

## Flood vulnerability and urban resilience: a real-time study of local recovery following the floods of June 2007 in Hull

Project Summary SC080008/S1

The flooding that took place during summer 2007 exposed the vulnerability of urban communities. A new report explores the experiences of people trying to recover from a flood, based on a study of residents in Hull who were severely affected by the 2007 floods.



Hull, summer 2007

Severe flooding in the UK in 2007 highlighted the need to help residents reduce the impacts of flooding and improve the way in which organisations such as the Environment Agency and local authorities can help people recover more effectively.

This project, carried out by Lancaster University and funded by the Environment Agency, Engineering and Physical Sciences Research Council and Economic and Social Research Council, used diaries, interviews and group discussions over an 18-month period to explore 44 residents' experiences of flood recovery. These methods were adapted successfully from a study of community recovery following the 2001 foot-and-mouth disease outbreak Cumbria in (see www.footandmouthstudy.org.uk). Interviews were also carried out with 18 frontline workers who were involved in flood recovery as part of their job.

The study found that it is the recovery process – rather than the flood itself – that is most difficult for residents deal with. This is largely due to a 'recovery gap' which emerges during the longer process of recovery, at the point where contingency arrangements provided to the affected community by the local authority diminish and where less well-defined services provided by the private sector (such as insurance and repair work) begin. In this gap, residents must manage their own recovery and coordinate the actions of the different private and public sector organisations involved.

Such project management is both time-consuming and stressful. It is made more challenging by the fact that it involves new kinds of skills and expertise – for example, learning to make a major insurance claim and finding ways to prevent poor workmanship within the home. Crucially, this must be done at the same time as having to deal with everyday tasks such as cooking, washing and commuting to work or school – many of which became more difficult as a result of displacement into temporary accommodation in different parts of the city.

The challenges of flood recovery can be particularly intense for more vulnerable residents. This report found that vulnerability is hard to predict with reference to predefined groups, as it is the specific interaction of factors operating within a person's life which determines how and when they may become vulnerable. People's vulnerability can also change over time or take longer to emerge, such as a person's ability to access affordable insurance. However, this study identified specific difficulties associated with private tenants, council tenants and older people which may make them more vulnerable to floods.

The recovery process itself can generate new forms of vulnerability. The report found that the way people are dealt with by various agencies after a flood affects their long-term recovery. Many diarists coped well with initial problems brought by the floods, only to find their stress levels rising due to their treatment by private and public sector organisations involved in the recovery. Far from showing a steady improvement, the study found that the process of flood recovery is punctuated by a series of 'highs' and 'lows' which are closely tied to how a person is treated by builders, insurers and so on. This recovery process cannot be separated from other issues in a person's life, such as work stresses, illness, family celebrations and relationship problems. Flood recovery does not end when people move back into their homes, nor do things go back fully to normal because there are aspects of everyday life which are fundamentally changed – for better and for worse.

Finally, people's sense of the future was also affected by their experiences of flood recovery. For some, this meant experiencing anxiety every time it rained and a feeling of disillusionment towards the bodies that they perceived to be responsible for the floods. However, for others, there was a new desire to develop resilience within their home and to engage in debates about public participation and local knowledge in how the built environment is managed.

This report will help the Environment Agency to work with other organisations and industries, for example in influencing others to make repair works on homes more resilient to future flooding.

The report will also help staff who work with communities at flood risk to understand how people feel after a flood and ensure that communications from the Environment Agency are sensitive to the problems that people face.

This summary relates to information from project SC080008, further details are available at the following source:

http://www.lec.lancs.ac.uk/cswm/hfp

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This project was commissioned by the Environment Agency's Evidence Directorate, as part of the joint Environment Agency/Defra Flood and Coastal Erosion Risk Management Research and Development Programme.

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