

# Hertfordshire Local Flood Risk Management Strategy: non-technical Summary



## Introduction

Flooding in Hertfordshire can be caused by overflowing rivers, surface water run-off or rising groundwater. Prolonged rainfall can cause problems but short, intense showers can also have an impact and may lead to 'flash flooding'. Flooding events can be caused by a single source or several, meaning they can often have a knock-on effect.

### **Lead Local Flood Authority (LLFA)**

*A county or unitary authority responsible for taking the lead on local flood risk management matters*

Until recently, there has not been a joined-up approach to dealing with flood risk in this country. After the summer 2007 floods, new powers and duties were created so that the risk of flooding could be better managed at a county level.

Hertfordshire County Council is now the Lead Local Flood Authority (LLFA) for the county, with the responsibility to co-ordinate the management of flood risk across Hertfordshire.

## Types of flooding in Hertfordshire

### **Fluvial flooding**

This occurs when a watercourse (usually a river or stream) becomes full, causing water to spill out of the channel and onto the surrounding land, known as the floodplain. Many floodplains are undeveloped or part of farmland but some are within existing built-up areas.



### **Surface water flooding**

This occurs when rainfall is unable to drain away through traditional means such as drainage systems or soaking into the ground. This usually happens when the ground is saturated and drains are full. Surface water flooding can also occur when the rainfall is so heavy that it cannot drain away quickly enough.

### **Groundwater flooding**

This can occur when water underground rises and reaches the ground level. It is usually caused by long and extended heavy rainfall, although it can also be as a result of reducing abstraction, underground leaks or displaced underground flows.

### **Sewer flooding**

This is caused when a blockage occurs or when excess surface water enters the drainage network, exceeding the available capacity. This usually happens during periods of very heavy rainfall when the drainage network becomes overwhelmed.

### **Canal flooding**

This is caused by the overtopping or breach of the canal network. There are a number of canals within Hertfordshire, including the Grand Union Canal, the Lee Navigation and the Stort Navigation.

### **Reservoir flooding**

This is caused when a reservoir structure is overtopped or fails due to damage or collapse of the reservoir structure.



## **Managing flood risk in Hertfordshire**

Hertfordshire County Council is working with the Environment Agency, district councils and other local partners to manage flood risk in Hertfordshire. The Environment Agency is responsible for managing flooding from main rivers and reservoirs, whilst the county council is responsible for managing local sources of flooding from surface run off and groundwater. District councils have powers to manage flooding from ordinary watercourses.

### **Main river**

*A watercourse which has been designated main river status and is marked as such on the statutory main river map*

### **Ordinary watercourse**

*A river, stream, ditch, cut, sluice or non-public sewer which is not classified as a main river*

In managing local flood risk, Hertfordshire County Council and partners will aim to:

- Help communities understand the risks of flooding and enable them to become involved in making decisions to manage flood risk in their area;
- Ensure that no new flood risk is created (i.e. through new development) and where possible, make use of opportunities to reduce local flood risk;
- Use a reasonable approach to managing flood risk so that resources are targeted to areas where they will have the greatest effect.

Hertfordshire County Council has put together a work programme for the next four years, which includes working with local partners where appropriate:

#### **Structures and Features**

*Can be natural or man-made and can include garden walls, bridges, embankments, raised areas of land, etc. Once a structure or feature has been designated, the owner will need consent from the responsible authority (the LLFA in most cases) to alter, remove or replace it.*

- Put together and maintain an online register of designated 'Structures and Features' which may have a significant effect on local flood risk;
- Develop a data sharing protocol for all flood risk information relating to Hertfordshire so there is a joined-up approach to dealing with local flood risk;
- All local flood risk data will be available online for everyone to view;

#### **Strategic Flood Risk Assessments (SFRAs)**

*Provides information on areas at risk from all sources of flooding, used to provide an evidence base for flood risk and planning decisions*

- Review SFRAs to assess how the improving evidence base for flooding from all sources can be used in spatial planning and development control;
- Develop a risk based categorisation (i.e. high, medium and low risk) of all mapped ordinary watercourses to inform inspection and enforcement;

#### **Surface Water Management Plans (SWMPs)**

*Assesses surface water flooding within a given area and outlines the preferred approach to managing that risk*

- Implement an inspection regime for ordinary watercourses;
- Develop SWMPs based on the ten district authority boundaries;

#### **Sustainable Drainage Systems (SuDS)**

*Methods for draining and storing surface water in a sustainable way, designed to mimic natural drainage processes, providing multiple environmental benefits*

- Establish a formal partnership arrangement with relevant authorities for managing flood risk;
- Establish a SuDS Approval Body (SAB) to operate in Hertfordshire to deal with major planning applications which require drainage approval.

#### **SuDS Approval Body (SAB)**

*Once Schedule 3 of the Flood and Water Management Act 2010 commences, all LLFAs will need to establish a SuDS Approval Body (SAB) for their area. This role means Hertfordshire County Council will have a duty to:*

- *Approve drainage systems before construction begins, according to new Ministerial National SuDS Standards;*
- *Adopt and maintain approved SuDS that serve more than one property.*

## ***How structures and features will be designated***

Any structure or feature that has a significant effect on local flood risk will be placed on the public register. The decision for which structures and features should be on the register will be made by the LLFA, together with the relevant RMAs and the owner of the structure or feature. We will work with the RMAs to develop a criteria for designation, updating it when necessary.

### ***Risk Management Authorities (RMAs)***

*As defined under the Flood and Water Management Act 2010 as LLFAs, the Environment Agency, district councils (where there is no unitary authority), internal drainage boards, water companies and highways authorities*

To assess whether a structure or feature is significant, an evaluation will be done based on risk calculated from the likelihood of something happening in combination with the severity of the outcome.

The evaluation will consider impacts on local housing, businesses, the environment, and highway and rail networks, as well as consequences for vulnerable groups and individuals or where a large proportion of a community is affected.

The register will initially hold information on known structures which may have a positive or negative effect on local flood risk. The register is expected to improve as SWMPs are researched or flood investigations are carried out. The ownership and condition of a structure or feature will also be recorded on the register.

## ***How we record and investigate flood events***

All flooding events reported to the LLFA will be recorded. An investigation will be carried out where there is uncertainty as to the source of the flooding and the organisation with primary responsibility for resolving it. Results of investigations will be published and added to the flood risk database, which will be made publicly available online. All cases of internal domestic flooding will be recorded and a basic investigation carried out.

A more detailed investigation will be undertaken where any of the following criteria are met:

- Where internal flooding has occurred at a property on more than one occasion in a ten year period;
- Where internal flooding of five or more properties has occurred during one flooding incident;
- Where internal flooding of a business property has occurred during one flooding incident;
- Where external flooding of land adjacent to a property has occurred more than five times in a ten year period;
- Where a critical service has been affected by flooding;
- Where roads and railways have been impassable for over ten hours;
- Where flooding potentially posed immediate, direct and real risk to life.

## ***How to report flood incidents in Hertfordshire***

If you are aware of a flood from one of the following sources you should report it to the responsible authority:

<b>Flood type</b>	<b>Responsible authority</b>
Flood emergency	If flooding is causing a risk to life and/or property ring 999 or look at our emergencies webpage: <a href="http://www.hertsdirect.org/contact/emergencies/">http://www.hertsdirect.org/contact/emergencies/</a>
Flooding from roads	HCC, Highways/Roads and Environment: <a href="http://www.hertsdirect.org/highwayfaults">www.hertsdirect.org/highwayfaults</a>
Flooding from sewers	The relevant water and sewerage companies for Hertfordshire:  Thames Water: 0845 9200 800  Anglian Water: 08457 145 145
Flooding from private drains	Private drains are the responsibility of the homeowner/occupier. Your local water company or drainage contractors will fix the damage for a fee.
Flooding from burst water main	The water supply companies for Hertfordshire:  Affinity: 0845 782 3333  Thames Water: 0845 9200 800  Anglian Water: 08457 145 145
Flooding from a river	Environment Agency Floodline: 0845 988 1188
Flooding in your home	Any flood damage in a home is the responsibility of the homeowner/occupier. If the flooding is from one of the sources above (except private drains) then you should contact the relevant organisation.
Surface water flooding from an unidentified source	HCC General enquiries: 0300 123 4040

To find out your local water company please visit:

<http://www.ofwat.gov.uk/consumerissues/watercompanies/map/>



<http://www.hertsdirect.org/services/envplan/water/floods/>