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Editorial

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My initiation into the fickleness of public opinion came as a young engineer working for the Essex River Authority. Immediately after a flood event, (as part of a cost-benefit exercise) we canvassed private home owners and businesses in the area to assess their losses and what they would be prepared to pay for flood protection. Based on a significant amount of this information, we designed a scheme that appeared to have a generous benefit/cost ratio. After several years had elapsed, just prior to the start of the scheme, we questioned the public again. The scheme still went ahead—but at a much less generous benefit/cost. The collective public memory is short; this applies equally to acts of terrorism or flu epidemics as well as natural disasters such as flooding. Strong leadership at national and local level is always necessary to deal with these threats, but history has taught us that ultimate success will always depend upon public awareness and participation. The risks involved and the remedies must however, be kept in the public conscience lest they forget.

In his recent review of the June and July 2007 floods Sir Michael Pitt¹ has concluded that basic changes are needed in the way that the UK deals with the threat of future flooding, particularly in the light of climate change. The report states that ‘The flood of last year caused the country’s largest peacetime emergency since World War II. The impact of climate change means that the probability of events on a smaller scale happening in the future is increasing’. In view of this we may ask whether it is currently the foremost topic of conversation in pubs, clubs and common rooms up and down the country. I doubt it—what with the new football season about to start.

Pitt says that he is concerned about the quality and accessibility of information available to the public and also the emergency services, he states that ‘We need to be more willing to tell people the truth about risk’. The report contains 92 recommendations and among them are a number which bear very much on public awareness, preparation and participation. People who are considering buying property should be alert to any flood risks so that they can make informed decisions. The government should work together with the insurance industry to provide public education on the benefits of insurance. The government should also encourage local communities to invest in flood risk management measures. Building regulations should be tightened when improving or building new homes in flood prone areas, and home improvement loans should be available for properties in high flood risk areas. Home information packs,

provided when selling a property, should include flood risk information. The government should improve the public’s understanding of community risks and implement a public information campaign on flood prevention and mitigation measures. Detailed information should be provided on a monthly basis on areas recovering from flooding, including the number of persons displaced from their homes. All of these measures, and a number more in the review, will help to improve public awareness of flooding risks and hopefully keep them in the communal conscience. The public need to be aware of what to do in an emergency—certainly one of the main lessons emerging from the effects of hurricane Katrina in the USA was the importance of communication and cooperation at all levels between neighbours and local and government agencies.

As well as being made directly aware of the immediate effects of flooding, the public should be reliably informed of the risks involved and the possible effects in terms of damage to property and loss of life. They should also be conversant with the possible steps that could be taken to mitigate these effects and the costs involved. Tahmina Anam² in a recent article in *The Guardian* concerning the effects of global warming says that ‘if the public remain unconvinced about the perils of ignorance it is because of a failure of imagination, and when the imagination fails it is the duty of those who govern us to set the rules. While we do not want a heavy-handed government, the public does need leadership when the collective imagination or memory fails’. Pitt suggests that a cabinet committee should be set up to deal with the flooding problem and that it should be given the same importance as the major risk of terrorist attacks and the spread of flu. This is surely a step in the right direction.

In the current world economic crisis, it is even more important that governments carry public opinion with them if expenditure on flood mitigation works is to be maintained—and it must be maintained. Pitt states that ‘Waiting for another serious event is a dangerous “strategy of luck”; we need to act now to protect our future.’

Difficult strategic decisions will have to be made concerning future flood mitigation works. There are competing and interwoven social, economic and environmental interests. For instance it is probably not viable to maintain protection at the current level for all of the land currently behind flood-walls. The public will need to be involved in decisions concerning what land to keep and what to flood. How cost-benefit analyses

can be designed in order to accommodate social, welfare and environmental effects is also a key area demanding a community input.

Spelling out the future risks of climate change and flooding, and then keeping them in the forefront, with both government and community is a task that falls largely upon engineers and scientists. It is a task in which with a few shining exceptions, we have not excelled in the past. Many engineering departments at universities place a good deal of emphasis upon communication skills, and ICE to their credit encourage this. Hopefully the next generation of engineers will be better equipped than this to make their voice heard—we must all hope that this will not be too late.

Finally, as far as educating the public is concerned, I must end on a more cheerful and positive note. There is an excellent website which is both instructive and good fun. This is 'FloodSim.com' in which you are challenged to manage the UK flood strategy over the next three years. I certainly learned from it and found playing it a very salutary experience indeed.

REFERENCES

1. Lessons learned from the 2007 floods: the Pitt Review, Cabinet Office, July 2008, See http://www.cabinetoffice.gov.uk/thepittreview/final_report.aspx (accessed 27/08/2008)
2. ANAM T. I've seen the effects of climate change—and if people won't face up to it, governments must make them. *The Guardian*, 3rd July 2008.