

Flood risk management: the last ten years

Below is a summary of some of the key activities to manage flood risk over the last decade. It highlights some key points in certain areas – for more detailed information on these and other activities, please refer to our report “*Flooding in England – A National Assessment of Flood Risk*”

Flood defence asset improvements to reduce the probability of flooding.

Between 2003-04 and 2007-08, flood defence improvements delivered by the Environment Agency, Local Authorities and Internal Drainage Boards reduced the risk of flooding to over 176,000 households, comfortably exceeding Government targets set over this period. In the 5 years prior to this, Environment Agency projects reduced the risk of flooding to 84,000 households.

Projects delivered in the past decade will deliver significant economic benefits over time: around £8 of long term economic damage will be avoided for every £1 invested. On average, for every 1,000 households benefiting from increased protection, around 750 commercial properties also benefited.

Existing defences have also prevented major economic damages every year. In 2001 the existing asset base was estimated to prevent an average £2.7bn per year in damages.

This scale of benefit is particularly apparent during major flood events; for example, in Autumn 2000, 280,000 properties are estimated to have been prevented from flooding, and a further 100,000 were protected during Summer 2007.

There are 24,000 miles of flood defences, and 46,000 flood defence structures. The recorded quantity of defences has more than doubled since 2001, partly due to the transfer of 1,700 watercourses from Local Authority to Environment Agency control between 2004 and 2006.

Despite this increased management burden, and although assets transferred to Environment Agency control have been in relatively poorer condition, the overall condition of assets has remained stable. This is partly due to better information and better management, with the proportion of total maintenance spend invested in the highest risk assets increasing from 55% to 75% since 2007.

Major flood events, during which assets have been tested to their limit, demonstrate that this overall condition is fit for purpose. Less than 0.2 per cent of the man-made defences and assets that were tested during the summer 2007 floods actually failed. Experience from nationwide flood events, in 1998 and 2000, suggests that less than 1% of flooding is due to failure of flood defence assets.

Other programmes to reduce the impacts of flooding

Significant progress has also been made to prevent inappropriate development on the floodplain. The introduction of Planning Policy Statement 25 in 2006, made the Environment Agency a statutory consultee on flood risk. In 2001, less than 65% of planning applications where the Environment Agency lodged an objection on the grounds of flood risk, were amended or refused in line with this advice. By 2008, this had increased to over 95%.

Improved flood warnings have also reduced the impacts of flooding. In 2000, less than 20% of residents in Flood Warning Areas were able to receive a flood warning. Today, this figure is over 60%, equating to over 1.3 million households and businesses, and the quality of flood warning services has improved markedly. Varying local procedures have been superseded by national campaigns and consistent, simple flood warning codes. The Floodline Warnings Direct service began in 2005 and now has over 430,000 customers (England and Wales).