

Abstract

The Stepped spillways structures that are useful order to control the flood of provide energy dissipation and reduce the size of the stilling basin to down spillway. This is consistent with the mechanism of RCC structures and methods of construction stone masonry, also prefabricated concrete parts cause has made extend application. Hydraulic simulation is form of physical simulation who using similar scale use simulate flow. Advantage this simulation is the potential the simulation of complex flows. In this research using physical simulation was created in a legged flume, two models with downstream slope 1:7. (Vertical ratio horizontal). Spillway crest of the curve associated with was standard was with six staircase in form simple and five staircase in form triangular. The two models of stepped spillway and stepped spillway triangle (half the standard step) was constructed in the flume and experimental measurement and was record with different flow. Based on the results obtained from experimental amount of energy dissipation was in the stepped spillway more than stepped spillway (triangular) and on the result the triangular stepped spillway was uneffective than stepped spillway in energy dissipation.

Keyword: Comparison Energy dissipation rate, Stepped spillway, Triangle stepped spillway, Inverse slope 45 degree, WES.



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**Investigation energy dissipation in the physical models of
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