

# **Coldwell Lower Reservoir - Weighted Filter, Wave Wall and Overflow Improvements**

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**SYNOPSIS.** An improvement project has recently been completed on a United Utilities dam at Coldwell Lower Reservoir in Lancashire comprising:

- crest lowering and slope slackening incorporating an integral weighted granular filter
- a new reinforced concrete overflow
- a reinforced concrete masonry clad wave wall
- various associated ancillary works

The site is quite constrained and has posed many construction difficulties. The paper describes the history and engineering background to the scheme followed by a description how these were overcome as part of the design and construction of the scheme.