



UK reservoir spillway flood hydrology

Thursday 7 March 2019

Institution of Civil Engineers, 1 Great George Street, London SW1P 3AA

Nearest underground stations: Westminster or St James's Park

PROGRAMME

- 09:30 *Registration*
- 10:00 **Welcome:** Duncan Faulkner, JBA Consulting
- 10:05 **Session 1 Chair:** Peter Ede (President BHS), Mott MacDonald Group
- 10:10 **Reflections on FSR/FEH methods of design flood estimation**
David MacDonald, consulting hydrologist
- 10:35 **Flood Studies of Reservoirs – General Guidance and Two Case Studies**
João Correia, Senior Dams Engineer, Atkins
- 11:00 **Revised estimates of Probable Maximum Precipitation (PMP) and Standard Percentage Runoff (SPR)**
Colin Clark, Charldon Hill Research Station, and James Dent
- 11:25 – 11:40 *Refreshments*
- 11:40 **Flood estimation for reservoir safety – an Inspecting Engineer's perspective**
Alan Warren, Mott MacDonald Group
- 12:05 **Practical experience from hydrology and engineering from reservoir flood studies across the Canal & River Trust's network**
David Mould and Richard Dun, Canal & River Trust
- 12:30 **Discussion**
- 12:50 – 14:15 *Lunch*
- 14:15 **Session 2: Chair:** Alan Warren (Vice Chair BDS), Mott MacDonald Group
- 14:20 **Investigating dependence between ReFH model parameters and event magnitude for extreme events**
Thomas Kjeldsen, University of Bath and ICE Reservoir Safety Advisory Group
- 14:45 **Modelling the runoff from extreme hydrological events: an inter-comparison of data and methods**
Lisa Stewart, Centre for Ecology & Hydrology and Andy Young, Wallingford HydroSolutions
- 15:10 – 15:25 *Refreshments*
- 15:25 **Centennial scale records of extreme floods in the British uplands and their potential application to reservoir and spillway design**
Mark Macklin (University of Lincoln) and Sean Longfield (Environment Agency)
- 15:50 **Precision and accuracy of Unit Hydrograph model parameters for gauged and ungauged basins**
Ian Littlewood, IGL Environment
- 16:15 **Session 3: Discussion Chair:** Anita Asadullah, Environment Agency
- 16:50 **Close:** Peter Ede (President BHS)