

Te Ara O Hei- "The Path of Hei" (Coromandel Walks) - Project Fact Sheet # 11

WATER AND WASTEWATER IN HAHEI

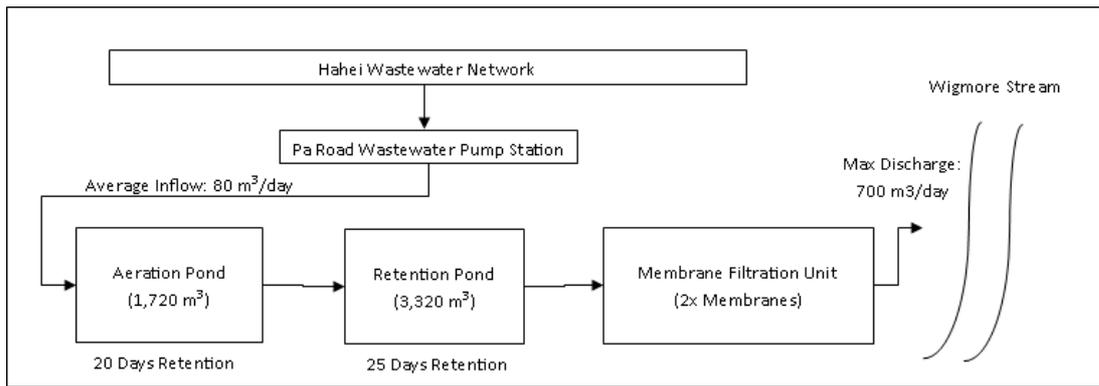


What is the current capacity of the Hahei Waste Water Treatment Plant and what future capacity does it have to accommodate growth/plan changes?

The Hahei wastewater network services the green area highlighted in figure 1. There are currently 139 properties serviced in this area. The wastewater treatment plant has approximately 25% of its remaining capacity available for further connections. To accommodate for future growth, projects are in place to increase this capacity (see future plans below).

What treatment does the Hahei Waste Water Treatment Plant undertake and what is the discharge consent into the Wigmore Stream?

The wastewater treatment process is shown in figure 2 above. The reticulation network is delivered to a pump station on Pa Road where it is pumped to the wastewater treatment plant. Wastewater enters the plant into an aeration pond where it is processed for roughly 20 days. After passing through the aeration pond, the wastewater enters the retention pond. After approximately 30 - 40 days in the retention pond, the effluent is treated by pumping it through a Membrane Filtration Unit (MFU) to improve the wastewater quality. Treated effluent from the membrane plant is discharged to Wigmore Stream under resource consent 117888. Discharge into the stream is processed through a simple perforated pipe diffuser in the stream bed. TCDC is in the process of renewing the discharge consent into the Wigmore Stream with WRC. The current consent provides for discharge into the stream within strict environmental parameters. This is common and accepted practice for many rural towns and villages across New Zealand to ensure water quality levels remain within acceptable guidelines. The Waste Water Treatment Plant in Hahei has been operating within the acceptable discharge standards set by the Waikato Regional Council.



Are there any future plans to upgrade the Waste Water Treatment Plant in Hahei?

Through its 2015-2025 Long Term Plan, TCDC has allocated \$131,000 in 2015/16 financial year for the renewal of the discharge consent into the Wigmore Stream. Remaining budget has been carried forward for completion in 2016-17.

TCDC has also allocated \$350,000 for the 2017/2018 year for the Hahei Treatment Plant Upgrade (Electrical & Inlet Screen) to increase the treatment plant's capacity.

WATER QUALITY OF THE WIGMORE STREAM

What is the current status of the Wigmore stream water quality?

Waikato Regional Council conducted a one off survey of 18 coastal stream mouths in the Coromandel area during January and February 2015. This follows the discontinuation of the survey since 2009, however through the WRC Long Term Plan discussions in 2015, the WRC decided to reinvest in a coastal monitoring programme.

Wigmore stream was selected based on its popularity and the community previously raising concerns regarding water quality.

The survey looked at measures such as nutrient loads and turbidity as indicators of ecological health, as well as the presence of ecoli bacteria that can potentially affect human health if present in sufficient quantities. Results were compared to relevant guidelines for ecological health and contact recreation standards for people.

Water is susceptible to contaminants (excess nutrients and faecal contaminants) that are washed from the surrounding land, particularly 24-48 hours after heavy rainfall.

The Wigmore stream was within the recreational water quality guideline value most of the time, however, exceeded the guideline value 2 of the 8 times it was sampled following heavy rainfall and high tides in the area. WRC have stated that this is commonly due to higher than usual concentrations of nutrients and contaminants washed down from the catchment due to surrounding land use practices (farming etc).

Ruminant animals (Cows and Sheep) were one of the most common sources of faecal contamination. Possum and gull sources were also seen at most locations.

WRC is planning to conduct further investigations in these water types around the Coromandel area during 2016/17. They intend to concentrate their efforts on four of the Coromandel Peninsula's streams, that most exceeded recreational water quality guidelines. The purpose of this work will be to develop our understanding of weather conditions and contamination sources that may impact water quality in these water types. This work does not include Wigmore Stream, as it was deemed to be one of the safer streams in terms of water quality.

