



**EVENING MEETING**

**MONDAY 21st JANUARY 2013 at 5:30 PM**

One Great George Street, London

(Nearest tube: Westminster)

**Banbury flood storage reservoir**

by

**John Ackers and John Hopkins (Black & Veatch)**

For a brief synopsis see overleaf

**Admission free**

**Teas available from 5.00pm**

**For more information please contact**

**Tim Fuller (BDS Secretary) on 020 7665 2234 or  
email : [bds@ice.org.uk](mailto:bds@ice.org.uk)**

This meeting will also be streamed live on the internet. For more details on how to view this meeting online please visit the BDS website.



## Banbury flood storage reservoir

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**John Ackers (BV) and John Hopkins (BV)**

### Synopsis

The primary purpose of the Banbury flood alleviation scheme is to reduce the incidence and severity of fluvial flooding in the town of Banbury. This is achieved by storing part of each severe flood in the flood storage reservoir – which is located upstream of Banbury, largely within the natural floodplain of the River Cherwell – limiting flows passed downriver to an amount that does not cause unacceptable flooding in the town. The principal elements of the scheme are:

- an ‘on-line’ flood storage reservoir, with a storage capacity of about 3 million cubic metres;
- the raising of an 860m long section of the A361 road that passes through the flood storage reservoir; and
- the construction of various in-town flood defence banks and walls and a pumping station.

The talk will concentrate on the flood storage reservoir, including the flood hydrology of the catchment, the development of the reservoir design, including the passive flow control structures, and the flood modelling which shows how it will perform. It will go on to describe some of the other design features and cover the construction of the scheme, which was completed in August 2012.



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## **Biographic details of presenters (not for inclusion in the issued flyer)**

### **John Ackers**

John Ackers is an AR panel engineer with a particular interest in the design of hydraulic structures for reservoirs. Among these have been the air-regulated siphons on the bypass spillway of the Ghazi-Barotha hydropower scheme in Pakistan, labyrinth spillways in Wales and Scotland and a proposal currently under development to retrofit piano-key weirs around a bellmouth spillway in Scotland. The development of the orifice control devices for Banbury was based on an idea he came across in irrigation schemes in Turkey and Pakistan. Most of these hydraulic structures – Banbury included – have involved physical model tests.

John has been involved in the Banbury scheme almost since its inception following the Easter 1998 floods. He gave evidence at the Public Inquiry in 2010 and is the Construction Engineer under the Reservoirs Act 1975.

### **John Hopkins**

John Hopkins has been a Supervising panel engineer (SE) since 1986. In recent years he has been SE for up to 26 reservoirs. These include Roadford & Colliford and flood storage reservoirs in Milton Keynes and the Somerset levels. He has worked for both consulting engineers and water companies in the planning, design and construction of a wide range of water engineering schemes.

John has been involved in the Banbury Scheme since 2010, as engineering manager finalising the detailed design and as Site Supervisor during construction.