Comparison of methods used to determine the probability of failure due to internal erosion in embankment dams.

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SYNOPSIS. Quantitative risk assessment is a routine part of periodic safety reviews in Australia and the United States. Many dam owners have been using these techniques to produce Portfolio Risk Assessments of their dams for a number of years. The recent publication of the DEFRA Interim Guide to Quantitative Risk Assessments has increased awareness of such techniques in the UK. This paper describes the application of two methods used for quantitative risk assessments of internal erosion used in Australia and the United States to six pilot dams and compares the results with the DEFRA method of assessing the probability of failure due to internal erosion.