

You are invited to attend an Open Meeting

# WATER, WATER EVERYWHERE (AND NOT A DROP TO DRINK)

Floods (and droughts):

evidence-based predictions, risk assessment and future management  
*engineers, statisticians, interest groups, the environment agencies, the water companies and  
government join together to consider these issues*

**Thursday 16 March 2006**

**(14.00 – 17.00 hrs)**

**The Royal Statistical Society  
12 Errol Street, London EC1Y 8LX**

*(nearest underground stations: Barbican, Old Street, Moorgate and Liverpool Street – see <http://www.rss.org.uk/PDF/RSSmap.pdf>)*

Just how important is it that we adapt to climate change? In Britain, there are more than 2 million homes in flood prone areas. Major floods in 1998, 2000, 2002 and more recently in 2004 (Boscastle) and in 2005 (Carlisle) have all taken their toll. Floods in Central and Eastern Europe and the drought across Southern Europe in the Summer of 2005 have been the worst for decades.

Scientists and statisticians agree that greenhouse gas emissions are warming the Earth's climate and predict that global temperatures will, on average, rise substantially over the next century. However, there is much less agreement regarding likely patterns of change in rainfall, particularly at a regional level. This creates serious difficulties for those charged with the task of planning against future floods and droughts.

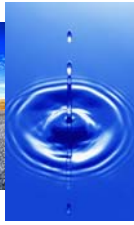
Until recent years the strategy for managing floods was almost entirely based on 'defence' but the current focus is much more on flood risk management ('managed flooding' making communities better able to cope with floods) - how can we develop a better understanding of the river system and sea defences and improve governance, emergency planning and disaster management? Do we need to take a similar approach to drought risk management?

Finally, how do insurance companies calculate flood premiums and develop catastrophe models (the risk triangle)? and how important is the National British Flood Insurance Claims Database? - the biggest of its kind in the world.

This is your opportunity to consider these issues with experts, and to consider how the results of research inform stakeholders such as industry, government departments and, more generally, influence public policy-making.

Whether you are a member of the public with an informed interest in these topics, a geographer, scientist, mathematician or student of related disciplines, we are confident that this programme (see overleaf) will reveal new information and encourage fresh thinking on these issues.

Please contact Debra Hurcomb, Theme Manager, Education at the RSS on E-mail: [d.hurcomb@rss.org.uk](mailto:d.hurcomb@rss.org.uk) to find out more. There is no charge for attendance or refreshments. Booking is not essential (and subject to availability of places, late deciders will be very welcome on the day), however, if you are able to let us know that you are planning to attend – on E-mail as above, Tel: 020 7614 3934 or Fax: 020 7614 3905 – it will aid administrative arrangements for the event. Further details and a map to help you find us will also be supplied. **We look forward to seeing you on the day!!**



# PROGRAMME

| TIME             | SESSION   |
|------------------|---|
| <b>PROGRAMME</b> |   |
| 14.00            | <i>Welcome and Introduction to Event</i><br>(Marian Scott and Ron Smith, Environmental Statistics Section, The Royal Statistical Society)   |
| 14.05 – 14.35    | <i>Floods, Droughts and Crystal Balls</i><br>(Richard Chandler, University College London)<br><br>Richard will consider the range of timescales that are of interest (hours for householders, decades for engineers designing flood defences). What happens to rain after it hits the ground? and what are some of the difficulties attached to predicting some floods accurately?. There will also be a brief review of long-term planning in the past and how this is changing in the UK and consideration of some of the scenarios for the next century.<br><br><i>Richard is a statistician with a lot of experience in problems relating to flooding and other aspects of climate.</i> |
| 14.35 – 15.05    | <i>“Flood Risk Management” - what do we mean by this? how <u>do</u> we manage the risk? How could the risks change in the future?</i><br>(Jim Hall, University of Newcastle)<br><br>A review of how flood risks are analysed and how solutions to flooding problems are developed and tested. The talk will look at the present day and the potential (and rather uncertain) changes that may take place over longer timescales. How can decisions be made that are robust to these sometimes severe uncertainties?<br><br><i>Jim is a civil engineer who analyses and develops responses to the risks of flooding and coastal erosion.</i>   |
| 15.05 – 15.35    | <i>Developing evidence-based policy</i><br>(Gary Lane, Environment Agency)<br><br>Gary prepared the Agency's response to the floods in 2000 and will provide insight into how this experience informed future policy and action and how the Agency uses evidence to address flood risks.<br><br><i>Gary is a senior flood risk manager in the Agency's central office. He has had extensive experience of both policy making and delivery.</i>  |
| 15.35 – 15.50    | <b>Refreshments</b>   |
| 15.50 – 16.20    | <i>Are insurers getting out of their depth?</i><br>(David Crichton, Benfield Hazard Research Centre, UCL and Middlesex University Flood Hazard Research Centre)<br><br>David will explain how insurance companies calculate flood premiums, how they develop catastrophe models (the risk triangle) and consider the importance of the National British Flood Insurance Claims Database and the importance of adapting to climate change.<br><br><i>David is an insurance and climate change researcher and freelance consultant.</i>   |
| 16.20 – 17.00    | <b>Debate – panel members answer further questions from the floor/open discussion</b>   |