

Environmental Risks

Environmental risks have hit the UK headlines in the last five years, mainly due to the effects of devastating storm/flood damage, some of which occurred in areas which were not previously considered to be vulnerable. However, the effects of climate change can be further reaching, as this guide will highlight, while relatively new strategies to generate energy and promote sustainability are also posing environmental question marks. This guide provides information on some of these including flood, potholes and fracking.

Flood

In the past, storm and flood events were generally the result of climatic and seasonal fluctuations, with heavy rainfall, snow and tidal surges occurring in the autumn and winter. With unseasonable heavy rainfall, the UK is now experiencing significantly more events in the spring and summer. The effects are exacerbated by increased building that reduces water run-off areas, less investment in flood defences, resulting from cuts in public spending, and a rising water table level as a consequence.

Historically, flooding tended to occur in coastal and river regions, allowing local authorities that were likely to be affected to take appropriate prevention and planning measures. Growth in unpredictable heavy rainfall has widened the range of areas where flooding may occur and the likelihood that the local authorities involved may not be prepared.

Risk consequences

The impact of storm and flood on property and infrastructure is widely appreciated, due to incidents over the last few years. The significant challenges for affected local authorities in these circumstances include:

- Maintaining continuity of services
- Providing short-term, longer-term and possibly permanent rehousing for displaced residents
- Repairing roads and bridges
- Communicating progress and developments with their communities.

Health and safety

In addition, local authorities have to deal with health and safety concerns. The influx of contaminated water into properties means that preparing these properties for rehousing is more than a matter of 'drying out', by also ensuring that there is no remaining residue which could present a health hazard. If contamination is severe, it may not be possible to clean and be necessary to remove walls or floors.

Less clear cut are the effects of the impact on displaced communities.



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We often have to face emergencies such as flooding in our everyday working lives. The approach taken by the team at Devon & Somerset Fire & Rescue Service is an excellent example of cross-agency working. At the same time, it indicates the need to learn from and improve our resilience activities as a result of such incidents. It re-emphasises the importance of the review phase of the usual risk-management cycle.”

Robin Powell, Corporate Risk and Insurance Manager at Sandwell Council

Over time, people become comfortable within their local areas and often, particularly in the case of the elderly or vulnerable, establish their own local support networks. With very few local authorities able to access a portfolio of housing which is able to immediately accommodate a large inflow of new residents, such people are likely to lose their local support networks and may experience considerable stress relating to future uncertainties.

Local authorities need to take these needs into account, perhaps considering whether those being rehoused would benefit from this being a permanent rather than temporary relocation. Elderly people on their own, who have been living in homes that were no longer suitable for their requirements, may be prompted by the need to relocate to consider a different form of supported living.

Other environmental risks you should be aware of

Potholes

The highway network is deteriorating at a faster rate than current funding permits authorities to maintain standards, with recent severe weather events exacerbating the problem.

Councils need to prioritise long-term demands for highway maintenance to minimise costs and deliver value for money.

Sinkholes

The sustained and heavy rainfall of the last two years with the associated rise in the water table level resulted in the opening of a number of sink holes and collapse subsidence. Local authorities need to assess their vulnerability, bearing in mind that sinkholes tend to occur where the composition of the underlying ground, for example limestone, gypsum or chalk, may mean that an influx of water can cause a void. When granting planning permission for developments over such areas a geological survey is very important.

Wind turbines

Currently, there is no conclusive evidence that wind turbines present a health risk to people despite reports of ‘wind turbine syndrome’ (generally attributed to low frequency noise). Perhaps more to the point is that some reports suggest they may not be a particularly efficient way of generating energy so local authorities may risk allegations of unnecessarily blighting landscape and contributing to environmental damage associated with the bird and bat collisions that can occur with turbines.

Solar panel fires

Local authorities are under pressure to build sustainably but a number of recent solar panel fires in schools suggest that it may be wise to wait before rolling out this particular piece of environmental technology.

Fracking

While hydraulic fracturing to extract gas and oil from shale rock is regarded by some as an effective way of generating power, there are some question marks, particularly regarding the over-use of water and its possible pollution.

Are you planning for these risks?

Key questions you should ask

- In the absence of exposure to traditional flood risk, do we have a flood plan and anyone in-house who has experience of such an event?
- If so, when was our plan last updated and who, both internally and externally, has responsibilities – and for what?
- Is our flood plan fit for purpose? Have we tested it recently?
- Do we fully understand the ramifications of a flood within our area and the extent of the problems it could produce? (For example, regarding our property portfolio and personnel exposure, both internally and externally)
- Would we be able to access immediate relevant advice from experts? Potentially in competition with other organisations in neighbouring areas
- Do we receive local flood warnings and, if so, who is the person responsible for receiving and monitoring these?

Potential strategies

- Local authorities within known high risk areas should have fully developed flood and business continuity plans, which are regularly tested and be aware of associated risks. With more frequent storm/flood incidents in historically less vulnerable areas, other local authorities need to take the same precautions
- Similarly, those in high risk areas should have the contacts to obtain the right expertise in the event of a major incident. Those local authorities with flood less high on their risk register may want to make provision to secure those resources to ensure that, if there is a need, they too can access a pre-existing well rehearsed plan
- It is important to ensure that business continuity plans do not simply focus on internal impact, such as loss of the local authority's own premises and how its services will function. Considerations should extend to the wider community impact as well as to primary associated functions. For example, having a comprehensive data base which details the degree of vulnerability of residents, allows a local authority to prioritise its initiatives
- Timely communication with tenant or employee groups is essential, particularly in explaining delay in returning to properties due to any contamination problems.

Zurich Municipal's view

Even if some local authorities consider that their storm/flood risk is remote, it is worth making contingency plans. In our experience, those that have tried and tested business continuity plans in operation with appropriate stakeholder groups, recover far more quickly after an event.

Contact us

If you have any questions or if you would like to talk to one of our team please contact us at info@zurichmunicipal.com
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Further reading

British Geological Survey, 2015, Sinkholes (or dolines) <http://www.bgs.ac.uk/caves/sinkholes/home.html>

<http://newsandviews.zurich.co.uk/wp-content/uploads/2014/12/Managing-and-dealing-with-potholes-to-minimise-risk-for-local-authorities.pdf>

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