

Addresses at risk of flooding

Indicator

Addresses at risk of flooding

Status



The combined performance of fluvial and surface water flooding is poor. There is not yet any data for comparison, so the direction of travel is unknown this year. Within this combined indicator, there is relatively good performance for fluvial flooding and average performance for surface water flooding (again, no data for comparison is yet available to suggest direction of travel).

Overview

Flooding is considered to be a major issue for Worcestershire. Over the years, floods have occurred as a result of rivers such as the Severn, Avon and Teme bursting their banks and through surface water flooding as a result of intense rainfall.

Information relating to the number of addresses in Worcestershire at risk from fluvial flooding and surface water flooding is provided through the Environment Agency. This data covers residential and non-residential addresses in Worcestershire.

In Worcestershire, approximately 10% of the land area is at risk of fluvial flooding. In the 2006 State of the Environment update, the number of properties at risk of fluvial flooding was around 4000. This figure has now increased.

As the climate is predicted to change and bring with it an increased frequency and intensity of extreme weather events such as heavy rainfall, it is likely Worcestershire will see more flooding incidents.

Following the introduction of the Flood and Water Management Act ("the Act") in 2010, Worcestershire County Council was named as a Lead Local Flood Authority, thus having increased responsibility for managing flood risk in the area. The Act requires development of a strategy for managing flood risk and requires increased working between authorities with flood responsibilities.

Performance

The data provided by the Environment Agency showing flood risk has been mapped against address points for Worcestershire. As of this year, data on surface water flooding has also been provided.

Worcestershire currently has 257,759 addresses, including domestic and commercial properties. Compared with 2010, the number of addresses has increased by over 4000. By district, Wychavon has the largest proportion of addresses in the County (21%). Malvern Hills District has the smallest percentage of the total addresses (13%) (figure 1). For 2011, 4.3% of Worcestershire addresses were at risk of fluvial flooding (table 1), indicating no change from 2010.

Graph 1: Percentage of addresses in each district in 2011.

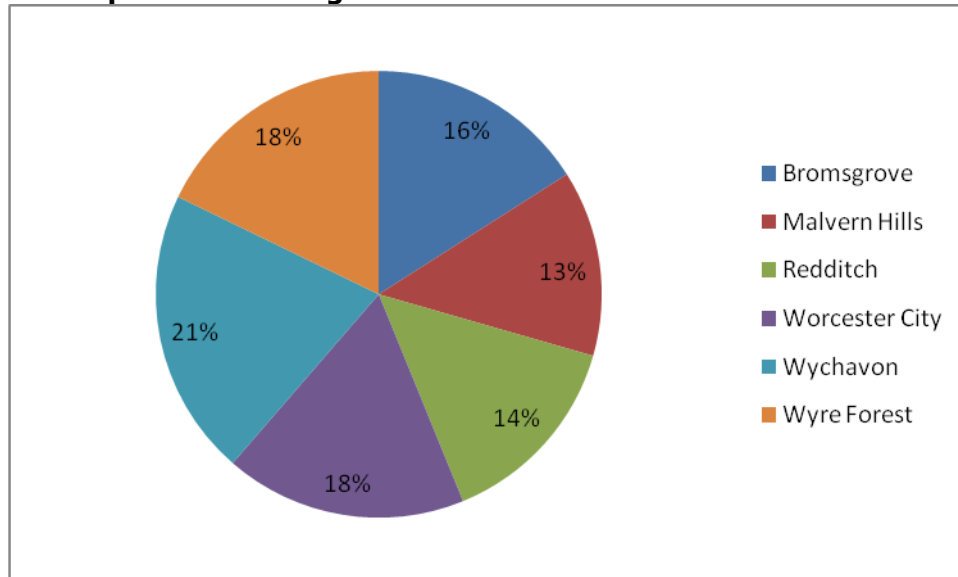


Table 1: Number of addresses at risk of fluvial flooding for 2010 and 2011.

	Addresses at risk 2010	Addresses at risk 2011
1 in 1000 year flood	11,100	11,100

Surface water flooding

Following the introduction of the Flood and Water Management Act 2010, surface water flooding has now been mapped. Currently, 7.8% of addresses in Worcestershire are at risk of surface water flooding. As Lead Local Flood Authority, Worcestershire County Council will be preparing Surface Water Management plans. The figure for the addresses at risk of surface water flooding may change once the plans are completed and more detail is available.

Combined, there are 11% of addresses in Worcestershire at risk of surface water or fluvial flooding.

Geographical context

In England and Wales, 9% of people live or work in properties at risk of flooding. It is estimated that in the West Midlands, 6.5% of land has a 1% chance of flooding in any one year. This puts around 4% of properties in the region at risk of flooding. Around 80,000 of these properties at risk are thought to be residential ([Environment Agency, 2011](#)).

Comparing the West Midlands with the East Midlands we see that a higher proportion of land in the East Midlands (17.5%) has a 1% chance of flooding in any one year. This puts around 12% of the properties in the East Midlands at risk of flooding, the majority of which (200,000) are residential ([Environment Agency¹, 2011](#)). The East Midlands therefore has a far higher figure for properties at risk of flooding compared with the West Midlands.

3% of properties in the North East region are at risk of flooding, with around 6% of the land being at risk ([Environment Agency, 2009](#)). This is lower than West Midlands figures. The South East region records around 25% of properties in the area to be at risk of flooding ([Environment Agency, 2010](#)).

Actions

In Response to the Pitt Review following the summer flooding of July 2007, the West Mercia Local Resilience Forum set up a Worcestershire Severe Weather Group. A Strategic Flood Risk Management Group and Land Drainage Partnership have also been set up under the leadership of Worcestershire County Council. Funding has been secured to aid improvement works to local drainage systems to alleviate surface water flooding issues.

Multi-agency flood plans for all Worcestershire districts are now in place. Worcestershire County Council, as Lead Local Flood Authority, will have added responsibility and powers for co-ordinating flood risk management response. Surface water flooding maps have been produced and plans are currently under development for surface water management in Worcestershire. The Flood and Water Management Act 2010 will enable better communication and liaison between organisations with flood management functions.

Alternative bus timetables are activated for flooded routes across the county to allow public transport to continue.

Flood alleviation measures are continuing to be installed on site to support new school development across Worcestershire. Flood alleviation at a school site can also benefit the local community by storing water and releasing it slowly to the storm drains, thus reducing surface water in nearby residential areas. The use of swales to store water on site can benefit the children's learning and support the curriculum.

Previous flood alleviation schemes have proven successful in protecting homes. A £6 million flood alleviation scheme completed in 2003 to protect 180 properties in Kidderminster was successful in protecting the town from flooding in July 2007. The system stores water upstream of the town in the 700,000m³ reservoir of Puxton marshes. Later, the water is slowly released when river levels drop.

Further information

For further information about locations at risk of flooding view the [Environment Agency Flood Maps](#).

The West Mercia Local Resilience Forum [flooding risk registers](#) are also available to view.

The [Flood and Water Management Act 2010](#) details the new flooding responsibilities given to Lead Local Flood Authorities and what will be required under the Act.

More information on water issues in Worcestershire over the coming years can be found in the ['Planning for Water'](#) technical research paper.