

# Flood Forecasting: Developments in Science and Application

The 2008 Pitt Review was one of the widest ranging policy reviews ever carried out in the UK and resulted in the establishment of the Flood Forecasting Centre, with forecasting products now being issued to a range of stakeholders. Agencies responsible for flood forecasting across the UK and Ireland have advanced real-time modelling applications to support the growing need for early warning services which has in turn seen a significant improvement in flood resilience.

Ongoing challenges remain for flood forecasters including the prediction of flash flooding. Research such as the jointly funded Natural Environment Research Council and Met Office Flooding From Intense Rainfall program has looked to seek ways of improving forecasts of such events and scoping end-to-end forecasts. Other recent developments include how to handle forecast uncertainty, with a growing application of probabilistic forecasting.

This **British Hydrological Society** National Meeting will bring together those involved in developing the science and its application and will look at how we are making more use of flood forecasts.

Venue: One Great George Street, London. 0930 to 1600, 1<sup>st</sup> October  
<https://www.ice.org.uk/events/developments-in-science-and-application-london>



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1<sup>st</sup> October 2019



Image source: Flood Forecasting Centre

# Session 1: Developments in flood forecasting science

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- 1010 **Flooding from Intense Rainfall**  
Hannah Cloke, University of Reading
- 1040 **Flood Forecasting Centre – 10 years of operations, learning and a view to the future**  
Charlie Pilling, Flood Forecasting Centre
- 1100 **Tackling uncertainty in flood forecasting**  
Leonore Boelee, HR Wallingford
- 1120 **A global perspective on developments in operational flood forecasting systems, with emphasis on the management of uncertainties**  
Jan Verkade, Deltares, Netherlands
- 1140 Panel discussion followed by a short British Hydrological Society AGM  
Pete Ede, BHS President



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Session 1 Chaired by  
Emma Brown, HR Wallingford

# Session 2: Flood forecasting applications across the UK and Ireland

- 1310 **Establishing the national flood forecasting and warning service in Ireland**  
Matthew Roberts, Met Éireann
- 1325 **The feasibility of future flood warning systems on the Isle of Man**  
Gemma Toher, Manx Utilities / Lancaster University
- 1340 **Flood forecasting and warning developments in Scotland**  
Pascal Lardet, SEPA
- 1355 **Developments with FEWS Wales**  
Samantha Mitchell, Natural Resources Wales
- 1410 **Consolidating, standardising and simplifying England's flood forecasting system**  
Paul Wass, JBA



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Session 2 Chaired by  
Michael Cranston, RAB



# Session 3: Future opportunities and challenges in flood forecasting

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- 1455 **Forecasting everywhere: recent developments in national scale flood and impact forecasting**  
Steven Cole, CEH
- 1510 **Providing flood forecasts and impacts online – our approach and user feedback**  
Faye Burrows, Environment Agency
- 1525 **Cost-effective flood forecasting for community-based early warning systems**  
Paul Smith and Keith Beven, Lancaster University
- 1540 **Improving the flood forecasting capability and service in England**  
Neil Ryan, Environment Agency
- 1555 Summing up and meeting close  
Nick Chappell, Future BHS President



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*Session 3 Chaired by  
Linda Speight, University of Reading*

