



## Chapter 5: The Emergency Response

### Summary

This chapter examines:

- the performance of weather forecasts, flood warnings and flood defences;
- the local, regional and national response; and
- the transition to recovery.



**5.1** From the first flooding in mid-June 2007 to the restoration of drinking water supplies in Gloucestershire in mid-August, responders were faced with a string of major emergencies, many of them going well beyond all previous experience. As Chapter 1 has noted, these included the largest surface water flooding event ever experienced in the UK; record levels of flooding along the River Severn; and, with the loss of Mythe water treatment works in Gloucestershire, the most serious loss of essential services since the Second World War.

**5.2** Despite the UK's well-developed emergency planning frameworks, emergency plans and procedures were tested to their limits and beyond. Inevitably, the events exposed weaknesses and areas that need improvement. These are identified in this chapter. But the Review considers it appropriate to pay tribute at the outset to the dedication and commitment of all organisations involved in the response. In extremely testing situations, responders including the police, the fire and rescue services, ambulance and health services, the Armed Forces, local authorities, the Maritime and Coastguard Agency and a wide range of voluntary organisations, including the Red Cross, St John Ambulance, the RNLI, Search and Rescue Assistance in Disasters (SARAID) and Rotary International in Great Britain and Ireland, were highly effective in offering practical help, support and reassurance to affected communities.

### Met Office forecasts

**5.3** Generally, the exceptional levels of rainfall in summer 2007 were well predicted, with the weather forecasts preceding the major July flooding in particular being the most detailed and accurate provided for any major flooding event in the UK.

**5.4** Early severe weather warnings were distributed direct to emergency response

organisations via email and fax, and Met Office advisors located around the country worked with responders to manage the impact of the severe weather, with sufficient lead time for some mitigation plans to be put in place.

**5.5** The forecasts followed the timeline below:

- **17–20 June** – There were a number of localised torrential downpours with many flash warnings issued.
- **22 June** – An early warning was issued to National Severe Weather Warning Service (NSWWS) recipients and the public, giving three days' notice of severe rainfall.
- **23 June** – Further warnings were issued, with an update to the early warning given on 22 June.
- **24 June** – A further update correctly focused on the worst-hit areas and accurately estimated the rainfall totals.
- **27 June** – Another early warning was issued, giving three to four days' notice of potential further disruption over the weekend due to slow-moving rain bands.
- **16 July** – Medium-range forecast model output suggested that a potentially severe weather system was developing, but confidence was only considered moderate at this stage.
- **18 July** – Confidence in the likelihood of the event increased as the week progressed and a NSWWS early warning was issued in the morning.
- **19 July** – Confidence was now sufficiently high to focus warnings about the area of greatest risk of disruption on the south-west Midlands, Gloucestershire and Oxfordshire.
- **20 July** – NSWWS flash warnings were issued widely for southern and central England.

**5.6** Although the summer's rainfall was generally well forecast, a number of submissions to the Review have suggested that more use should be made of probabilistic forecasting (based on the likelihood of weather change rather than actual rainfall levels). With the development of higher-resolution models, this would allow forecasts to be given with more confidence and greater precision. Submissions also suggest the issuing of early warnings at defined – and possibly lower – levels of probability. Such a step could be of potential value, especially for extreme weather events, in giving emergency responders more time to prepare. However, it will inevitably result in more false alarms. Nevertheless, the Review considers that the idea has sufficient potential to merit further examination. Chapter 3 describes the absence of an effective warning system for surface water flooding, the prevalent form of flooding in June, with the result that responders had to deal with unexpected flooding. It also makes recommendations for the development of tools and techniques which will allow that gap to be closed.

**IC 37** – The interim conclusion of the Review is that the Met Office and the Environment Agency should produce an assessment of the options for issuing warnings against a lower threshold of probability, including costs, benefits and feasibility; this will be considered further in the final report.

## Flood Warnings

**5.7** For each type of flood warning (Flood Watch, Flood Warning, Severe Flood Warning), the Environment Agency has a predetermined activation threshold, based for example on river depths and rainfall levels over a catchment area. Lower thresholds are used to initiate supporting actions, such as the staffing of incident

rooms, increased monitoring of river gauges and enhanced flood forecasting activities. The trigger for issuing a Flood Warning or Severe Flood Warning is based on the Agency's assessment of whether any watercourse or part of a watercourse will reach a level at which the Agency judges that significant property flooding will take place. Since the trigger is usually calculated by the use of flood modelling studies or by looking at the behaviour of past floods, unexpected behaviour of rainfall or river water can lower the accuracy of warnings.

**5.8** The Environment Agency's flood warning system has service standards which aim to issue warnings more than two hours ahead of potential flooding and to deliver them to the public through its Flood Warnings Direct system by a number of different media (in several languages). Warnings are also issued to the emergency responder community and the broadcast media. The lead time available is almost entirely dependent on the type and behaviour of a river and the location of the flood warning area on that river (more time may be available to issue warnings to downstream areas than those upstream near the headwaters of rivers). It is dependent on the type and location of the rainfall that will lead to flooding. For coasts and tidal rivers it will also be dependent on the accuracy of sea surge and wave forecasting.

**5.9** The Environment Agency provided the Review with an initial assessment of more than 500 flood warnings issued during June and July 2007. This shows that:

- around 80 per cent were issued to target – that is more than two hours before the threshold was reached.
- around 20 per cent were not issued to target – that is, they were issued either less than two hours before, or after the threshold was reached.

- In about 20 per cent of cases the river concerned did not in the event reach the threshold level.

**5.10** The Review is aware that the generation of flood warnings cannot be an exact science. As assessments will always be affected by variations in rainfall forecasts, data from river telemetry and ground saturation levels. However, there is scope for a higher percentage of warnings to meet the target. As noted in Chapter 3, revised flood risk maps are vital to improve the accuracy of risk registers and the effectiveness of emergency planning, and the Review makes a recommendation in this respect.

## Flood Defences

**5.11** The majority of flood defences and other flood risk management assets – both those on rivers and those which defend against coastal surges – are maintained by the Environment Agency, with others being maintained by local authorities, Internal Drainage Boards, businesses and individuals. The Agency has investigated the performance of all these assets during the summer 2007 floods to check that they operated to their design standard, which is typically to withstand a 1-in-100-chance event.

**5.12** This investigation found that in England and Wales during June and July 2007:

- 9 per cent (1,016 kilometres) of man-made raised flood defences were tested by the summer floods.
- About 50 per cent (525 kilometres) of the raised flood defences tested were overwhelmed.
- Less than 0.2 per cent of the defences failed physically (nine sites) or suffered a breakdown or power failure which meant that they did not operate as expected (six sites):
  - There were four sites whose physical failure led to an earlier onset of

flooding: these were flood walls at Worksop, Chesterfield and Sheffield and an embankment at Auckley. However, the same level of flooding would have occurred anyway due to the extent of the flooding.

- There were five sites which failed physically after being overwhelmed: these cases were all embankment breaches in the north of the Anglian region; at North Kelsey Beck, Waddingham Catchwater, Barlings Eau, Stainfield Beck and Winterton Beck. Flooding was already significant at the time of failure.
- The six sites that did not operate as expected due to a loss of power (which occurred after they were overwhelmed) comprised a flood gate at Canklow (Rotherham), pumping stations at Great Clough (North Yorkshire), Winestead (Hull) and Hempholme (Humberside) and two pumping stations in Doncaster. Flooding was severe when power was lost and was therefore not made worse.
- In addition, a sea gate at Goxhill Haven (Humberside) could not close properly due to a blockage, and agricultural land was flooded leading to several hundred pigs being killed. Trash screens (which prevent culverts and pump stations from blocking) at Cox's Meadow, (Cheltenham) and Paradise Road (Boscastle) did not function properly. Flood defence improvement work was underway in Tirymynach (Pool Quay, Welshpool) and defences could not be restored effectively. As a result up to ten properties may have flooded.

**5.13** The Review, on occasion, heard suggestions that individual communities were deliberately allowed to flood to protect other communities. The Review found no direct evidence of this happening. The fact that 50 per cent of the raised flood defences were overwhelmed illustrates the

extreme nature of the summer's events. The number of assets physically failing or suffering a breakdown or power failure is encouragingly low, and the Environment Agency judges that in none of these cases was the flooding made worse as a result. However, these assets should be examined to establish why these failures occurred to see if lessons can be learnt.

## The Local Response

### Readiness and alerting

**5.14** The scale of the 2007 floods stretched resources to the limit and beyond, and responders in some areas were not as ready as they might have been. In part, this can be explained by the unprecedented nature of the events, especially when set against a historic pattern of more localised, low-impact flooding events. The absence of a warning system for surface water flooding contributed. The frequency and volume of severe weather warnings received by responders (including a number of false alarms) will have played a part. But it is also clear that, in some areas, there were no agreed protocols between responders, setting out responsibilities for assessing the potential impact of a specific severe weather event and triggering an appropriate multi-agency response. This gap, crucial to the initiation of an effective emergency response, needs to be filled.

**5.15** The Met Office has an improving understanding of how its warnings are used by the different members of the multi-agency responder community. Met Office advisors are the natural starting point for the improved arrangements. The Review judges that, if Local Resilience Forums were to designate the police and local authorities as the primary points of contact for the Met Office advisors before and during an emergency, this would ensure a focused use of this valuable resource at a critical time.

**5.16** By extension, there would be a benefit in designating a single organisation as

being responsible for triggering emergency response arrangements. In some areas, there was a degree of confusion between responders about whose responsibility it was to consult with partners and to advise whether multi-agency response arrangements should be triggered in light of severe weather and flood warnings. While most Local Resilience Forums have generic plans in place to respond to emergencies, and some key responders in flood-prone areas have specific flood plans in place, few set out collectively agreed arrangements for assessing the impact of an emergency such as flooding, where the effects can be felt over a wide area and take many forms.

**5.17** 'Upper tier' local authorities are well placed to assess the potential impact of floods across their area, liaising with neighbouring local authorities as appropriate to gather input on the basis of local visual assessments and previous experience. In light of this, the Review considers that 'upper tier' local authorities are best placed to be given 'lead responder' status, with a duty to advise partners on whether multi-agency response arrangements should be triggered, perhaps initially on a precautionary basis. Such assessments would be carried out in close consultation with local partners, including 'other' local authorities and the emergency services. The police, unless agreed otherwise locally, should then convene and lead the multi-agency response.

**IC 38** – The interim conclusion of the Review is that unless agreed otherwise locally, 'upper tier' local authorities should be the lead organisation in relation to multi-agency planning for severe weather emergencies at the local level, and for triggering multi-agency arrangements in response to severe weather warnings.

## Case study – Warnings in Gloucestershire

In the July floods, the main challenge proved to be river flooding, particularly on the Rivers Severn, Thames and Avon and their tributaries. Following unprecedented levels of rainfall, Gloucestershire Gold Command met at 6pm on Friday 20 July and was informed by the Environment Agency that no significant river flooding was expected. The same evening the Met Office issued a weather warning stating that heavy rain would continue overnight in Gloucestershire. On Saturday 21 July at a 10.30am Gold teleconference, the Environment Agency said that there would be little or no serious flooding and Gold was stood down following a further meeting at 6pm. Early on Sunday 22 July Mythe water treatment works was submerged by rising flood water and shut down, affecting water supplies to 350,000 people in Tewkesbury, Cheltenham and Gloucester. Serious urban and rural flooding also occurred. Gold was reconvened.

**IC 39** – The interim conclusion of the Review is that where a Gold Command is established, the police, unless agreed otherwise locally, should convene and lead the multi-agency response.

### Advice

**5.18** A number of emergency responders told the Review that the Environment Agency's flood warnings can be difficult to interpret. They also noted that, in some areas, Environment Agency staff who engaged with Gold Commands during the 2007 floods had a limited understanding of their role and purpose, and in some cases were unable to present their assessments clearly. Chapter 3 covers the development of visualisation tools which should help significantly in providing emergency responders with a rapid summary of the likely impact of forecast flooding. But their use, and the interpretation of underlying data, will clearly be aided if the Environment Agency commits staff to Gold Commands (and to prior work by Local Resilience Forums) who are knowledgeable about their functions and able to explain scientific material lucidly.

### Gold Commands

**5.19** Gold Commands activated in the summer were effective in co-ordinating the local response, often with reassuring and high-level visible leadership.

**5.20** However, in some areas, some responder organisations had difficulty in engaging effectively with the local response effort, possibly because Silver Commands were activated instead of Gold. Although these areas coped, the strategic perspective brought by Gold Command would have allowed more effective engagement by the full range of potential responders and hence the easier procurement of external resources.

**5.21** There is a clear benefit in Gold Commands being activated at an early stage on a precautionary basis when assessments indicate that significant disruption is likely. Precautionary Gold Commands need not physically convene at the outset: conference telephone calls, or other appropriate means of multi-agency communication, could be used to share and assess information on the extent of the emergency.

**5.22** The Review has received positive feedback from responder organisations on the emergency facilities at Gloucestershire Constabulary's purpose-built headquarters in Gloucester, which can accommodate a Gold Command at short notice in the event of a major incident. The Gold Command suite's IT and communications systems, including immediate Gold e-mail addresses for all responders, were said to work well. The Gold suite was also complemented by

an adjacent flexible open-plan space to accommodate agencies and Gold support services.

**IC 40** – The interim conclusion of the Review is that Gold Commands should be established at an early stage on a precautionary basis where there is a risk of serious flooding.

**IC 41** – The interim conclusion of the Review is that Local Resilience Forums should assess the effectiveness of their Gold facilities, including flexible accommodation, IT and communications systems.

## Involvement of Category 2 responders

**5.23** A number of submissions to the Review drew out the way in which inconsistencies in the level of engagement of Category 2 responders, particularly utilities companies, in the work of Local Resilience Forums contributed to a lack of preparedness in some aspects of the response. This weakness was compounded by the irregular level of engagement of Category 2 responders in Gold Commands. Moreover, some Category 2 responders who attended Gold Command meetings were clearly unfamiliar with emergency response procedures, and unable to engage effectively. Chapter 6 returns to these issues.

## Flood rescue

**5.24** Organisations carrying out flood rescue, including the fire and rescue services, the Maritime and Coastguard Agency, the RNLI, river police and SARAID, are highly valued by the public and were generally praised for their effective operations over the summer. However, the Review notes that there is currently some ambiguity as to which organisations have

responsibilities for flood rescue. The fire and rescue services usually attend to such situations, as all fire and rescue crews are trained to work safely near water and are provided with suitable equipment to assist people in difficulty in water. Selected stations have also been trained to offer a full water rescue capability, involving crew members working in water, using inflatable boats when the circumstances necessitate it.

**5.25** However, the fire and rescue services have no explicit statutory duties for flood rescue. Similarly, although the Maritime and Coastguard Agency is a Category 1 responder for casualties at sea, on the coast and in estuaries, and the RNLI has a statutory duty on the Thames, neither organisation has a legal responsibility for flood rescue. However, both organisations played an active role in the response to the summer 2007 floods and deployed crews to assist the local response in a number of the affected areas.

**REC 4** – The Review recommends that all Local Resilience Forums urgently review their current local arrangements for water rescue to consider whether they are adequate in light of the summer's events and their local community risk registers.



A Sea King helicopter from RAF Kinross searches for people in floods in Tewkesbury, Gloucestershire  
© Rex Features

“The emergency services didn’t know who was in or out of the property, it was a case of people opening their windows and shouting to people. The people in the rubber dinghies were brilliant. They were paddling up and down and even when people had been moved out they kept an eye out to make sure properties were safe.”

**Householder, Toll Bar, Doncaster**

**5.26** The Review considers that this perceived ambiguity should be addressed, although that does not mean that a specific statutory duty is necessarily the appropriate solution, particularly given the range of organisations with experience and expertise in this area. The issue to be considered is the provision of resources needed specifically to undertake flood rescue, including personal protective equipment, pumps, rescue craft and, especially, trained personnel.

**5.27** The Review is aware that Communities and Local Government (CLG) is considering flood rescue as part of the review it is undertaking into the Fire and Rescue Service’s response in the summer. The Review will consider CLG’s report in due course and will return to flood rescue in the final report. In doing so, it will also

examine whether there would be advantages in establishing a single search and rescue emergency response co-ordinating authority for land-based emergencies, rather than the present system co-ordinated by the Ministry of Defence, the Maritime and Coastguard Agency and the police.

### Mutual aid

**5.28** The Review is aware of many examples of effective mutual aid in response to the flooding events of June and July 2007 (see case studies below). Effective mutual aid arrangements enable organisations engaged in the response to an emergency to request urgent support from other parts of the country – a particularly useful arrangement during wide-area emergencies which can severely deplete resources locally.

**5.29** Mutual aid can come in many forms, including equipment (such as pumps or boats) and people. Well-established and effective arrangements already exist for the provision of mutual aid between police forces, with all requests for assistance routed through and co-ordinated by the Police National Information Co-ordination Centre in London. Arrangements also exist in the fire and rescue services, administered through a national coordination centre in West Yorkshire,

### Case study – Flood rescue of a carer and three men with learning disabilities

Mark Overall is responsible for the care of three men with learning disabilities, who, prior to the flood, lived in the property next door to the family’s home. When the waters rose, the men were brought into the house with the family while they waited to be rescued by boat. This was a very difficult time for everyone in the household, but especially for the men, who had difficulty coping with situations out of the ordinary. The rising floodwater and its entry into the house upset them and they became agitated and anxious.

In the early afternoon a boat arrived at the house to rescue everyone and they managed to get two of the men into the boat with other family members and their pets. The third man was so distressed that it was decided that it was unsafe for him to go in the boat at that time. Mark stayed with him until the boat returned to fetch them both in the late afternoon, by which time the man was calmer and it was therefore safe to help him into the boat and take him to safety.

## Case studies – Examples of effective mutual aid

1. When significant parts of Herefordshire and Worcestershire were badly affected by flooding in both June and July, in addition to local crews, the rescue effort involved fire and rescue teams from Buckinghamshire, Mid and West Wales, Greater Manchester, Cheshire and Merseyside.
2. During the June floods in South Yorkshire, a representative from Carlisle Council contacted Doncaster City Council to offer its assistance and the expertise gained from its experiences during the 2005 Carlisle flood. As a result, Carlisle loaned an experienced member of staff for the duration of the response phase, which Doncaster described as being invaluable. Afterwards, the Mayor of Doncaster suggested the compilation of a national register of people with expertise in handling similar events, which could be referred to by responders during emergencies.

supplemented by an Emergency Information Support Group in London. The provision, mobilisation and effectiveness of high-volume pumps during the 2007 floods were widely praised by local fire and rescue service officers.

**5.30** Beyond the emergency services, however, there are few structured arrangements for mutual aid. Where it does happen, it is usually ad hoc. Local authorities generally rely on neighbouring authorities to provide support with equipment and personnel in an emergency. The wide range of potential roles can make it difficult to identify the right people with the right skills to assist during an emergency. Moreover, during summer 2007, many local authorities found that they could not rely on assistance from neighbouring authorities either because they too were also affected by floods or because they feared being affected. Furthermore, shared inventories of equipment were not available, so that local authorities were unaware what help neighbouring authorities might provide.

**5.31** In its submission to the Review, and in subsequent discussions, the Local Government Association (LGA) has acknowledged that national and cross-regional mutual aid arrangements between local authorities could be improved, for example by the development of a register of experts available to assist the response

to a future wide-area emergency. The Review recommends that the LGA should take forward work to address this issue as soon as possible.

**IC 42** – The interim conclusion of the Review is that the Local Government Association should consider how best mutual support might be enhanced between local authorities in the event of a future wide-area emergency.

## Emergency accommodation

**5.32** Affected local authorities in several areas set up rest centres to provide a range of humanitarian assistance to people affected by the floods. These ranged from drop-in centres to overnight facilities in venues such as town halls catering for large numbers of evacuees.



Residents and council workers gather round the specially installed Mobile Advice Centre © Rex Features

### Case study – The experiences of a young man and his family

Mark Harris\* had responsibility for three generations – his parents living elsewhere in town, as well as his own family. He first heard about the flooding via a call from his father who called him to say “Get down here and help”, as his parent’s home was flooding. Half an hour after he arrived at his parents’ house, he had a call from his wife, saying he should get home because his own house was now flooding.

When Mark arrived, he saw that the water had smashed through the floor of his house and there were fountains of water coming up through the floor. He phoned the council, who told him that they would send sandbags. These eventually arrived a week later. He also called the fire and rescue service and got through to the service in another county, Hampshire, because the local one was so overloaded with calls. The Hampshire service was not able to respond. Because the location of his estate forms a natural basin, Mark had a metre of water sitting in the house for two days. He feels that new housing locally has meant that the old drains no longer work. He also claims that, because the water flooding his house was contaminated, nobody would agree to take it away.

During those two days, Mark decided that enough was enough and that he had to get his family out of the house. He called the council and was told that he could go to the local leisure centre with his family. He drove through the flood water with his family to get there, only to find that it was not being used as a rest centre and he had been given the wrong information.

Mark feels that there was a real lack of co-ordination, and information, which left his family feeling unsupported. He eventually received some financial help from the Parish Council, but states that they are the only organisation to have helped him at all.

\*An alias has been used to protect the respondent’s identity

“We were taken to a rest centre where four families were accommodated. I was impressed by the help that was given to us by the council – including a special sleeping bag for myself and my baby. Please pass on our thanks to the many people who helped that night. Someone generously brought us more nappies, bowls and baby wipes. There were plenty of sandwiches and breakfast the next morning as well as hot tea and coffee.”

**Householder, Pangbourne**

**5.33** These arrangements generally worked well, although a number of designated rest centres could not be used because they were flooded. So, too, were other important sites, including police headquarters, county council offices holding data on vulnerable people, and depots holding sand stocks.

**5.34** There is a clear need to check that those sites which have an important role in response to flooding (and other major emergencies) have sufficient resilience against flooding and the loss of electricity and water supplies to enable them to be used.



Floods along Molly Millars Road, Wokingham © Rex Features

**REC 5** – The Review recommends that all Local Resilience Forums should undertake an urgent review of designated rest centres and other major facilities to ensure either that they have the necessary levels of resilience to enable them to be used in the response to flooding and other major emergencies, or that alternative arrangements are put in place.

**5.35** There were many instances of people in transit being stranded away from their homes in both the June and July 2007 flooding events. For example, about 500 people were stranded at Gloucester railway station when the rail network failed. However, the largest single event occurred on Friday 20 July, when an estimated 10,000 motorists in the South-West were stranded overnight between Junctions 10 and 12 of the M5 and on some other roads. In this instance, rest centres were able to accommodate around 2,000 people overnight, and only 80 people remained at the centres the following day, testifying to the effectiveness of the local authority in helping people to resume their journeys. However, the consequences of a similar event during the colder winter months could be much more serious (and have been on other occasions). This area merits better

preparedness planning at local, regional and national levels.

**5.36** In areas close to motorways, trunk roads and major transport hubs, planning for rest centres must take account of the need to cater for a potentially large number of people left stranded. The Review notes that, although the need to make provision for people stranded in road blockages is included in guidance issued by the Cabinet Office, it is not clear that this guidance caters adequately for the range of needs of large numbers of people left stranded, as exemplified by the summer's events. This should be addressed.

**IC 43** – The interim conclusion of the Review is that Cabinet Office guidance to local planners should specifically include incidents which leave large numbers of people stranded on motorways and trunk roads.

**5.37** That said, it is clearly better to prevent people from being stranded in the first place, especially through the use of earlier, stronger, more specific warnings, or strategic road clearance and closures, perhaps beginning a long way from the actual flooded areas.

**IC 44** – The interim conclusion of the Review is that, as part of their emergency plans, Local Resilience Forums should consider the vulnerability of motorways and trunk roads to flooding, and consider the potential for earlier, stronger, more specific warnings, and strategic road clearance and closures, to avoid people becoming stranded.

**5.38** The Review is aware that the Highways Agency, through its regional control centres, has contingency plans in place to respond to serious blockages on the motorways and trunk roads. However,

these plans are focused on risks such as snowfall, ice and accidents, rather than flooding. The Review welcomes plans to enhance traffic clearance by the introduction of more ‘cross-overs’ (demountable central barriers), and the further development of the memorandum of understanding between the Environment Agency and the Highways Agency, setting out communication arrangements for flooding events.



Flood victims at the Main Tesco store in the centre of Gloucester receiving bottle water supplies © Rex Features

## Emergency supplies

**5.39** Some private sector companies made a major contribution to the emergency response through the provision of supplies for those affected, including food, water and sanitation supplies, drawing on their established and efficient distribution networks. But the response exposed weaknesses in arrangements for the provision of logistical support to emergency responders.

“We had everybody that worked here in the local charity office phoning Asda, Tesco, John Lewis – everybody you can think of donated food, candles, towels, bedding and quilts.”

**Householder, Sheffield**

**5.40** The delivery of drinking water to people in Gloucestershire who had lost

their mains supply generated an urgent need for a range of vehicles. Smaller vehicles were also required to navigate narrow roads in some areas. These were not easily found. Central Government departments also became engaged in sourcing other supplies, including wet wipes and portable toilets. The arrangements put in place to carry out this task, although broadly successful, were ad hoc, and consumables were sourced later than would have been desirable.

**5.41** The Review is aware that the Cabinet Office is now examining how best to institute arrangements to source essential supplies in a major emergency, for example through the establishment of stockpiles or the provision of call-off contracts. ‘Virtual stockpiles’, whereby necessary products and suppliers able to provide them in bulk are identified before an emergency, could have a significant role. This work should be pursued urgently.

**REC 6** – The Review recommends that the Cabinet Office, with other departments, should urgently consider the costs, benefits and feasibility of establishing arrangements for the urgent acquisition of supplies during a major emergency, including the use of call-off contracts or the creation of national or regional stockpiles of equipment and consumables.

## Emergency water provision

**5.42** On Sunday 22 July 2007, the Mythe water treatment works in Gloucestershire was submerged by rising flood water and shut down; water supplies to 140,000 properties (some 350,000 people) were lost. The Armed Forces provided support to Severn Trent Water as part of the very substantial logistical operation that was needed in order to ensure emergency water provision. After initial challenges responders coped well with the difficult

circumstances they faced. Mains supplies to all 140,000 properties were not fully restored until 2 August and not declared fit to drink until 7 August, 17 days after supplies were lost.

**5.43** The Review will consider in its final report the lessons to be learned from this episode for building better preparedness plans for the loss of drinking water. In one area, however, work needs to be taken forward as a matter of urgency.



Residents fill up their containers with drinking water from a bowser in Langford © Rex Features

**5.44** Regulations require water companies to provide a minimum of 10 litres of drinking-quality water per person per day when mains supplies fail.<sup>1</sup> Depending on the size of the water company concerned and the total population it supplies, the guidance sets in place contingency plans to ensure that in smaller incidents 8,000 to 50,000 people receive this 10-litre provision for durations of up to three days. For major incidents, the requirement rises to 200,000 people for a week.

“I think the big picture response was impressive. The speed with which they managed to get the resource together, the distribution going – the army were brought in and people were advising on that aspect. But I mean it did happen fairly quickly, and when you look at the area on the ground with the number of people that they were trying to supply, it was a big area.”

**Resident, Upton**

**5.45** With logistical support from the Armed Forces, Severn Trent Water provided the required volume of water. But the contingency plans were clearly not sufficient for the large population (350,000 people) who had to be supplied, or for the long period (17 days) for which supply was required. And it is arguable whether 10 litres per person per day is in any case sufficient. The World Health Organization, for example, recommends that a minimum of 15–20 litres per person per day be made available as soon as possible, and this figure rises greatly once sanitation is factored in; the generally quoted target is 50 litres. Even this figure does not take account of the increased needs of vulnerable people such as the elderly and those with small children.<sup>2</sup>

**IC 45** – The interim conclusion of the Review is that Defra should review the current requirement in emergency regulations for the minimum amount of water to be provided in an emergency, to reflect reasonable needs during a longer-term loss of mains supply.

## Science and Technical Advice Cells

**5.46** Science and Technical Advice Cells (STACs) were established to support Gold Commands in Yorkshire and the Humber, the West Midlands and Gloucestershire

<sup>1</sup> [www.ukresilience.info/upload/assets/www.ukresilience.info/water\\_guidance.pdf](http://www.ukresilience.info/upload/assets/www.ukresilience.info/water_guidance.pdf)

<sup>2</sup> Technical Notes for Emergencies – Minimum water quantity needed for domestic use in emergencies, Technical Note No.9, WHO 07/01/05 – [www.who.or.id/eng/contents/aceh/wsh/water-quantity.pdf](http://www.who.or.id/eng/contents/aceh/wsh/water-quantity.pdf)

during the 2007 floods. The concept worked well, but a number of issues were raised, not least in the area of public health protection where there was confusion over the respective roles and accountabilities in law of staff of the Health Protection Agency (HPA), primary care trusts (PCTs), strategic health authorities (SHAs) and, in Gloucestershire, the Drinking Water Inspectorate.

**5.47** The fundamental value of a STAC – the provision for Gold Commanders of a single point of advice on matters of public health – was reinforced by the events of summer 2007. But the current STAC guidance is not sufficiently clear about how roles within the STAC should be discharged, in large part because the law is not clear in this area. There is an urgent need to provide a clearer definition of these roles. It has been proposed to the Review that the HPA should have primary responsibility for the provision of health protection advice in an emergency, with PCTs and SHAs having lead responsibility for the direction of NHS services and resources; this proposal should be examined urgently.

**5.48** A ‘national STAC’ was also set up during the floods to advise central Government, especially debate in Cabinet Office Briefing Rooms (COBR). Some experts were asked to attend both local and national STACs, which led to competing demands on their time and stretched resources. It was unclear to some whether the role of the national STAC was to provide advice on the same issues being considered by the local STACs, or to provide support in areas that could not be handled by the local STACs. Similarly, it was unclear whether decisions made at the local level had to be signed off by the national STAC.

**5.49** The Review is aware that Department of Health guidance clarifying health roles in STACs is due to be published by the end of

2007, and recommends that this should be implemented as a matter of urgency. The Review also welcomes development work at the Department of Health to examine the roles of national and local STACs and to test the effectiveness of the new guidance through an exercise.

**REC 7** – The Review recommends that Department of Health guidance clarifying the role and accountabilities of organisations involved in providing scientific and technical advice during a major incident should be implemented as soon as possible and understood by Gold Commanders.

### Vulnerable people

**5.50** The Review has heard many accounts of humanitarian assistance offered by local authorities and voluntary organisations during the 2007 floods in order to ensure social care support for vulnerable people. The Red Cross, for example, deployed staff and volunteers to assist with the evacuation of stranded people, the provision of practical and emotional support in rest centres and people’s homes, and the delivery of humanitarian relief in the form of bottled water, food and hygiene items to those most in need. St John Ambulance provided 24-hour support to affected communities with volunteers and vehicles: some volunteers acted in support of ambulance services, responding to emergency calls, while others helped set up and staff rest centres.

“After five days the council had a wagon that fetched sandwiches and water and a Red Cross van provided hotdogs and other food... but for five days it was really scary.”

**Householder, Toll Bar, Doncaster**

**5.51** Flooding events may place higher demands on those dealing with vulnerable

### Case study – Communities helping each other

Jack Dawson\* lives with his wife and children in West Oxfordshire. His family home was not flooded but was at risk of being so. However, many of the people close to where he lives were flooded. He was aware that he lived in an area at risk of flooding but described the “shock of seeing the damage and chaos caused by the floods” that he “couldn’t have ever contemplated”.

West Oxfordshire was “split in half by the floods”. Half were severely flooded, while the other half “got lucky”. Jack’s story sticks out because it exemplifies many of the other personal stories of communities pulling together and people assisting the most vulnerable in their communities.

Like so many others, Jack’s immediate action was to protect his family. Early in the morning, he arranged for a family friend to take his family out of danger. Having done this, he stayed behind to help other local residents take care of elderly neighbours. This became a priority for him. He also helped people to move furniture upstairs contacted their relatives.

However, much of the help Jack provided for vulnerable neighbours affected by the floods came in the days after the flooding. With three friends, he helped two elderly neighbours clear up the “mess and sludge” left by the floods in the downstairs and garden. He describes himself as “having no choice... they needed help and I was able to give it”.

\*An alias has been used to protect the respondent’s identity

people than other emergencies. Indeed, the definition of who is vulnerable may itself be wider. It will cover the elderly and sick and disabled people as well as those with small children. In addition, parents of dependent children may have the added problem of collecting their children from school or nursery. Other vulnerable groups may include foreign language speakers who might not understand or be aware of flood warnings, and people who have recently moved to an area.

**5.52** The Review heard that ‘door-knocking’ to alert householders to imminent flooding risks was widely welcomed. It also provided responders with an early opportunity to identify those needing help, including by cross-referencing house calls with records of vulnerable people. A related recommendation is made in Chapter 7.

**5.53** The Review is aware of work under way by the Cabinet Office to provide local responders with advice on the definition of

vulnerable people, how best to identify them and planning to provide social care support in an emergency. This advice should take account of the lessons of the summer’s events, and then be issued urgently.

**REC 8** – The Review recommends that the guidance currently under preparation by the Cabinet Office to provide local responders with advice on the definition and identification of vulnerable people and on planning to support them in an emergency should be issued urgently.

**5.54** It is evident that some responders were reluctant to share personal information with each other for fear of contravening duties of confidence or the Data Protection or Human Rights Acts. In general, emergency responders should balance the potential damage to the individual (and where appropriate the public interest in keeping the information confidential) against the public interest in

sharing the information. In emergencies, the public interest consideration will generally be more significant than during day-to-day business. But it is clear that this message has not yet been received by all emergency responders. It is also clear that a number of myths around data protection still remain.

**5.55** The Cabinet Office has issued guidance to the emergency responder community to dispel some of the myths surrounding data protection as an aid to emergency planning, response and recovery<sup>3</sup>. One of the key principles in that guidance is that data protection legislation is not a barrier to appropriate information sharing. The guidance provides a framework within which personal information can be used with confidence that individuals' rights to privacy are respected.

**5.56** The Review encourages responders to familiarise themselves with this guidance, and the Cabinet Office to continue promoting it, in order to ensure that

appropriate relationships are established between bodies, such as social care departments, faith groups and voluntary organisations, which hold relevant data on vulnerable people.

**5.57** Another issue brought to the attention of the Review relates to animals, including livestock and domestic pets. The RSPCA is widely recognised as an important contributor to the response effort, and central guidance encourages Local Resilience Forums to use its resources. Although animal rescue must be regarded as secondary to people's safety, it has been observed that some people are reluctant to be rescued or evacuated without their pets. RSPCA capabilities thus form a welcome addition to the resources available for emergency response.

"They tried to evacuate the street, but there was me and two other houses stayed because we'd got pets, basically."

**Householder, Chesterfield**

### Case study – Evacuation and pets

Martin Brody\* lives in a rented house in Chesterfield, which he shares with his partner and their cat. At the time of the floods, he and his partner initially stayed in their house, living in their upstairs bedroom for around three weeks. There was no suitable temporary accommodation for them to stay in with their cat, and they did not want to incur the cost involved in sending the cat to a cattery. They therefore chose to stay in the house despite the extensive damage and contamination that had been caused to the ground floor by three feet of dirty flood water.

After some time living in this way, restricted to one room on the upper floor, Martin and his partner had a bout of sickness and diarrhoea, stomach pains and loss of energy. Despite their best efforts to clean up the house, he feels that their illness must have resulted from the contamination caused by the flood water.

Martin is very resentful of the lack of support from the local council in cleaning up after the floods. He received a leaflet from the council several days after the flood, with instructions on how to approach the clean-up. This was felt to be 'too little too late', and arrived at a time when practical help and support, such as equipment or help with cleaning, were required.

\*An alias has been used to protect the respondent's identity

<sup>3</sup> [www.ukresilience.info/response/recovery-guidance.aspx](http://www.ukresilience.info/response/recovery-guidance.aspx)

## The National And Regional Response

**5.58** Although flooding is predominantly a local emergency, larger-scale events, such as those witnessed during the summer, often require support at regional and national levels. The exceptionally large scale and variety of the summer 2007 floods, coupled with the consequent widespread disruption of essential services, made the regional and national efforts integral to the response.

**5.59** Central government's response to each of the string of major emergencies followed the guidance laid down in *Central Government Arrangements for Responding to an Emergency*.<sup>4</sup> This distinguishes between incidents which are primarily managed locally, with little or no central government engagement, and those that require closer working with central government, either primarily through the Lead Government Department or, where there is a need for wider government involvement, through the activation of central crisis arrangements and facilities ('COBR'). In the summer 2007 floods, the central government response was led by Defra, the lead government department for flooding.

**5.60** The Review considers that overall there was strong collaborative working and co-operation between government departments and agencies during the 2007 floods and that the central response was effective and coordinated. Certain departments played a particularly prominent role, notably Defra as the lead government department, CLG as the lead department for the recovery phase, and the Cabinet Office.

### Central government crisis machinery

**5.61** The flooding in June 2007, although undoubtedly serious, was judged on the basis of initial reporting from the

Environment Agency to be within the capacity of local responders to manage. COBR was not therefore formally activated, although consolidated briefing on the situation was produced and circulated by the Cabinet Office to all government departments, and Defra (with the Environment Agency) provided a continued oversight of the response. There was, however, recognition, based on experience from the flooding in Carlisle in 2005, that the major challenge was likely to be during the recovery phase. The central government focus was therefore placed on confirming CLG's leadership of cross-government activity to support recovery efforts in the affected areas, and ensuring that financial and other support was made rapidly available.

**5.62** COBR was activated during the July 2007 floods. The trigger was a forecast by the Environment Agency – which turned out to be broadly accurate – that the scale of the flooding would be severe and on a par with that in 1947. As well as the direct flooding emergency, COBR was used for the succeeding civil emergencies, including the prolonged interruption to water supplies following the loss of the Mythe water treatment works and the threat to Walham electricity switching-station, as well as later flooding events in the Thames Valley. Each of these events was expected to require significant central government support from a number of departments to the local multi-agency response. This proved to be the case.

**5.63** The activation of COBR was welcomed by Gold Commands, and played an important role in the achievement of improved performance. Departments felt that the response was better co-ordinated and more focused than had been the case in June. While it would be wrong to say that the non-activation of COBR in June was a

<sup>4</sup> [www.ukresilience.gov.uk/upload/assets/www.ukresilience.info/conops.pdf](http://www.ukresilience.gov.uk/upload/assets/www.ukresilience.info/conops.pdf)

failure, it is certainly right to say that its activation in July enhanced the overall response. This experience points to the desirability of earlier activation of COBR on a precautionary basis in the future in the event of serious flooding in order to facilitate access by local responders to central government and to ensure a better understanding of the evolving situation.

**IC 46** – The interim conclusion of the Review is that central government crisis machinery should always be activated if significant wide-area flooding of whatever nature is expected or occurs.

### Information management

**5.64** Although local responders generally appreciated central government's need for local information, the Review has learned that they were frustrated by the volume of information requested and the time it took to collate. On the other hand, central government was concerned by the lack of agreement on the extent of the flooding and the scale of the damage. This was exemplified by the range of information supplied on the number of properties affected by the June floods. Initial Environment Agency reports were of 3,000–4,000 properties affected, while several days later the Government Offices and local authorities were reporting 30,000 houses flooded from all sources, including surface water.<sup>5</sup> It was subsequently established that the discrepancy arose because the Environment Agency was counting only properties affected by river flooding, excluding those in urban areas affected by surface water flooding – the most significant impact in June.

**5.65** These and similar discrepancies can be partly explained by the different locations and timings of reporting and the

widespread nature of the flooding. They may also reflect instances where Gold Commands were not established to provide the strategic dimension. However, they do raise questions over the extent to which there was a coherent understanding on the scale and extent of the problems faced. While accurate figures will inevitably take time to collect and data collection must take a lower priority to saving life, rough estimates of the scale of damage need to be made available to allow scarce resources to be effectively prioritised. This data should also be sufficient for central government's immediate needs.

**5.66** The confusion experienced in June suggests that for surface water flooding events, central government should seek information via Government Offices from local authorities in the first instance. Data from the Environment Agency and the Association of British Insurers (ABI) should be used as supplementary evidence to gauge the extent of potential damage.

**5.67** It will also be helpful to be clearer about what data is needed, who is responsible for providing it and when. This could be captured in pre-agreed templates for specific scenarios, reducing the amount of work needed at the local level during an event. This model could be incorporated into central government's usual template for situation reports – referred to as a Common Recognised Information Picture (CRIP).

**5.68** One further issue is the handling of information once it reaches central government's crisis machinery. Information presented to ministers through CRIPs during the summer was on occasions inaccurate. This could be improved by simplifying information content, or by establishing a Defra/Environment Agency situation room, as discussed later in this chapter.

<sup>5</sup> CCWater report, Response to Loss of Water Supply, September 2007

**5.69** The Review considers that more work is needed on these issues and possible solutions and it will return to them in its final report.

### Defra – the role of the lead government department

**5.70** As the designated lead government department for flooding, Defra was at the heart of the Government's response to the flooding. It discharged this role with commitment, working with other departments and the Environment Agency.

**5.71** However, Defra's response took time to settle into an effective pattern. This was essentially due to the unprecedented nature of the floods and the way in which the July flooding events rapidly led on to a much more serious emergency, affecting essential services and critical infrastructure (and thus going well beyond Defra's day-to-day responsibilities).

**5.72** The careful and effective response to the possibility of East Coast flooding in November shows that both Defra and the Environment Agency have already learnt lessons and improved their level of performance. Defra also has important emergency responsibilities in relation to animal disease and other significant risks and there is now a significant body of expertise and experience within the department which should be captured and shared.

**IC 47** – The interim conclusion of the Review is that Defra extends its current departmental programme to share best practice and provide training in emergency response across the organisation.

**5.73** Defra's position was further complicated due to the split of responsibilities between it and the Environment Agency. However, the relationship was generally productive and

there is no evidence to support a need to draw the Environment Agency more closely into the department following the summer 2007 events.

**5.74** This split of responsibilities, along with the very local nature of flooding impact, means that direct comparisons with other national emergencies such as foot-and-mouth disease or pandemic influenza need to be made cautiously. Nevertheless, there are some national-level planning and response techniques used in other areas which could have obvious benefits for the response to flooding events.

**5.75** The fragmented, locally-focused nature of planning for the response to floods is one such issue. While this did not materially affect the quality and effectiveness of the local response, time was spent dealing with issues which could have been pre-determined centrally. In other areas (such as pandemic influenza), such issues are addressed within a single national framework – a model in which the lead government department brings together information, guidance and key policies in a single strand of planning, thus providing a resource for all tiers of government and key external partners. It is not an emergency plan, but it does bring coherence and identify key prior decisions. The Review believes that capturing good work on emergencies across government in this way would be sensible.

**REC 9** – The Review recommends that, in order to effectively fulfil its Lead Department role for flood risk management and emergency response, Defra needs to urgently develop and share a national flood emergency framework.

**5.76** Management of the operational-policy split between Defra and the Environment Agency was achieved through very close working relationships. Nevertheless,

experience from other emergencies shows the efficiency benefits that come from single site co-ordination of key information gathering and decision-making. A separate Environment Agency control room and individual policy teams in Defra had to work harder than necessary in order to deliver coherence. This could in future be better achieved if staff representing key divisions in Defra and the Environment Agency were co-located together to support decision-making and work with ministers in their representative role. To succeed, this enhanced co-ordination and communication effort would need to be supported directly by the top management teams of both organisations. The Review draws encouragement from analogous, very effective arrangements to bring together Defra and Animal Health in the response to major animal diseases.

**IC 48** – The interim conclusion of the Review is that Defra and the Environment Agency work together to establish a single London situation room to coordinate flooding information, to act as a focal point for cross-Defra efforts, and to support Defra ministers.

### Exercising

**5.77** The improvements which Defra was able to institute before the July floods reflect the learning experience many of those involved went through. This demonstrates the benefit of experience when framing any response. This experience can come in two ways – through dealing with actual emergencies or through exercises. Because relying on experience of actual emergencies alone may risk dissipation of experience and expertise, the Government has a wide-ranging exercise programme to ensure that experience gained is then sustained.

**5.78** The last national flooding exercise was Exercise Triton in 2004. The exercise

scenario covered an extreme event with extensive coastal flooding affecting nearly half of England and Wales. The Review notes that another national flooding exercise is not due until 2010 (although local flooding exercises do take place). The capability of central government in a serious flooding emergency would be enhanced if that exercise could be brought forward, not least because departments will be refining their arrangements in light of both their own learning and this Review.

**IC 49** – The interim conclusion of the Review is that a national flooding exercise should take place at the earliest opportunity in order to test the new arrangements which central government departments are putting into place to deal with flooding and infrastructure emergencies.

### Regional leadership

**5.79** Regional Civil Contingencies Committees (RCCC) were activated in the south west region on 23 and 24 July as a precaution against the potential wide-area impacts of power loss that would have occurred if Walham switching-station had been flooded or closed down. These were the first RCCCs activated since the Civil Contingencies Act came into force in 2004.

**5.80** The Review has heard evidence that, regionally, the reasons for activating the RCCC were not widely appreciated and there was some uncertainty in responders' minds over the RCCC's authority and relationship with COBR. Some people wrongly believed that the RCCC had a command and control function above Gold Command rather than being a structure for coordinating the regional picture and liaising with central Government. It appears to have been sensible for the RCCC to meet when it did and to step it down once it was clear that widespread power loss had been avoided. However, the Cabinet Office

and CLG should explain the situation to local responders, drawing on the events of the summer and the role and purpose of RCCCs.<sup>6</sup>

### Financial assistance

**5.81** During and after the floods, the Government made a number of grant awards to assist affected regions and help those in greatest need, totalling £63 million in November 2007. The money was used for example to repair schools and roads and to cover the replacement of essential household items for vulnerable individuals and their families. The Review has heard praise for the Government's swift award of these grants and the flexibility given to local authorities in their allocation of the funds to those in need; however, there have also been concerns raised about differences in how the schemes operated and uncertainty as to whether they will apply in the future.

**5.82** Government financial assistance was provided via four main schemes:

- the 'Bellwin' Scheme, through which CLG made emergency financial assistance available to local authorities to cover the costs of the emergency response;<sup>7</sup>
- the Flood Recovery Grant, paid by CLG, which was mainly used by local authorities to ease the plight of those affected by the floods;
- a grant to help schools and young people paid by the Department for Children, Schools and Families (DCSF); and
- a scheme to provide support for the repair of roads damaged in the floods provided by the Department for Transport (DfT).

**5.83** The Bellwin scheme may be activated where local authorities have spent money in taking immediate action to safeguard life

or property or to prevent suffering or severe inconvenience. As such, it applies to the response phase of an emergency rather than recovery activities such as repair and restoration.

**5.84** During the floods, the Government revised the 'Bellwin' rules to assist local authorities with 100 per cent (up from 85 per cent) of their eligible emergency costs over a standard threshold. This was praised, as was the scheme more generally. But the scheme has also been described as limited in that it focuses exclusively on response, with no scope for funding recovery activities. It is clear that local authorities in particular would like financial assistance to help their communities recover from exceptional events.

**5.85** The Flood Recovery Grant and the grant paid by DCSF were created following the June floods. Although this assistance was very much welcomed, local authorities have said that differences in the way the schemes operate have led to confusion. The Review has heard from a number of local authority Chief Executives who allocated funds where the need was urgent without being sure that the money would be reimbursed by the Government. This reliance on trust left the Chief Executives personally – rather than institutionally – exposed. Furthermore, following messages from government that the schemes should not be regarded as setting a precedent, local authorities are uncertain whether they will be available in future major emergencies.

**5.86** The British Chambers of Commerce (BCC) welcomed flood grants from the Regional Development Agencies (RDAs) to help businesses, but reported that businesses were sometimes unaware of them. They also highlighted the impacts on

<sup>6</sup> [http://www.ukresilience.info/upload/assets/www.ukresilience.info/err\\_chap\\_08.pdf](http://www.ukresilience.info/upload/assets/www.ukresilience.info/err_chap_08.pdf)

<sup>7</sup> <http://www.local.communities.gov.uk/finance/bellwin/bell078.pdf>

businesses which were not directly affected by the floodwaters, but who had suffered due to customers or staff being cut off by road closures. Because they were not directly flooded, insurance did not cover their losses and they were not eligible for RDA flood grants. The BCC has suggested that in such cases a contingency fund might be considered which could offer grants or short-term loans.

**5.87** Relief funds collected by voluntary organisations played an important role in helping those most in need during and after the floods. £5 million was collected by the Red Cross UK Floods Appeal and at least £900,000 was raised through Rotary International in Great Britain and Ireland. In addition, 14 local appeal schemes were set up by local authorities. While the local appeal schemes raised large sums of money and were of undoubted value, the Review has been advised that a single national fund might have gained more media coverage and raised more money. However, a possible counter-argument is that donations were intentionally made to local schemes to provide local benefits and accordingly might have been more generous. The Review does not make any recommendations in this respect, but the arguments might be considered by those setting up future appeals.

**5.88** The question of financial assistance is a complex issue. Response and recovery must be properly resourced but the right safeguards and incentive structures have to be in place. The Review is aware of forthcoming studies and will consider the findings of these and make firm recommendations in its final report. Certainly, more can be done to streamline existing arrangements.

**IC 50** – The interim conclusion of the Review is that financial assistance for local responders in relation to emergency response and recovery should be revised to improve speed, simplicity and certainty.

## Transition to recovery

**5.89** The transition from response (the actions taken to deal with the immediate effects of an emergency) to recovery (the process of rebuilding, restoring and rehabilitating the community following an emergency) flowed smoothly over the summer in most areas. However, submissions to the Review have noted that, in some cases, separate recovery sub-groups were not set up from the outset and that this led to confusion arising as to who should direct resources and negotiate with key partners.

**5.90** The Review therefore recommends that recovery sub-groups are set up from the outset. Submissions also highlight the value of a formal handover of responsibilities between Gold Command, usually chaired by the police, and the Recovery Co-ordinating Group (RCG), normally chaired by the Chief Executive of the Local Authority. The Review recommends that this approach is followed in future.

**5.91** These observations and recommendations are reinforced by recent Cabinet Office guidance<sup>8</sup> and the Review recommends that awareness of the guidance is raised at Local Resilience Forums. One other concern raised by local authorities is the ‘dropping off’ of some responders once handover to the RCG has taken place. The value of a continuing contribution by appropriate responders to the recovery phase should not be underestimated. The Review

<sup>8</sup> [http://www.ukresilience.info/upload/assets/www.ukresilience.info/recovery\\_documents/recovery\\_plan\\_guidance\\_template.doc](http://www.ukresilience.info/upload/assets/www.ukresilience.info/recovery_documents/recovery_plan_guidance_template.doc)

strongly endorses high-level representation on both Gold Command during the response phase and the RCG during the recovery phase. Local Resilience Forums should agree which responders are essential to both stages.

**IC 51** – The interim conclusion of the Review is that Local Resilience Forums should be made aware of recent Cabinet Office guidance setting out the transition to recovery. Recovery sub-groups should be established from the onset of major emergencies and in due course there should be formal handover from Gold Command to the local Recovery Co-ordinating Group(s), normally chaired by the Chief Executive of the affected local authority.

“I lost all my Christmas decorations, kids’ passports, birth certificates and photos. I have got no possible way now of getting them.”

**Householder, Sheffield**

“The whole of the ground floor of our house was damaged by the flooding. Almost nine weeks on now, and we are living a nightmare day in day out. We live in the upstairs area of our house as downstairs is ripped back to brick. We have no cooker, so live on takeaways and microwave food. The thought of suffering a winter in this mess is unthinkable.”

**Householder, West Berkshire**



James Hooker, right, and his wife Liz, scrub the floor of his parent’s house which was damaged by flood water in Tewkesbury, Gloucester © Empics