

Reservoir safety risk assessment – a new guide

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SYNOPSIS. Since the House of Lords Select Committee review of dam safety in 1982 there have been various attempts to introduce a more quantified approach to the assessment of dams and reservoirs, including the CIRIA guide to risk assessment methods for UK reservoirs and the Interim Guide to Quantitative risk assessment for UK reservoirs. Unfortunately none of these have gained universal acceptance. The need for a commonly agreed and widely accepted risk assessment method for reservoir safety is now a pressing requirement, both in terms of supporting asset and business management as well as minimising risk to lives and the environment and the increasing use of a risk based approach in government management and regulation of risk to society (HSE, 2001).

The main objective of this project is to develop a risk assessment method that is technically robust, scalable and proportionate across the wide range of UK reservoirs. This paper reports on the framework and associated methods that have built upon existing Environment Agency, British Standards (and other) concepts and projects, providing continuity of assessment from small flood control structures through to large dams. The methodology has evolved through initial scoping, method development and pilot testing, taking into account industry feedback via questionnaires and a series of team and industry workshops.