



# The British Dam Society

## EVENING MEETING

Monday 15<sup>th</sup> April 2019 at 6:00pm

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

Talybont Reservoir - innovations in pipework replacement

**Barry Cotter, Adam Bush, Charlie Woollcombe-Adams and Paul Edwards**



**For a brief presenter biographies see overleaf | Admission free  
Teas available from 5.30pm**

This meeting will also be streamed live on the internet.

For more details on how to view this meeting online, including at one of our Regional Hubs in Glasgow, Warrington, Leeds or Cardiff, 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: [societyevents@ice.org.uk](mailto:societyevents@ice.org.uk)

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## Synopsis

The presentation will cover the application of modern technology and innovative approaches which successfully led to the full replacement of the supply and scour pipework and valves at Talybont Reservoir in South Wales, formed by a 30m high embankment dam. It will explain how the use of siphons were able to maintain supply and compensation water throughout the duration of the construction during one of the driest summers on record in the UK.

Isolation of the mid-level drawoff required unusual underwater excavation and engineering. Advanced underwater surveys and the application of robotics enabled the isolation of the low-level drawoff and scour pipework and valves. The presentation will include the challenges encountered in developing and implementing the strategies which successfully facilitated safe replacement of the drawoff works without impacting the security of water supply.

**Barry Cotter** is a Dam Safety Engineering Manager at Dŵr Cymru Welsh Water and is appointed to the panel of Supervising Engineers. Barry is responsible for the management of operational and monitoring activities at 20 reservoirs in the southern region of Wales and is appointed as Supervising Engineer for a further eight reservoirs across Wales. He has worked in the water industry for just over 18 years and has specialised in dams and reservoirs for the past 10 years. In this time Barry has delivered a varied portfolio of dam engineering projects including a number of spillway works, grouting schemes and discontinuance projects. More recently Barry has managed the delivery of a number of pipe/valve replacement projects.

**Adam Bush** is a project manager working at Dŵr Cymru Welsh Water with over 15 years' experience in the design and construction of civil projects in both the water and construction sectors. He has gained experience in the construction of many types of project including concrete and steel framed buildings, large retaining walls, highways, large diameter piling, earthworks, water utilities and associated infrastructure. He has more recently worked on pipeline design and installation of various diameter pipelines and systems for pumping stations, treatment plants, reservoirs and for rehabilitation works for large water networks.

**Charlie Woollcombe-Adams** is a chartered civil engineer at Mott MacDonald with over 12 years' experience in the design, project management, and construction supervision of projects within the water, highways, and power sectors. He is the NEC ECC Supervisor for the works currently being undertaken at Talybont Reservoir, and site representative for the appointed QCE.

**Paul Edwards** is the Managing Director of EDS with over 30 years' experience in marine engineering. Paul has developed the business from a straightforward diving company to a multi-disciplined specialist engineering contractor, capable of delivering technically challenging and bespoke solutions to a myriad of marine and industrial applications. He has worked as the principal contractor controlling hundreds of contractors whilst co-ordinating his own team of skilled engineers to carry out specialist underwater engineering tasks simultaneously. He has project managed a variety of schemes for public and private sector clients, as well as some high-profile dam repairs in extremely challenging environments. He maintains his diving status as active and enjoys the hands-on approach in resolving problems underwater.