عنوان مقاله:

(Uncertainty analysis of the gravity dam s stability using fuzzy set theory (a case study on Folsom dam

نویسندگان:

Fakhreddin Moradi Kia - *Civil Engineering, Karbala construction headquarters, Iran*

Maryam Kaboodeh - *hydrology and water resource engineering Department of Shahid Chamran University, Ahvaz, Iran*

Ali Gheybi - *Civil Engineering, Karbala construction headquarters, Iran*

خلاصه مقاله:

This paper introduces a methodology for uncertainty analysis in gravity dams stability analysis drawing on the fuzzy set theory. For this purpose, the uncertainty analysis and risk identification of stability of Folsom gravity dam has been discussed using fuzzy sets theory with α-cut methodand ANSYS, CADAM software. The results of uncertainty analysis showed that the crisp safety factors might be highly affected by the input uncertainties. For instance,±10% uncertainty in the design parameters could result in about -267.57 to +83.24% uncertainty in the maximum tensile stress in the heel of dam.

کلمات کلیدی:

Fuzzy set, Folsom dam, uncertainty analysis.

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