

Abstract

To estimate runoff and peak flow in the watersheds, there are several experimental and indirect methods. Each method has their own region-specific coefficients, and under those conditions have been developed: therefore, they may not be suitable in the other regions and produce high errors. One of the experimental techniques that widely used in the world, is the curve number method that has proposed by the Natural Resources Conservation Service, U.S. Department of Agriculture and this have been used by hydrologists and water resources researchers. In this study, the curve number method and the imperial rational method were evaluated in Sarbaz Watershed. Therefore, the flood peak discharge was determined using these methods. First, the curve numbers of the watersheds were determined using the standard tables based on vegetation cover, land use and soil hydrologic groups. The rational method was the other imperial technique. To compare the efficiency of these methods, the observed peak flow discharge was used and all estimated peak flows were evaluated. Results showed that the curve number method estimate the runoff and peak flow with less precision and higher error than the rational method in Sarbaz Watershed.

Key words : Peak discharge, Surface Runoff, Curve Number, Rational Method, Sarbaz Basin



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Runoff and Discharge Estimation for
Sarbaz Watershed**

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