Current European Research Relevant to Reservoir Safety: The FloodProBE and UrbanFlood Projects

M. MORRIS, HR Wallingford/Samui France, St. Jean D’Aulps, France.
C. GOFF, HR Wallingford, Wallingford, UK.
J. SIMM, HR Wallingford, Wallingford, UK.

SYNOPSIS. The European FloodProBE (www.floodprobe.eu) and UrbanFlood (www.urbanflood.eu) projects started in 2009, run for several years and contain components of research that are likely to be of interest to reservoir safety managers.

The FloodProBE project focuses on flooding in urban areas, with research into the resilience of the built environment to flooding and the performance of flood defences, such as embankments. Processes such as internal erosion, structure transitions and the performance of grass cover are investigated.

The UrbanFlood project is developing a framework of ‘smart’ sensors, connected to the Internet and providing real time data for use within systems supporting routine asset management, early warning and emergency event management. Linked with a touch table system to support emergency response event management, this system offers a glimpse of what could soon be available to support the management of dam incidents.

This paper provides an overview of the two projects, highlighting some of the aspects of research considered most relevant to reservoir safety and where more detailed information can be accessed.