

# PŌHUTUKAWA COAST

## MATTERS



From left, Franklin Local Board members Malcolm Bell and Angela Fulljames take a tour of the Beachlands Wastewater Treatment Plant with Watercare's Regional Wastewater Treatment Plant Manager Jonathan Piggot.

## Supporting local growth

**Over the past 10 years, we've been upgrading and expanding your local network to ensure it has the capacity to service the community's expected growth.**

We took over the existing wastewater network from the former Manukau City Council in 2010. In 2014, we spent almost \$8 million expanding and upgrading it, putting in a wastewater pipeline along Jack Lachlan Drive and a pump station to cater for the wastewater expected from new developments in that area. We also upgraded the pump station at Te Puru, adding extra storage so that we can regulate the flow of wastewater during periods of heavy rain.

Today, we service around 7,500 people in Beachlands, Maraetai and Pine Harbour. We base this number on the flow into the Beachlands Wastewater Treatment Plant on a normal day with no rain (approximately 1,200,000 litres) and the estimated amount of water used by people on tank water (150 litres per person per day).

"We're confident the existing network has capacity to service current and future growth," network manager Simon Porter says. "Auckland Council's Unitary Plan determines the areas of growth. We then work closely with Council to ensure this growth can be accommodated by aligning investment in infrastructure, and developing and implementing strategies to manage wastewater efficiently in the long term."

### Pipe break on Okaroro Drive

On a recent evening, one of our maintenance crews urgently attended a call-out near the Beachlands Wastewater Treatment Plant.

They found diluted wastewater overflowing onto the roadside from a break in the main pipe to the treatment plant. Acting quickly, our team isolated the overflow so that it could not flow into Te Puru Stream and they used a sucker truck to clean up the area.

Because there have been a number of breaks in this pipeline in the past year or so, we're investigating whether there is an underlying problem.

We are alerted to most events as our network is closely monitored, but with this kind of break we rely on people phoning us to report them.

If you see a wastewater overflow, phone us on (09) 442 2222 straight away – we're available 24 hours a day, 7 days a week. Once we know about it, we can send a crew out.

# Your wastewater network...

We operate the public wastewater network. It is made up of local wastewater pipes, pump stations, rising mains (pressurised pipes) and a wastewater treatment plant.

## Te Puru Pump Station and Storage Tank

The majority of the wastewater in the local area is pumped through this pump station. It was upgraded in 2014, when we added a storage tank to increase its wet weather capacity.

Our wastewater network is resilient and has capacity to handle most storm events, however the Tasman Tempest weather bomb in March was so extreme it caused extensive flooding and resulted in the pump station overflowing.

While such weather events are thankfully rare, stormwater entering the wastewater system can overwhelm the capacity of the network. To find out what we are doing and how you can help, see the back page.



## Te Puru Stream

Once the treated wastewater has undergone the final stage of the process, UV disinfection, it is discharged onto a land disposal area, which then soaks into Te Puru Stream. We monitor the water quality of the stream as a condition of our Resource Consent.



## Kahawairahi Drive Pump Station

This pump station was built in 2014 to cater for the wastewater expected from new developments.

We also built an additional wastewater pipeline under Jack Lachlan Drive to cater for planned growth in residential housing.



## Beachlands Wastewater Treatment Plant

Here, wastewater from Beachlands, Maraetai and Pine Harbour is treated to a high standard. We monitor the plant's performance and production 24 hours a day, seven days a week.

The surrounding land is owned by us and leased out to local farmers.



Key:

- Pump stations
- Beachlands Wastewater Treatment Plant
- Main wastewater pipes

FAST FACTS

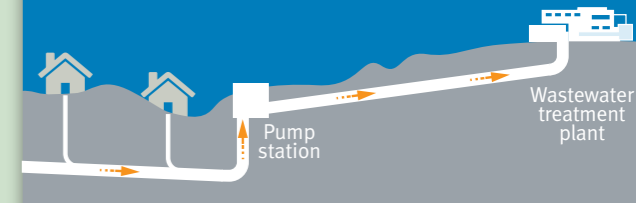
# 13

## WASTEWATER PUMP STATIONS SERVICE

### BEACHLANDS, MARAETAI AND PINE HARBOUR.

## What does a pump station do?

Auckland's wastewater network is designed to make the most of gravity. When pipes run downhill, gravity ensures the wastewater flows easily. However, because we can't keep digging pipes deeper and deeper, there are parts of the network where gravity alone is not enough to move the wastewater. Pump stations increase the pressure in the pipes. We use them at low points in the network so that wastewater can be lifted to a higher point and continue its journey under gravity until it reaches another pump station or a treatment plant. Wastewater is gravity-fed from most properties in Beachlands, Maraetai and Pine Harbour into the main wastewater pipelines. The 13 pump stations then push wastewater up to the Beachlands Wastewater Treatment Plant.



- 12 years old
- Services 7,500 people
- 1.12m litres daily output
- Can be upgraded as needed for future growth

# Reducing local overflows

In Beachlands, Maraetai and Pine Harbour there are separate wastewater and stormwater networks, as well as open drains that channel stormwater and rain tank spillage into natural watercourses.

Most of the time, this system works effectively. Wastewater flows from your property into public wastewater pipes, which carry it to be treated at the wastewater treatment plant. Overflows from water tanks and road run-off drain directly into public stormwater pipes and watercourses, which empty into streams and the sea at selected points.

However, during very heavy rainfall, a lot of extra water can drain from buildings, roads and rain tanks. If this enters the wastewater system, it can overwhelm the network's capacity and cause overflows. When this happens, wastewater diluted with stormwater is released into the environment.

We call these wet-weather overflows, because they occur during periods of heavy rain.

Since the beginning of the year, there have been several instances of extremely heavy rainfall, resulting in wet-weather overflows in your community.

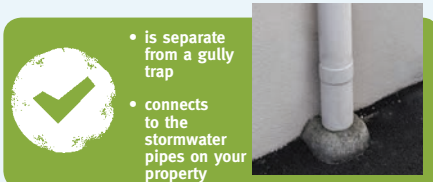
## What can you do?

You can help to reduce wet-weather overflows by checking that:

- stormwater connections and any rain tank overflow systems are not connected to your gully trap, which is for wastewater only
- your gully trap is above ground level. If your gully trap is the same level as the ground, rain or spillage from a rain tank can flow into it during wet weather and enter the wastewater network.

In heavy rain, stormwater from a single house is equivalent to the wastewater generated by more than 40 households; so, removing even a few non-compliant connections can make a difference.

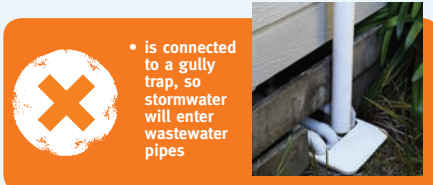
### A compliant downpipe:



### A compliant gully trap:



### A non-compliant downpipe:



### A non-compliant gully trap:



In addition, a local resident told us that some people turn on taps to ensure their rain tank doesn't spill during heavy rain. Please don't do this. The water running from taps goes down the sink and straight into the wastewater network, adding extra water to the network at a time when it will be reaching capacity.

## What are we doing?

As part of our work to reduce wet-weather overflows, in the coming months we'll be inspecting public and private wastewater pipes in the local area, as water in the ground can seep into old, leaky or damaged pipes.

You'll receive more information about our visit closer to the time.



*In some cases we use non-toxic smoke to pinpoint places where stormwater is entering our wastewater network – like the leaky pipe in the ground, pictured above.*

# Meeting



## Watercare's Community Liaison Group

**Date:** Wednesday  
23 August 2017

**Time:** 6.00pm

**Venue:** Beachlands Baptist Church, 59 Third View Avenue, Beachlands

Come along to learn how we are responding to growth in the area. You'll be able to speak to several Watercare employees, including specialists on the area's wastewater network and wastewater treatment plant.

Before connecting an area to the water supply network, we consider factors such as feasibility, distance and demand. As the Beachlands, Maraetai and Pine Harbour region is considered to have an overall low demand for a reticulated water supply, there are currently no plans to connect the area to the water network.

## CONTACT US

*Pōhutukawa Coast Matters* is your newsletter.

If you would like to talk to us about any stories from this edition or your ideas for future issues, we'd love to hear from you.

To get in touch, please phone our communications team on (09) 442 2222 or email [info@water.co.nz](mailto:info@water.co.nz).