

Determination and workout of morphological characteristics of Makhamalabad mini watershed in Nashik district of Maharashtra

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■ **ABSTRACT** : The study was carried out on the preparation of contour map for Makhamalabad site and to determine the morphological characteristics of Makhamalabad mini watershed. Topographic surveying and planning was done for Makhamalabad farm. The watershed selected for the study is located off Peth road at Makhamalabad village of Nashik district. The area of watershed undertaken to study is 4.2 ha. Survey was carried out with grid spacing of 20 m. Contour interval was taken of 1 m. From the study of watershed characteristics it was seen that the watershed has fan shape with small catchment area of 4.2 ha, with stream order 1. The drainage density was 0.051 km per sq km. which was relatively very less. So, runoff from catchment was also less. Time of concentration was 3.44 min. It is seen that the watershed has stream order 1. There were more streams per unit area. The drainage density was 0.051 km/km². Thus, the average length of overland flow was more. The area of watershed was less so also the slope and length of stream. This has resulted in higher time of concentration, which was 3.44 min. The length-width ratio was also higher.

■ **KEY WORDS** : Watershed, Drainage density, Catchment, Time of concentration, Contour interval

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