



The British Dam Society

EVENING MEETING

Monday 6th March 2023 at 6:00pm

One Great George Street, London (Nearest tube: Westminster)

Grass cover - improving establishment and resilience to deal with increasing stresses

Mike Hughes BEng(Hons) MICE



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

This meeting will be streamed live 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

For more information please contact the ICE on 020 7665 2147 or email: bds@ice.org.uk

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Synopsis

Maintaining healthy grass cover is necessary for safeguarding the resilience of embankment dams and levees and is critical if they are designed to overflow.

Grass will tolerate a range of operational stresses ranging from drought to saturated ground if:

- the type of grass is appropriately selected and is sufficiently diverse;
- care is given to proper establishment; and
- sufficient attention is given to maintenance all year round.

The use of standard 'grass only' mixes, is likely to lead to disappointment if it is unsuited to the local site conditions and not measured against a sufficiently robust specification.

The presentation will draw on the contents of a paper, jointly written by Mike Hughes (Atkins) and David Holland (Salix River & Wetland Services Limited), published in the Proceedings of the 21st Biennial Conference of the British Dam Society held at Nottingham University from 15th to 17th September 2022.

The presentation will provide a practitioner's viewpoint on the importance of grass cover and explore a number of current industry publications and specifications to provide recommendations for more easily enforceable definitions of what acceptable grass cover is. The presentation will also question the standardised approach of specifying grass only seed mixes, and whether more diverse seed mixes including a small percentage of appropriately selected herbs or legumes may instead be beneficial and whether resilience can be improved by selection based on observations of existing grass diversity in the embankment and adjacent areas.

Presenter's Biography

Mike is a Chartered Civil Engineer and All Reservoirs Panel Engineer based in Swansea. Over a period of 32 years with Atkins, Mike has worked on an extensive range of projects including dams and reservoirs, flood defences, river engineering, inland waterway, harbour, highway and rail works. He has responsibility for overseeing and reviewing the planning, interpretation, design and implementation of both the geotechnical and wider civil aspects of schemes. Currently, having been involved in the development of the reference design for Havant Thicket Reservoir (the first strategic water storage reservoir to be constructed in 30 years), he maintains a design assurance role as Atkins support the client and contractor through the design development process.