

Preparing for floods

Policy implications

- The timeliness and degree of detail for flood information need to improve. This could be addressed through a two-fold approach: the development of a crowdsourcing technology to capture local flood data in real-time at the sub-postcode level; and the capture of local knowledge about how water flows in the local topography.
- Generic flood education is unlikely to be effective at a local level; instead a tailored approach should take into account prior flood experience.
- The direct and indirect reputational damage to local areas caused by flooding should be mitigated through 'open for business' promotional campaigns at both the local and national level.
- Differences in the capacity of individuals and communities to cope with flooding need to be recognised. There is a need for local healthcare initiatives to reduce the emotional and physical impacts of flooding upon vulnerable householders.
- Flood management responsibilities need to be more clearly defined and better understood by all groups involved. Additionally, there needs to be improved alignment between expertise, responsibility and resource.
- Training and support infrastructure should be developed at the national level to address the physical and psychological wellbeing of emergency responders, both during and after flood events.

Overview

Estimates suggest that more than five million people within two million homes and businesses in the UK are currently at risk from flooding, and that this number is expected to rise significantly. Floods of recent years have severely tested the technical, political and social infrastructure for flood management across large parts of the UK, and provided a unique opportunity to study in real-time the factors affecting flood preparedness.

The research project *The Summer After the Floods* explored the factors that enabled or inhibited flood preparedness as events unfolded in the aftermath of the 2013/14 winter floods – examining how businesses and communities recover after flooding and prepare for the threat of future floods.

The project brings together experts in business and management, resilience, human geography and hydrology to compare the recovery and future preparedness of four diverse UK locations affected by the floods. The locations were selected to represent different types of flooding – ie surface and ground water, rural and urban areas, and different levels of prior experience of flooding.

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Key findings

- Flood information provided to households, businesses and emergency planners is currently too slow and too generic. Sub-postcode level information is required but is not currently widely available. Additionally, local knowledge about how to assess flood risk is being lost.
- Prior experience of flooding leads, in general, to improved preparedness. However, historic flood experience may in some cases undermine preparedness, as it can lead to inaccurate assumptions about the location, type, extent and duration of future flood events.
- Flood-affected areas are perceived as physically tainted or 'closed for business', and this reputational effect results in significant and long-lasting economic damage.
- Indirect flood impacts have been underestimated and underexplored. For example, negative reputational effects extend to households and businesses that were not directly affected by flooding, but were situated within flood-affected areas.
- Communities differ markedly in their expectations of local and national government support in preventing and responding to floods – associated with perceived injustices among flood-affected communities.
- There is a lack of information about the experiences and needs of hard-to-reach individuals and communities, and about the emotional implications of flooding more generally.
- There is a lack of operational clarity as to the role, reach and responsibility of key stakeholders within flood-affected areas. Resources do not always follow responsibilities, and this has led to gaps in delivery.
- Flood events, particularly those lasting more than five days, place emergency responders under significant and sustained physical and emotional stress that undermines preparedness.

BRIEF DESCRIPTION OF THE PROJECT

The ESRC-funded pilot urgency project *The Summer After the Floods* explores the drivers of flood preparedness for individuals, businesses and communities, studying processes of flood recovery and future preparedness at four flood-affected sites in 'real time', and evaluating the intended and unintended impacts of policy responses.

The Summer After the Floods: a real-time examination of the social, economic and environmental dimensions of flood recovery and resilience

Web: www.birmingham.ac.uk/research/activity/water/projects/esrc-floods/index.aspx

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The Economic and Social Research Council is the UK's leading agency for research funding and training in economic and social sciences.

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