

WET WEATHER OVERFLOWS FROM THE UPPER HUTT, HUTT, WELLINGTON & PORIRUA CITY COUNCIL WASTEWATER NETWORKS

Resource Consent Applications Summary



1.0 OVERVIEW

On behalf of Upper Hutt City Council, Hutt City Council, Porirua City Council and Wellington City Council, Wellington Water is applying to the Greater Wellington Regional Council for a resource consents for the overflows that occur during wet weather from the wastewater networks.

Three applications have been lodged: the first covering the Upper Hutt and Hutt City Council networks; the second covering the Porirua City Council network and those parts of the Wellington City network which drain to the Porirua Wastewater Treatment Plant; and the third covering the remainder of the Wellington City Council network.

The applications seek consent for a 35-year period, subject to:

- Progressively reducing the frequency of the wet weather overflows
- Collaborating with Mana Whenua to determine priorities and overflow reduction plans
- Implementing a community engagement framework for ongoing information sharing over the duration of the consent
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- Regular checks on and reporting about how successful the reduction plans have been
- Regularly reviewing options that would satisfy the Zero Overflow Aspirations of Mana Whenua and our communities, including new technology that becomes available.

This document provides a summary of our applications. You can find significant further details in the main body of each application.

2.0 WET WEATHER OVERFLOWS

Wet weather overflows occur from our wastewater networks when they become overloaded with rainwater and groundwater. Rainwater can enter our wastewater networks because of aging or broken pipes and manholes, incorrectly connected down pipes and flooding of gully traps. Groundwater can enter our networks via aging or broken pipes. While our wastewater networks are designed to carry some excess water, eventually excess flow will exceed network capacity. At these times overflows of wastewater diluted by rainwater and groundwater will occur.

Overflows can occur from either deliberately constructed overflow points (e.g. at pump stations) or from uncontrolled overflow points (e.g. manhole lids). The overflows can discharge directly from wastewater pipes into the environment, e.g. adjoining land, a stream or harbour, or into the stormwater network before being discharged to our waterbodies.



Figure 2-1: View of an uncontrolled overflow from a manhole into a nearby kerb and channel

Monitoring in recent years has identified that these overflows, in combination with other contaminant sources¹, are creating adverse effects on the ecology of our water bodies and on public health risks. We also know that wastewater overflows are contrary to the values of Mana Whenua and the general community.

There are many reported overflow events each year. Some of these events involve overflows at several different points at the same time. For example, a storm in northern Wellington and Porirua in early December 2019 resulted in overflows at 15 pump stations. It's likely that there would have been more overflows in that storm that Wellington Water was unaware of. In addition, we know that climate change and our ageing networks will overtime cause more overflows to occur unless we intervene to improve our networks.

3.0 OUR PROPOSAL

We plan to address this significant problem by making progressive improvements over the next 35 years through a strategic management plan (Figure 3-1) that has four main elements to it.

¹ One of these other contaminant sources is our stormwater system which collects run-off from our roofs, paved surfaces and roads. We have also lodged a companion plan and resource consent application to better manage the water quality effects of stormwater, while maintaining the important stormwater flood management function. Given the overlap between these applications, we anticipate that the Regional Council may invite submissions on both applications at the same time.



Figure 3-1: Key Components of the Strategic Management Plan

At its heart is our commitment to work towards Te Mana o te Wai. Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of water protects the health and well-being of the wider environment and the community.

To deliver Te Mana o Te Wai we will seek to achieve the following consent objectives:

1. The frequency of wet weather overflow events is progressively reduced.
2. Partnerships are developed with Mana Whenua for the oversight, planning and implementation of the resource consent for wet weather overflows.
3. The reduction of wet weather overflows is prioritised in sub-catchments where the overflows are having an adverse effect on Mana Whenua sites of significance.
4. Wet Weather Overflows caused by issues in the public networks do not enter habitable dwellings or private property.

To oversee the implementation of these objectives we propose to establish a Collaborative Committee with Mana Whenua. We intend to work with Mana Whenua to agree the functions of the Collaborative Committee and anticipate that the functions will include determining the 'containment standard' for each wastewater network. A containment standard is the annual frequency of wet weather overflow events that will be targeted under this consent². We acknowledge that ideally there would be no overflows. However, at this point, due to the limits of our existing networks and the very substantial cost that would be involved, we do not believe that a no overflow containment standard is possible.

² Achievement of the containment standard will be determined using modelling that considers weather patterns over a long time period. It will not be based on the record of overflows each year given that the level of rainfall fluctuates significantly from year to year.

In addition to setting the containment standard, the functions of the Committee would include prioritising the sub-catchments³ for improvement and developing the plans to do so. The Committee's decisions would be informed by community groups that will be set up under this consent. We propose to establish a global community group to inform the Collaborative Committee's strategic decision making, as well as local groups to inform decision making in each wastewater network sub-catchment.

The key mechanisms that we would use to plan and deliver on the objectives of this consent are the Strategic Reduction Plan and the Sub-catchment Reduction Plans.

A Strategic Reduction Plan would apply across each of the three consent areas, i.e. one would apply across Upper Hutt and Hutt City, one would apply across Porirua and Wellington's northern suburbs, and one would apply across the remainder of Wellington City. The Strategic Reduction Plans would set the big picture for the consent, e.g. the containment standard and the prioritisation of sub-catchments. We propose to review and update each Strategic Reduction Plan every six years.

We would also develop a Sub-catchment Reduction Plan for each of the 35 wastewater network sub-catchments (or for smaller geographic areas³) within the Upper Hutt, Hutt, Porirua and Wellington City Council areas. These sub-catchment plans would be prepared progressively based on the priorities set by the Collaborative Committee and would set out how wet weather overflows will be reduced in that sub-catchment to meet the containment standard. As the Sub-catchment Reduction Plans would be prepared progressively, some parts of the wastewater networks will see improvement sooner than other parts. However, improvement would be implemented in all sub-catchments within 35 years.

Each Sub-catchment Reduction Plan would have a list of infrastructure interventions such as increased pipe capacity, storage tanks and inflow and infiltration⁴ programmes as well as policy and regulatory solutions. Implementation of each Sub-catchment Reduction Plan would take several years, depending on the scale of investment required, and would likely come at a significant cost. The scale and timing of the investment would need to consider not only the extent of the wastewater overflow problem but also other investment requirements, such as the need to improve to our stormwater system.

Under the consent we propose to deliver on these commitments through a series of detailed consent conditions. We have included draft conditions in the Appendices to our applications and you can provide formal feedback on these during the submission process that will be run by the Regional Council, which we expect will be in the second half of 2024.

³ Some of our sub-catchments are quite large. We're therefore proposing to provide scope for the Collaborative Committee to recommend that Sub-catchment Reduction Plans be developed for smaller geographic areas, as appropriate.

⁴ Inflow and infiltration ('I&I') refers to rainwater which finds its way into the wastewater network through poorly maintained or mis-connected stormwater or wastewater fittings and groundwater infiltration into wastewater pipes and manholes. I&I programmes seek to reduce the additional flows from these sources through physical investigations into the state of the public and private parts of the wastewater system in a local area.