



Risk Assessment of dams under consideration of uncertainties

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First results obtained from an ongoing research project on risk based methods to guarantee adequate flood safety for dam-reservoir systems are presented. The project deals with risk assessment methodologies and the development of advanced design procedures against dam failure caused by flood loads. The assessment includes the estimation of failure probabilities, dam breaching, downstream propagation of the dam breach flood, damage analysis and determination of risk indices. The analysis of uncertainties associated with data, methods, and models used to estimate the risk posed by dams will be investigated within a framework of a complete risk assessment of a reservoir-dam system in the Ruhr river basin in Germany.