



Flood Protection Works

Waiwhetu Stream

Large areas of Hutt City are contained within two relatively narrow valleys – Hutt and Wainuiomata – with rivers and streams draining water from the surrounding hills and ranges out to the sea.

In most wet weather situations, surface water is drained away from commercial and residential properties through a substantial network of stormwater pipes and drains. However, during extremely heavy rainfall, the capacity of the network to carry this stormwater can be exceeded, and this leads to flooding and ponding in low-lying areas.

The Hutt River still represents the major flood risk to Hutt City with the potential for damage of up to \$700m. In recent years the Council has worked with the Greater Wellington Regional Council, which has overall responsibility for the Hutt River, to complete the floodplain management plan. An \$80m major upgrade is underway.

There is a perception that we have been experiencing more frequent extreme weather events in recent years. Hutt City Council recognises that this is of concern to residents and businesses and so has put in place both short and long-term strategies to improve the capacity of the stormwater system.

Hutt City's stormwater renewal and upgrade programme

From around 1990, Council began a programme to progressively replace and upgrade the entire stormwater system as pipes reached the end of their useful lives. The programme uses much higher stormwater design standards than those that in the past were generally accepted as best practice.

For example, whereas the old system was built to cope with one in five year weather events, the new standard requires that the system be capable of withstanding one-in-ten year and one-in-fifty year standards, depending on the level of risk in particular areas. It is also important to note that alternative flow paths are now required in all new developments, to safely carry away floodwater when the capacity of the stormwater pipes is exceeded.

Waiwhetu catchment

The Waiwhetu Stream is the responsibility of the Greater Wellington Regional Council from the end of the concrete channelling in Naenae down to where the stream meets the Hutt River at Port Road.

Hutt City Council is responsible for the section of Waiwhetu stream above the end of the concrete channel in Naenae and for the Awamutu Stream. Both authorities are working together to reduce the risk of future flooding.

Two extreme rainfall events in February and August 2004 caused flooding in the Waiwhetu area. The water levels in February 2004 were at the highest level ever recorded.

The Waiwhetu Stream is the main drainage channel for much of the eastern side of the Hutt Valley from Naenae in the north, to the stream outlet into the Hutt River just south of the Hutt River Estuary (Waione Street) Bridge. The Awamutu Stream joins the Waiwhetu Stream at Hutt Park, just upstream of the Seaview Road Bridge.

Short-term strategies for Waiwhetu area

In the short term the Council is increasing both stormwater pipeline and intake capacity as part of a programme dealing with flooding 'hotspots'. This programme has been accelerated since the two major flood events that occurred in 2004.

The programme includes a range of activities, such as improvements to existing drains, installation of additional drains, improvements to watercourses and stormwater intakes.

Longer-term strategies

Long-term solutions to flooding in Waiwhetu involve careful analysis and detailed technical advice.

Greater Wellington Regional Council has commenced a "Waiwhetu Stream Floodplain Management Study". This will set out how the flooding issues associated with the Waiwhetu Stream can most effectively be approached. The Greater Wellington Regional Council will consider an initial report in late 2004.

As part of this study the Greater Wellington Regional Council and Hutt City Council have commissioned a detailed aerial survey of the Waiwhetu Stream catchment. This will produce data on the catchment to enable the development of a high quality computer model.

The computer model will enable the effectiveness of a range of different options for addressing the flood risk, to be assessed.

The aerial survey is due in November 2004 and the computer model will be completed in mid-2005.

The study will present a range of issues, design options and recommendations to protect against future flooding. These will be the subject of consultation with the community prior to resource consent applications being lodged and the commencement of physical works.

For further information:

Phone: 570 6666 or
http://www.huttcity.info/council/services/emo/bad_flood.html

Hutt River Floodplain Management Plan is available from the Greater Wellington Regional Council,
Phone: 0800 496 734 or
www.wrc.govt.nz/fp/hutt/htm