Improving PMP and PMF estimation for reservoir safety in the UK

Evidence & Risk – National Flood Hydrology Team

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Audience: External

Supporting details for British Dam Society talk 21/11/2022

The following websites, tools and guidance were referred to in the talk:

- PDF versions of the Flood Studies Report and Flood Estimation Handbook are freely available from: https://www.ceh.ac.uk/services/flood-estimation-handbook
- Worked example using existing FSR methods (reference FRS19222/R1) and calculation spreadsheet (reference LIT 58205 "Probable Maximum Flood Calculation Spreadsheet" are available from FloodHydrology@environment-agency.gov.uk
- Full project report will be published in spring / summer 2023 at: https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/improving-probable-maximum-precipitation-pmp-and-probable-maximum-flood-pmf-estimation-for-reservoir-safety

Other projects from the Joint FCERM R&D Programme which may also be of interest to BDS members.

We have recently published a guide to Spillway design, examination and failure mechanisms at https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/spillway-design-examination-and-failure-mechanisms

Other reports on 'benefits of removing redundant reservoirs' and a scoping review into research needed 'to improve dam and levee breach prediction' are both due to be published in Spring 2023. They will be available on the Joint R&D programmes website

https://www.gov.uk/government/organisations/flood-and-coastal-erosion-risk-management-research-and-development-programme