

Executive Summary

Background

During August 2007, Sir Michael Pitt was asked by ministers to carry out a review of the flood-related emergencies which occurred during the summer of 2007. This is the interim report of the Review. It is being published now to achieve three objectives:

- to identify issues which need urgent action;
- to set out the direction for the remainder of the Review; and
- to provide a document for consultation before the final report is published next summer.

The floods during June and July 2007 were a wake-up call. The three months from May to July were the wettest since records began and the events that followed have been linked to the deaths of 13 people. They also resulted in damage to approximately 48,000 homes and 7,000 businesses. Power and water supplies were lost, railway lines, eight motorways and many other roads were closed and large parts of five counties and four cities were brought to a standstill. From an emergency response standpoint, this was a new level of challenge. The flooding triggered a series of emergencies which stretched local resources to the limit.

Conversations with victims illustrated the scale of distress and human misery experienced by many people. Even considering the extraordinary degree of disruption caused by the floods, the country was fortunate that the impact was not much more severe. There were several near disasters of an even greater magnitude. While the scale of loss and damage was massive, the crisis would have been worse had it not been for the dedication, quick thinking and effective action of those involved in the rescue and recovery operation.

Flood risk is here to stay. The Review recognises the findings of other reports, such as Stern and Foresight, which predict climatic change and state that this country can expect more extreme weather, with periods of intensive rainfall. The Review proposes that the country should confront these mounting challenges and adapt accordingly, recognising that this process of adaptation will take place over a generation. The impact of the floods and the high level of risk involved could have been significantly reduced with stronger local leadership of flood risk management, clarification of roles, more effective cooperation between responsible organisations, better protection of infrastructure and wider and deeper public engagement.

Given the severity of the emergencies this summer and the risks we face in future, the over-riding purpose of the Pitt Review is to learn lessons from the floods of 2007 and to bring forward recommendations that will help the country adapt and deal more effectively with future flooding incidents.

The findings

The Report contains a total of 15 recommendations and 72 interim conclusions. They are strategic in nature but with implications for every locality in the country. The Report also considers one or two of the 'myths' surrounding flooding. These include strongly held views about standards of waterway maintenance and the belief that some communities were deliberately allowed to flood to reduce the impact on places further downstream.

Chapters 1 and 2 provide the context for the Review, describing the severity of the emergencies and their wider social and economic impacts. They summarise the events of June and July and the effects the floods had on individuals, their families, businesses and communities. They are drawn from social research commissioned specifically for the Review, published in full as a supporting document to this Interim Report.

Climate change and the risk of flooding are discussed in **Chapter 3**. Ideally, experts would be able to accurately forecast bad weather and predict well in advance which properties will flood even more effectively than they already do. Doing so would give the emergency services and others more time to respond and to make the right decisions in a crisis. In practice the distribution, timing and intensity of rainfall and the dynamics of water flow once rain hits the ground are notoriously complex to model. Also, the nature of flooding is changing. In the past, considerable attention has been paid to the risks of coastal and river flooding. However, the greater intensity of rainfall and increasing urbanisation are leading to more flash floods caused by water running off the surface of the land. River, surface water and groundwater flooding all took place this summer, adding to the complications.

During the emergencies, the Met Office and the Environment Agency worked well together, but the limitations of some existing processes, together with technical limitations of flood prediction, meant that many property owners received warnings after their property had already flooded or not at all. Research into flood prediction is advancing and we believe this should be a priority subject to feasibility and cost effectiveness. Rapid progress must be made over the next few years to ensure that flood risk planning and management, including public warnings and emergency response, is underpinned by an improved understanding of when and where flooding will occur.

There are obvious concerns about the large number of properties currently at risk of flooding and the likelihood of further significant development in flood risk areas.

Chapter 4 discusses the need to strengthen and enforce the provisions of PPS 25 and Building Regulations to ensure that flood resistance and resilience measures are fully built into all new development where necessary.

The law relating to drainage systems is complex and numerous bodies are involved including the Environment Agency, water companies, local authorities, internal drainage boards and private owners. It is not surprising that the public are confused and that they wonder who is accountable. There is room for improved inter-agency cooperation. This Review recommends that the Environment Agency should take strategic direction of managing inland flood risks, while local authorities should adopt a new leadership and scrutiny role overseeing flood risk management within their local area.

In general, insurance companies responded quickly and effectively to the emergencies despite the vast number of claims they received from residents and businesses. However, some were less efficient than others and some people have received an unsatisfactory level of service. The Review is discussing with the insurance industry ways of achieving uniformly high standards and this subject will be reviewed again next year.

Chapter 5 deals with the calling of Gold, Silver and Bronze Commands and the response to the flooding emergencies. Relevant aspects of the Civil Contingencies Act were put into practice effectively and there is admiration for the way in which the emergency services and other responders worked tirelessly throughout one of the most complex, challenging and lengthy series of emergencies for many years. However, the Review also believes that the country was not as well prepared as it should have been.

Responders were surprised by the scale and duration of the emergencies and they often found themselves reacting to unexpected events. Sometimes basic information about operation and characteristics of the local drainage systems was unavailable when needed. The vulnerability of critical infrastructure and consequences of its failure were not fully appreciated in advance. The country must be better prepared and the Review makes a series of recommendations about national and local leadership, emergency planning, protection of local emergency facilities, water supplies, rescue and funding mechanisms.

In **Chapter 6** the Review is concerned about the major loss of essential services during the floods. Sites containing critical infrastructure were poorly protected. For example, tens of thousands of people found themselves without tap water and power, 10,000 were stranded on the M5 motorway overnight and 500 were left stranded at Gloucester Railway Station. Even greater loss of essential services was only narrowly avoided and there were major concerns about the complete failure of Ulley Reservoir. The Review makes recommendations on sharing information, building greater standards of protection and the closer involvement in preparedness planning of essential service providers, such as the water and power companies.

People depend on warnings and advice during an emergency. They will have important decisions to make about their safety and that of others, and about the risk of damage to their property. **Chapter 7** describes the efforts made by responders to keep the public informed and the contribution of local media – especially the ability of local radio to transmit up-to-the-minute broadcasts. The public appreciated the efforts of local authorities and other organisations which systematically knocked on doors and checked on the well-being of residents and businesses. The Report sets out proposals for ensuring that advice and warnings from various agencies are better coordinated, that councils play their full part in reassuring the public and that people are made fully aware of any flood risk when they buy or rent property. It also makes clear that individuals and communities must share responsibility for actions to deal with flooding.

Next steps

This first Report sets out the Pitt Review's initial thinking and proposals after just four months' work. The Review has benefited from the extensive evidence already submitted, but much more needs to be considered before the final Report will be ready next summer.

In particular, further work needs to be done to consider the costs, benefits and feasibility of the interim conclusions.

Interested individuals and organisations should let us have their views and join in a discussion over the coming months. You can find different ways to contact the Review Team set out in **Chapter 8**. The deadline for comments and further evidence is 31 March 2008.