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ASSESSMENT OF SURFACE RUNOFF POTENTIAL AND SEDIMENT YIELD OF WADI EL-RAML IN LIBYA

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ABSTRACT: Surface water in Wadi El -RamL, as the case of most watersheds in arid regions, is on the form of flashing floods which may occur once every one or more years due to sporadic rainfall events. Floods size and frequency are unknown and vary significantly from year to another. Because of rainfall and surface runoff floods, erosion and sediment deposition are common problems in Wadi El -RamL. In this paper an analysis of the geomorphologic, soil and rainfall characteristics characteristics, two models to of this Wadi is presented. Based on these predict surface runoff floods and sediment yield have been proposed. For better runoff and sediment assessment, the Wadi has been classified into 13 sub-catchments, and both models have been applied for each of them. Results of models application are presented and discussed.