Memo

File No:	47 03 25
Date:	12 November 2025
To:	Waitoa Water Community Panel
From:	Nicki Wilson, Senior Groundwater Scientist
Subject:	Considerations for bore water supplies

1 Introduction

This memo provides some information for consideration by the Waitoa Water Community Panel in relation to future community water supply. A request was made to Waikato Regional Council via Matamata-Piako District Council to provide the Panel with some information on bore self-supply, in particular on the following topics:

- What's involved in the consenting process (if applicable) and any reporting
- What bores are already in the area
- How aquifers work and the health/abundance of the aquifers under Waitoa
- The quality of the water in the aquifers under Waitoa, if known
- Anything else that would be relevant for a group considering this as an option

2 Consenting process

Installing a bore would require a Bore Installation Consent from Waikato Regional Council (WRC). This then gives you permission to drill and install a bore. You are required to submit information to WRC about the bore at the completion of drilling (i.e. the drillers log).

You would need to engage a Drilling Company to install the bore for you.

You are permitted to take groundwater for an individual's reasonable domestic and stock water requirements plus an additional 1.5 m^3/day (site less than 1 hectare) or 15 m^3/day (site more than 1 hectare) without needing to apply for a resource consent to take water. If you intend to take more than this amount, then you would need to apply for a resource consent to take groundwater. The proposed groundwater take would then be assessed by council.

Refer Rules 3.8.4.7 (Drilling) and 3.3.4.12 (permitted activity groundwater take) of the Waikato Regional Plan.

3 Requirements under the Water Services Act

You need to be aware of Taumata Arowai's (TA's) requirements for drinking water suppliers. If you are supplying over 25 people, then you will be considered a small networked supply and need to

register with TA and have responsibilities under the Water Services Act. There are also requirements if the supply is for a public, commercial or community facility even if supplying fewer than 25 people. Domestic self-supplies and shared domestic supplies (multiple households but total population less than 25 people) have no legal requirement to register with Taumata Arowai, prepare a Drinking Water Safety Plan, or comply with Drinking Water Quality Assurance Rules, but must still take reasonable steps to ensure water is safe (recommended, not enforced).

4 Considerations for private self-supply from a bore[1]

If you have your own private water source, the responsibility for maintenance and testing of drinking water rests with you. It's a good idea to carry our regular analysis on your water supply. Make sure your bore is in good working order and is protected from contaminants. This is crucial to protecting your family and those living on your property from sickness.

There are some important steps to look after your bore:

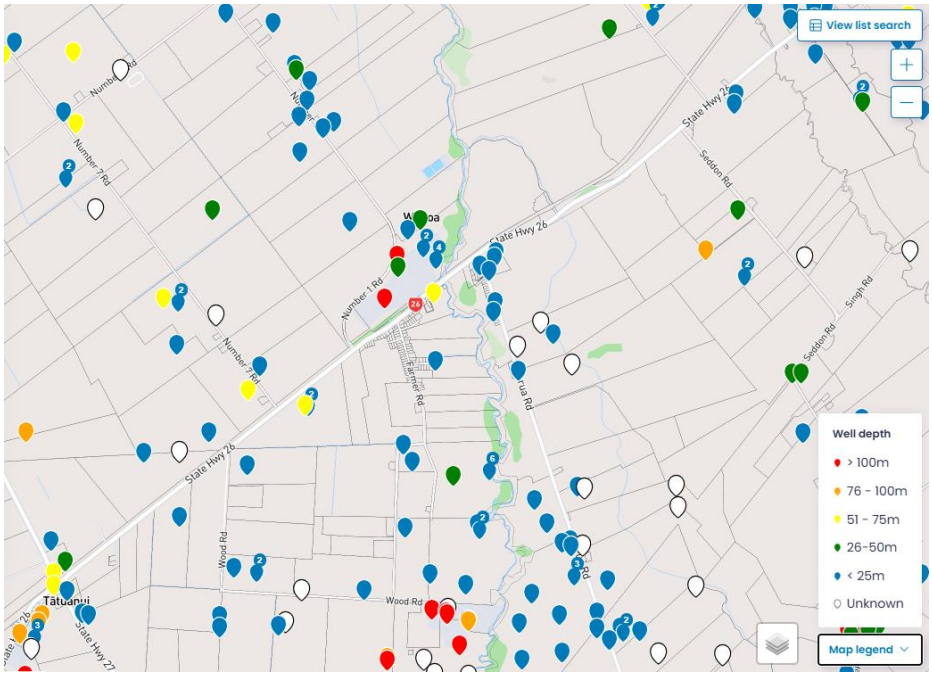
1. **Keep it tidy:** Make sure your bore is fenced off from stock (at least 5 metres), is located well away from areas where fertiliser, pesticides or chemicals are used, and is as far away as practical from potential sources of contamination such as compost, rubbish, septic tanks, offal holes, and effluent disposal areas, as contaminants infiltrate into groundwater through the soil/land surface.
2. **Keep it sealed:** To prevent stormwater and contaminants entering the water supply, the top of the borehead should be elevated and securely sealed. The bore casing should extend at least 0.5m above the ground and ideally be surrounded by a concrete apron. Don't forget a backflow preventer to stop contaminants siphoning back into your well.
3. **Know your flow:** Flooding situation? Heavy rain or snow? Power cut for an extended amount of time? Make sure you boil your water and don't forget to let others on your water supply know to do the same.

You need to consider where to locate your bore, this should be well away from your septic tank, far enough away from neighbouring bores so that you are not affecting their supply, and far enough away from surface water bodies so that you are not affecting their flow.

5 What bores are already in the area

Below is a map of existing bores in the Waitoa area. Bore depths in this area range from 4 m to over 200m deep. You can view the bores in your area and their details on Wells Aotearoa website: https://wellsnz.teurukahika.nz/

[1] Information in this section has been sourced from Environment Canterbury (Have you checked your bore lately? | Environment Canterbury). It also applies in the Waikato.



6 Aquifers in the Waitoa Area

Aquifers in the Waitoa area are located in lenses of sands, gravels and reworked ignimbrite interbedded with silts and peats. The close proximity of the Kerepehi Fault to Waitoa means there is a conduit giving rise to some localised, low level hydrothermal character in the deeper groundwater.

There is sufficient groundwater volume at Waitoa for community water supply. Water quality is a constraint that would require careful well design and likely also treatment. Groundwater high in iron, manganese and silica may present an issue in this area. Iron is not of health concern but can stain laundry, sinks etc. and may give the water a metallic taste. Likewise, manganese can lead to staining and taste issues. At high levels, manganese can be a health concern. Silica can cause scaling and chalky deposits on pipes, appliances, glassware etc., but is not of health concern.

Options exist for both shallow, smaller (e.g. domestic) supply and deeper, larger community supply in the Waitoa area. Proper consideration of design and cost would require expert contracted advice.

The primary contaminants of concern for private bore supplies in the Waitoa area include:

- Bacteria and viruses (primarily from faecal material from grazing animals or septic systems; or from farm effluent spread on the land)
- Nitrate (from Farming activities, wastewater disposal and landfills)
- Iron, manganese and silica (naturally occurring in deeper wells)