

Heavy rain, flooding, storms and gales scenario – July 2007

There is an overall trend that summers are becoming drier and winters becoming milder and wetter. Since the 1960's there have been more winter rain days and longer wet-spells. In addition heavy storms have contributed more to winter rainfall totals. There is also greater potential for extreme flooding events as demonstrated by the floods in July 2007.

The wettest period from May – July on record occurred in 2007 with 414.1mm falling (the previous wettest being 349.1mm in 1789). June was a particularly wet month, but prolonged heavy rainfall in July caused a number of major rivers and their tributaries to burst their banks. As a result of flooding and other storm damage:

- The Emergency Planning Unit received and responded to 1300 phone calls within 48 hours.
- Much of Stratford town centre was left under water and performances at the Royal Shakespeare Company's Swan Theatre were cancelled following flooding on Waterside.



- The River Leam burst its banks in Leamington and people were urged not to go to the town centre.
- There was widespread disruption to the road, motorway and rail networks within the region as cars were abandoned due to flooding and fallen trees.
- The Fire Service had to be called out to help rescue people from flooded homes.
- More than 1000 homes in Coventry and Warwickshire were blacked out when high winds brought down power and phone lines.
- The total cost to council services of responding to the

floods was over £1.7 million. This included £800,000 damage to highways and bridges, £500,000 in insurance claims and £350,000 following the forced temporary closure of a care home.

- The potential economic cost to the whole of Warwickshire as a result of the floods was estimated at £90 million.

In light of prolonged rainfall, flooding or storm damage, consider how such an event would affect your service. What are the 'potential' issues that may arise?

For example:

- How would demand for your service change in the event of flooding or more frequent heavy rainfall?
- How would milder, wetter winters affect how you plan and deliver your service?
- What impact would there be on staff and service users?

Drought / Heatwave scenario – July 2006

The average temperature in the midlands has risen by about 1°C since the 1970s, with 2006 being the warmest year since records began in 1766. To put this into even more context, the ten warmest years on record have occurred since 1997. Global temperatures for 2000-2008 now stand almost 0.2°C warmer than the average for the decade 1990–1999.

During July 2006, British temperatures exceeded such holiday destinations as Malta, Athens, Bermuda and Rome. As temperatures soared across the country, the heat brought people to the beaches and into the shade, melted roads and provoked health and safety warnings.



In the heat:

- Many schools chose not to open, while others closed at lunchtime and many school sports days were cancelled.
- On the roads, emergency measures were brought in to protect surfaces with gritters spreading gravel after asphalt began to melt.
- Heat caused railway lines to buckle in the Midlands causing speed restrictions and delayed services.
- Unions called for employers to keep staff cool and called for a change in the law to create a maximum working temperature.
- There was a tourism boom as people flocked to parks and coastal resorts to enjoy the hot weather and to try and stay cool.-
- A surge in demand for power for air conditioning systems continued to put pressure on electricity supplies.
- Water tankers were drafted in to top up reservoirs in the Midlands as water supplies were affected in Nottinghamshire, Derbyshire and Cardiff.
- Animals also tried to cool off. At zoos, keepers tried to make life more comfortable for the animals, handing out fruit or blood-flavoured ice lollies. The RSPCA issued warnings about leaving pets in areas without cover or water and said two dogs had died of heat exhaustion.
- Visitors to the Peak District National Park in Derbyshire were banned from venturing off footpaths by officials fearing fires in dry wooded and moorland areas. There were also increased 999 calls as a result of barbecues causing fires.
- The number of 999 calls has increased as people, particularly the elderly, struggle to stay cool in the heat, with there increased cases of heatstroke and dehydration.

In light of a prolonged heatwave consider how such an event would affect your service. What are the 'potential' issues that may arise?

For example:

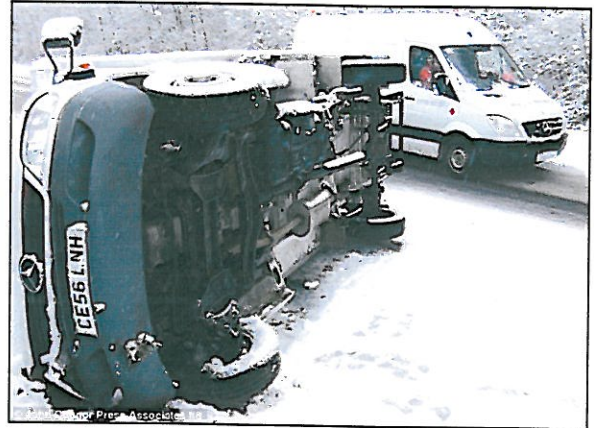
- How would you cope if heatwaves became more frequent or intense?
- Might increased temperatures or heat waves affect your ability to deliver services?
- How would reduced summer rainfall affect your service?

Low Temperatures and Heavy Snow scenario – January 2010

The winter of 2009/2010 was officially recognised as the coldest in 31 years. After three months of snow, sleet, rain and consistently freezing temperatures figures show the UK winter has been the harshest, in temperature terms, since 1978-79.

During the two weeks of snow in January:

- More than 180 schools were forced to close. As a consequence the WCC school closure website received 333,000 hits, with the peak being 77,000 during Wednesday, 6th January (12,000 between 7am and 8am alone).
- Gritting was carried out on the county's road network by the Highways Team, but due to the sustained snowfall primary routes were only gritted to preserve stocks as other local authorities ran out of supplies completely.
- The Customer Service Centre took 3,524 phone calls in January - 67 per cent of these calls were about gritting.
- Bin collections were cancelled across Warwickshire.
- Surges in demand for gas led to shortages as particularly elderly people tried to stay warm.
- The Fire Service had to deal with an increase in the number of house fires as people tried to keep warm with old paraffin and gas heaters.
- 4x4 vehicles were needed to help Health, Social and Care workers reach inaccessible villages to carry out their visits, and also help other services such as residential care and meals on wheels.



Following the snow and as a result of the thaw:

- The county council's highways teams filled almost 8,000 potholes in temporary repairs, costing about £100,000. However the bill to carry out permanent repairs to the potholes was in the region of £500,000.
- There was an increased risk of flooding and The Environment Agency issued a total of 26 flood warnings for the Midlands, including for the River Leam between Marton and Leamington.

In light of severe snow consider how such an event would affect your service. What are the 'potential' issues that may arise?

For example:

- How would demand for your service change in the event of extreme low temperatures or heavy snowfall?
- How would milder, wetter winters affect how you plan and deliver your service?
- What impact would there be on staff and service users?