



# The British Dam Society

## EVENING MEETING

Monday 18<sup>th</sup> November 2024 - 18.00

### Discussion Papers:

**Quality and the safety of reservoirs.**

**The role of the Construction Engineer and Panel of Specialists in the modern contracting world.**

**The Changing Role of the Supervising Engineer.**

Chris Scott, Julian Welbank, Dominic Molyneux



**For synopsis and brief presenter biography see overleaf | Admission free | Teas available from 5.30pm**

This meeting will be live at the ICE and streamed on the internet. For more details, including enjoying the live stream as part of a group at one of our Regional Hubs around the UK, please visit the meetings page on the BDS website: [www.britishdams.org](http://www.britishdams.org)

For more information, please contact the ICE on 020 7665 2147 or email: [bds@ice.org.uk](mailto:bds@ice.org.uk)

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## Synopsis

### **Quality and the safety of reservoirs.**

Arising from the Independent Reservoir Safety Review Report written by Professor David Balmforth and published in March 2021, work is being done to identify approaches to assess the quality and consistency of inspection reports and annual statements.

This paper will take a step back to consider what “quality” could mean in the context of reservoir safety legislation, the factors that influence the delivery of “quality” in safety interventions and what actions could be taken to promote “quality”.

This will be done by considering the various definitions of quality in the literature. The purpose of reservoir safety legislation will be reviewed and possible definitions of quality appropriate for reservoir safety activities discussed. The paper will move on to consider the factors that influence the quality of reservoir safety and finally suggested actions or interventions to deliver improvements will be proposed.

### **The role of the Construction Engineer and Panel of Specialists in the modern contracting world.**

The Reservoirs Act requires that for any new reservoir or alteration to enlarge an existing reservoir, a Construction Engineer is employed to design and supervise the construction or alteration. Procurement procedures have moved on from when the Reservoirs Act was written. Is there a need to rethink the role of the Construction Engineer for the modern contracting arena?

The Coxon report (Coxon, 1986), produced after the failure of Carsington dam in 1984, recommends that a panel of specialists reviews and comments on the design and construction of any major new dam. Expert panels are common on international projects and in some water companies, but there is less recent experience of panels for new dams in UK. We propose possible organisational arrangements for panels of specialists appointed for the new reservoirs that are proposed in England over the next 20 years.

### **The Changing Role of the Supervising Engineer.**

The Reservoirs Act 1975 introduced the role of the Supervising Engineer to reservoir safety legislation. Documentation from the time of the bringing the 1975 Act into force in 1985/86 indicates that the role was envisaged as a technical support to the Undertaker to fulfil his duties under the Act.

Amendments to the 1975 Act in 2003 and 2010 have given Supervising Engineer’s additional powers and placed additional duties upon them, some of which came into effect in England following the Ministerial Direction of Emergency Plans. The Independent Reservoir Safety Review Report written by Professor David Balmforth published in March 2021 and a Defra consultation in August 2023 both suggested significant additional duties and obligations.



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The cumulative effect of these actual and proposed changes is to alter the nature of the role of the Supervising Engineer with implications covering a range of areas from qualification and experience requirements for appointment to the commercial attractiveness of the work.

## Presenter's Biographies

**Chris Scott, Independent** | Chris has been a member of the All Reservoirs panel since 2005. He has over 40 years of international experience covering a wide variety of reservoir and water engineering projects. He is independent having previously worked for Binnie and Partners/Black & Veatch for 38 years. He has served on the committee of the BDS on three occasions, is the chair of the ICE's Panel Engineer Committee and is a member of the Reservoirs Committee.

**Julian Welbank, Independent** | Julian is a Fellow of the ICE and has been a Supervising Engineer for nearly 20 years. After spells with engineering consultants on UK and international projects he worked for Wessex Water as Head of Asset Strategy and Reservoir Safety Manager. Since 2020 he has operated as programme director and advisor for strategic resource option projects for the West Country Water Resources group and other clients.

**Dominic Molyneux, Binnies** | Dominic is an All Reservoirs Panel Engineer. He is currently Construction Engineer for Havant Thicket Reservoir, on the expert panel for the Lincs and Fens reservoirs, and a member of the design team for SESRO. He has over 35 years of international experience covering water retaining heavy civil engineering works above and below ground. He is a member of the Reservoirs Committee.



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**WARRINGTON | LEEDS | GLASGOW**

The Regional Hubs allow the live stream of BDS evening meetings in London to be enjoyed as part of a group elsewhere in the UK.

Refreshments are provided from 17:30 in conjunction with watching the live streaming of the evening meeting - anyone is welcome to attend!

We would be grateful if you could register your intention to attend with the relevant Regional Hub host - details below.

**BRISTOL HUB | Liz Rivers | [liz.rivers@jacobs.com](mailto:liz.rivers@jacobs.com) | 07817 166204**

Jacobs, The West Wing, 1 Glass Wharf, Bristol BS2 0EL

**WARRINGTON HUB | Nathan Freeman | [nathan.freeman@uuplc.co.uk](mailto:nathan.freeman@uuplc.co.uk) |**

United Utilities, Lingley Mere, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP

**LEEDS HUB | Tom Anderson | [tom.anderson@mottmac.com](mailto:tom.anderson@mottmac.com) | 07481 071694**

Mott Macdonald, 26 Whitehall Road, Leeds, LS12 1BE

**GLASGOW HUB | Matthew Craig | [matthew.craig@mottmac.com](mailto:matthew.craig@mottmac.com) | 0141 378 7373**

Mott Macdonald, 319 St Vincent St, Glasgow, G2 5LD

For general queries regarding the Regional Hubs please contact:  
Stephen Cavanagh | [cavanaghsp@binnies.com](mailto:cavanaghsp@binnies.com) | 01244 304 125