



The British Dam Society

EVENING MEETING

Monday 2nd October 2023 at 6:00pm

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

Lessons Learnt from Reservoir Discontinuances

Ryan McHugh MEng MICE
Michael McAree MEng 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

Any views or opinions expressed on any matters by the presenters or participants during or in connection with this presentation are solely the views of the authors of the respective comments and/or opinions and must not be taken to be the views of the ICE or the British Dam Society or any other organisation. ICE and the British Dam Society make no representations, warranties or assurances concerning any information provided in these presentations and accept no responsibility for the content and/or accuracy.



The British Dam Society

Synopsis

Redundant reservoirs, whether they are subject to the provisions of reservoir legislation or not, have an ongoing maintenance requirement that places a burden on reservoir owners. Reservoirs upstream of communities also pose a risk to life. For these reasons, reservoir owners often consider discontinuing redundant assets; however, reservoirs can deliver amenity value for local communities as well as contributing to a desirable environmental habitat. Careful consideration should therefore be given to balancing the advantages and disadvantages when deciding whether to discontinue a reservoir.

This presentation will discuss the process which has been followed leading up to discontinuance, outlining the nuances between different parts of the UK and draw on case studies where the merits of discontinuance have been assessed. The key influences and lessons learned will be presented including identifying and mitigating environmental aspects; the findings from public consultations; the approach to whole life cost estimates; the benefits or otherwise of carrying ground investigations; the approach to dealing with sediment issues; the approach to managing flood risk during removal of the reservoir; and the approach to managing downstream flood risk following removal of the reservoir.

Presenter's Biographies

Ryan McHugh is Chartered Civil Engineer with 6 years' experience in dams and reservoirs for Mott MacDonald. He has worked on a wide variety of dam related projects; from studies to outline, and detailed, design as well as construction support and supervision. He has worked on a number of reservoir discontinuances for Scottish Water and hopes to share knowledge gained and lessons learned in these projects.

Michael McAree is a Chartered Civil Engineer with 10 years' experience working on a variety of reservoir safety schemes on UK existing reservoir assets, including spillway replacement, embankment stability, valve replacements, new drawdown provision and discontinuance in England and Wales. He is currently working as a Design Manager for Mott MacDonald Bentley based in Newport, primarily focusing on dam safety, clean water and major civil projects.