



FEBRUARY 2008

Waiwhetu Stream Clean-up Trial

Introduction

Work is about to start on the trial clean-up of the Waiwhetu Stream. The trial is taking place to test the clean-up process to ensure that it will work the way we want it to, as well as refining the process and getting a more accurate picture of the cost of the full clean-up.

The process will result in the removal of the contaminated sediment from the stream bed and its safe disposal to the Silverstream landfill.

This is the first time this innovative clean-up process has been used in New Zealand. It has been successfully used in the United States on a river in Ohio of about the same size and with about the same amount of contamination. The clean-up process there was approved by the US Environmental Protection Agency.

The trial is expected to cost \$500,000 and is jointly funded by Greater Wellington, Hutt City Council and the Ministry for the Environment.

When is the trial happening?

The trial is anticipated to start in the week beginning 18 February 2008. However this may change depending on the weather or resource consent conditions. The trial is planned to take about four weeks, though this is also dependant on the weather and resource consent conditions.

What's happening?

- An 80 metre stretch of the Waiwhetu Stream, just downstream of the Bell Road bridge, will be blocked off with sheet pile walls.
- The stream flow will be pumped around this area and back into the stream after the last sheet pile wall.
- Silt curtains will be placed across the stream, upstream of the first sheet pile wall, and downstream of the last sheet pile wall. These will catch any sediment that is stirred up while the sheet piles are installed.

- The water in the active work area will be pumped out into the settlement area. See overleaf for a diagram of the site.
- The water will stay in the settlement area while the sediment settles to the bottom and the clean water will flow into the stream over a low weir at the top of the sheet pile wall.
- In the active work area the contaminated sediments will be excavated from the stream bed and into sealed trucks to be safely disposed of at Silverstream landfill.

What will I see?

We have deliberately chosen the trial site to minimise the impact on the local residents, however you may still see many aspects to the trial. The main ones being:

- Trees and other vegetation being cut down and cleared away – this is for the trucks and diggers to have clear access to the stream. We will attempt to minimise the removal of vegetation and only remove as much as we have to for ease of access.
- A security fence will be erected around the work site – this is for health and safety reasons as well as security of the site.
- A site office, plant storage area, and site carpark will be created on the work site.
- Two small causeways will be built out from the stream bank for the crane to install the sheet piles
- Machinery will be sitting on the stream bed excavating out the contaminated sediment
- Sealed trucks will be loaded up with contaminated sediment onsite, and then travel to the landfill where the contaminated sediment will be safely disposed of.

How will this affect me?

Hopefully very little, but you may experience:

- Traffic delays
- Noise from diggers, trucks and water pumps,
- Slight vibrations from the installation of the sheet pile walls,
- Slight odour from the exposed stream bed.

Your understanding for this important project is appreciated.

What are the risks?

Flooding

We have deliberately timed the works to coincide with the historically lowest annual median flows in the river. We will constantly be monitoring the weather forecasts and if a large rainfall is predicted during the works, there is an Emergency Response Plan that will be activated to reduce the flooding risk to the local area. More pumps can be brought in to deal with a larger water flow, and in the worst case scenario, the sheet pile walls will be removed to allow the stream to flow in its normal course.

Release of contaminants into the stream

By using two separate work areas as well as silt curtains, the release of contaminated sediments into the stream will be minimised. To confirm this, we will regularly monitor the water quality downstream from the works.

Transporting the contaminated sediment

The contaminated sediment will be transported to the landfill in sealed trucks. Trucks will also be washed down to ensure no contaminants are accidentally released into the community.

Why does the stream have to be cleaned up?

The Waiwhetu Stream has a legacy of contaminated sediment from undiluted and untreated industrial discharges being pumped into the stream up until 1978 when a trade waste sewer was installed. Heavy metals such as lead, zinc, copper and cadmium as well as pesticides are found in the contaminated sediment.

There is a risk that if the sediments are not removed that a major event such as a large flood or an earthquake could cause the contaminated sediments to end up in Wellington harbour causing significant environmental harm.

The stream also has to be cleaned up before Greater Wellington can implement flood protection measures to protect the local community from another devastating flood like the one in 2004.

The ultimate aim of the Waiwhetu Project is to have a safe healthy stream that enhances the local community environment, where residents can live alongside the stream without risk to their health or safety.

For more information go to www.gw.govt.nz/waiwhetucleanup

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