

## What you can do if you intend to develop, build or renovate?

Consider the following actions if you are building or renovating in a flood or erosion-prone area.

- Always speak to Upper Hutt City Council (Telephone 04 527 2169 - ask for environmental consents) before you start building.
- Development should avoid the area affected by flood or erosion as a first choice. However if this is not possible, such as for an existing dwelling, Upper Hutt City Council or Greater Wellington can provide you with site-specific advice.
- Raise your building platform or floor level. We recommend the underside of the floor joists or concrete slab should be at least clear of the 1 in 100 year return period flood level. Remember that the design flood event could be exceeded.
- Consider access issues and provide flood free evacuation routes. No one wants to be caught in a flood event with no escape routes. Elevating access routes is not recommended as they can act as barriers to flood waters.

## What you need to do if you live in this area

**Know your risk:** Find your property on the flood hazard map. The Hutt Valley Emergency Management Office can give you information about how to reduce the effects of flooding. This information could cover evacuation plans, how to protect items in your home by raising them above floor level, and how you can reduce the risk of future flooding to your home.

**Be prepared:** You will need to have:

- **A Household Emergency Plan** that will help you and your household plan for when disaster strikes.
- **Emergency Survival Items** such as food, water, clothing and medical supplies for you and your family. You will need enough for at least 3 days.
- **A Getaway Kit** of essential emergency and medical items if you need to be evacuated.

For more information on preparing for an emergency please contact the Hutt Valley Emergency Management Office.

T (04) 570 6666

W [www.huttcity.govt.nz/Council-Services/Emergency-Management](http://www.huttcity.govt.nz/Council-Services/Emergency-Management)

## Where to from here

This project is jointly funded by Upper Hutt City Council and Greater Wellington. Phase 2 is expected to be completed in approximately 2 years. Phase 2 will involve working with the community on what are the best options for flood mitigation for the Pinehaven Stream Catchment.



## Flood Hazard Information Sheet 6 Pinehaven Stream

JUNE 2010

This information sheet covers the current flood hazard extent for the Pinehaven Stream Catchment that was identified in Phase 1 of the joint Upper Hutt City Council and Greater Wellington study. These maps may potentially change in the future, depending on the results of phase 2 of this investigation which is looking at potential flood mitigation and management options. This study is expected to be completed in approximately two years.

One of the council's key roles is to help communities protect themselves from the effects of river and stream flooding. To do this, our communities need to understand the risk from flooding and have affordable and acceptable management measures in place. We also want to ensure that inappropriate developments don't create new problems.

The study, currently being undertaken on the Pinehaven Stream is looking to better understand the flood risk and to look at the best means to manage this flood risk in the future. This project is being undertaken in two phases. The first phase which has just been completed involved identifying the flood risks which exist in the catchment over a range of different sized flood events. The second phase of this project will involve using this information to help plan future development and flood risk management measures in the catchment.

Identifying hazards, such as those caused by river and stream flooding, is the responsibility of local and territorial authorities under the Resource Management Act.

## The Pinehaven Catchment

The Pinehaven Stream Catchment has an area of about 4.5 square kilometres and is outlined in yellow in Figure 1.

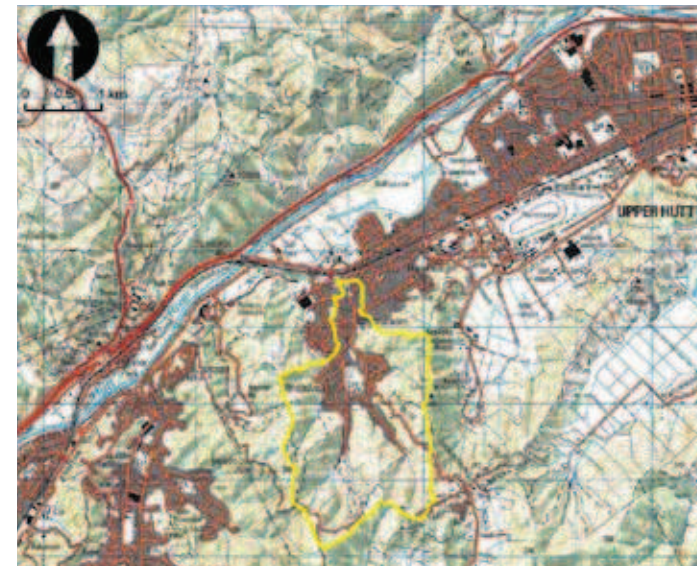


Figure 1 – Pinehaven Stream Catchment

## How do Greater Wellington and Upper Hutt manage the Pinehaven Stream?

The Pinehaven Stream is jointly administered by Greater Wellington and Upper Hutt City. Greater Wellington manages the reach from the Whitemans Valley Road Culvert to the Pinehaven Reserve and Upper Hutt manages the reaches upstream from the reserve. Maintenance activities include removing obstacles from the channel (such as trees). Erosion repair is the responsibility of the landowner, although we are happy to provide advice on request.

## How we measure floods

The amount of water flowing in a river is measured by a unit called a cumec (cubic metre per second), which is a measure of how much water flows past a given point every second.

The frequency of the flood is measured by how often a flood of a particular size is likely to happen such as a 1 in 5, 1 in 50 or 1 in 100 year return period event. A 100 year return period flood event has a 1% chance of being equalled or exceeded in any year. On average, one of these events will occur every 100 years based on past records.

But don't be misled into thinking that a 100 year return period flood can only happen once in a hundred years – two large floods could happen only days apart at any time.

### Floods in the Pinehaven Stream

The Pinehaven Stream has a history of flooding, especially in the lower reaches, where the capacity of the stream channel has been greatly restricted. Even in more frequent events (i.e. less than 1 in 10 year return period floods) the stream is known to overtop its banks in certain areas.

### Why this information is useful

The hazards associated with flooding and the natural evolution of the floodplain should be considered when new development is being considered on the floodplain. This approach is useful as it helps to:

- Minimise the future damage from flood events to property;
- Identify any potential threat to life;
- Allow evaluation of any impact on the river environment; and
- Alert people to any potential flood and erosion risk.

### What it means

The hazard assessment shows areas along the Pinehaven Stream and floodplain that are affected by the 100 year return period flood event. The maps covering the main channels of the Pinehaven Stream are shown in figure 2.

The maps include an allowance for climate change which is based on the latest recommendations by the Ministry for the Environment.

### Will this information affect my property value or insurance?

We have been advised by Quotable Value that valuations follow the market rather than set the market. They would not expect to discount a valuation without there being market data to support that approach, and this was not the case from their observations of the market at the time of their valuations. This advice was based on work they have recently undertaken in the Mangaroa Valley which is in a similar situation.

Many areas in the Wellington Region are subject to flood risk. We advise that any known facts relating to the physical risk to a property should be disclosed to an insurer. This includes whether the property is exposed to any particular hazard by virtue of its location (e.g. flood). An insurer requires these facts when evaluating whether or not to underwrite the risk and, if so, on what terms.

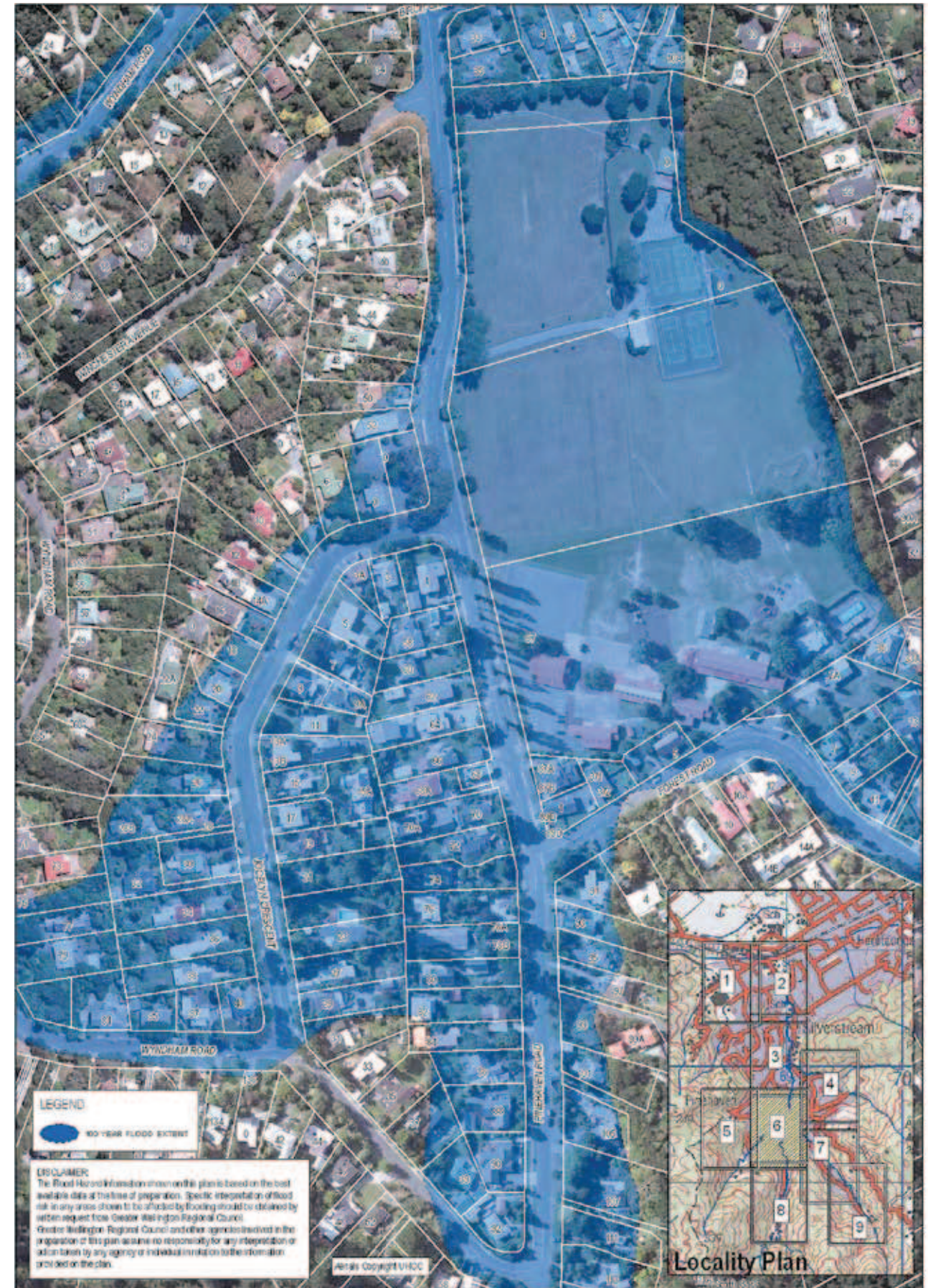


Figure 2  
PINEHAVEN STREAM - Flood Hazard