

عنوان مقاله:

3D Study of Scour Hole at Downstream of Khersan III Dam

محل انتشار:

اولین کنفرانس بین المللی و سومین کنفرانس ملی سد و نیروگاههای برق آبی (سال: 1390)

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خلاصه مقاله:

Scouring at downstream of dams is one of the most important issues in designing of outflow structures. In design of flood discharge systems, the goal is passing flow in a way which causes minimum scouring in the downstream of dam body. Otherwise if the scoured hole be more than the predicted value, the dam safety encountered withserious problems. Using physical models is the best way to get ensure about hydraulic performance of the dam. In the present study the scour hole which produced byreleased water jet from the crest spillway of Khersan III Dam was studied by its constructed physical model with scale of 1:40. Experimental study has been done to predict scour pattern downstream the dam by using three different flow discharges. Three dimensional scour hole at downstream of the spillway was plotted in different hydraulic conditions. Concluded data also were compared with some empirical equations. Results showed that there is a good agreement between empirical equations and experimental .data of the present study

کلمات کلیدی: 3D Scour Hole; Physical Model; Spillway; Khersan III Dam, Plunge Pool

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