



# *Flood Protection Works* *Wainuiomata*

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.

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.

## *Wainuiomata catchment*

The Wainuiomata River and Black Creek are the main drainage channels for much of Wainuiomata. Changes in weather patterns have seen an increased incidence of severe rainfall events in Wainuiomata in recent times. Two extreme rainfall events in February and August 2004 caused extensive flooding in Wainuiomata.

Flooding and ponding can also be a result of stormwater drains being unable to discharge into Black Creek when it has high water levels.

Past design of stormwater drains has meant the pipe capacity can be exceeded in extreme rainfall events, and in many places, there has been inadequate provision for secondary flowpaths for water.

## *Short-term strategies for Wainuiomata*

Hutt City Council is increasing both storm-water 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 involves a variety of activities, such as improvements to existing drains, installation of additional drains, improvements to watercourses and stormwater intakes.

Projects begun or planned for 2004/05 include:

- \$30,000 to protect properties from stream erosion in Wetherby Grove.
- \$100,000 for the installation of larger stormwater pipes in Donnelly Drive.

## *Longer-term strategies for Wainuiomata*

As a longer term project, \$85,000 is being invested in a study of Black Creek with the intention of mitigating flooding problems in the entire catchment. This is a major study and will scope and design future flood mitigation work.

Council has recognised the concerns of residents and is making a serious commitment to overcoming flooding problems in the catchment.

Substantial funding is being made available to undertake future works arising from the Black Creek study, with \$250,000 budgeted in 2004/2005, \$1,250,000 in 2005/06 and a further \$1,000,000 in 2006/07.

### *For further information:*

**Phone:** 570 6666 or  
[http://www.huttcity.info/council/services/emo/bad\\_flood.html](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](http://www.wrc.govt.nz/fp/hutt/htm)