely unsatisfactory – very high level of risk' gradings as allocated to all the water supplies within the district and as published in MOH document 'Register of Community Drinking Water Supplies' are considered consistent with this assessment.

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Only the township of Waimate itself is provided with a reticulated sewerage network delivering flows to a waste water treatment plant. The rest of the district is reliant on individual (or in some cases communal) septic tanks, the administration of which in terms of the treatment process lies beyond the remit of the district council. Sludges from septic tanks are often discharged to land and many properties within the townships served by septic tanks are relatively small. There remains the likelihood that many disposal fields will be unable to dispose of effluent satisfactorily.

The effluent discharged from communities not afforded sewerage systems will to some extent present a risk to public health. Discharges from domestic sewage treatment systems may contain pathogenic contaminants such as pathogenic viruses and bacteria that cause disease. These contaminants as well as chemicals and nutrients may also be transported to water sources presenting further risks. ECan continue to monitor the existing field situation and are now directly involved in all new Septic Tank installations.

The sewerage reticulation network within the township of Waimate itself dates back to the 1920's. The network conveys flows to a treatment plant constructed on the outskirts of the township adjacent to a public park. Flows from the plant are stored in maturation ponds awaiting periodic discharge to land via border dyke irrigation. There are no operation and maintenance manuals for the sewerage system or the sewage treatment facility and asset management plans are being phased in.

Most of the district is covered by a Waste Management Plan. Wheelie bins or bags are available for all urban residents and wheelie bins are available and may be collected in some rural areas. A recycling collection has been introduced, serving Waimate. Refuse collected weekly and non recyclables are transferred to a landfill site at Timaru. The Council also operates a recycling centre at the Resource Recovery Park on the outskirts of the urban area. Many rural properties, even those within the refuse collection areas continue to use offal pits which require a resource consent from the regional authority.

In terms of volume, the town water supply is considered adequate for the declining population for the foreseeable future and the rural areas are also served with plentiful water to meet human demand. Much of the water delivered to the region is intended for use by stock however and this use places an ever increasing burden on the supplies. The demand for stock water lies outside the scope of this assessment, but it is noted that once stock is introduced to the land the first call on the available water will be by the stock. Should supplies be inadequate at any time to cope with this demand, the delivery to many dwellings

will be affected. Recent enhancements to most rural water supply schemes has increased delivery volumes however.