



Reservoir safety research strategy

Project Summary SC130003

A process of review and consultation has been used to refresh the Defra strategy for conducting research on reservoir safety. The new strategy provides recommendations for the UK reservoir community for research priorities over the next 5 or more years.

More than 70 research topics were evaluated and prioritised. The top 5 research proposals were:

- improvements to the methodology to evaluate the run-off generated from extreme rainfall
- estimation of extreme rainfall
- management of trees and other vegetation on dam embankments
- selection, operation and maintenance of gates and valves for dam structures
- management of reservoir leakage and seepage

The new strategy aims to help Defra, the Environment Agency and its advisers in developing detailed scoping statements for future projects and in commissioning appropriate research contracts to meet the needs of the reservoir industry and to promote good practice.

The strategy will be of interest to reservoir owners, reservoir safety engineers and academics engaged in this field of research. By providing some transparency in the research topics considered and the topics likely to attract funding in the near future, the strategy aims to inform and encourage debate on the matters most deserving of further research. The strategy document will also be of interest to potential funding organisations.

The first reservoir safety strategy was published in 2009 and was used by Defra and the Environment Agency to help in scheduling and scoping research contracts. Many of the projects recommended in the original strategy have now been completed. A new strategy was required to consider:

- new challenges for reservoir managers and operators from severe weather events and in the face of climate change
- developments in methods and materials
- changes in reservoir safety legislation

- apparent needs arising from recent research and incidents

The new strategy was informed through a literature review and a number of industry consultation exercises including a workshop for reservoir safety professionals and a workshop with academics engaged in related fields of study.

This summary relates to information from project SC130003, reported in detail in the following output:

Report: SC130003/R1

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