ESTIMATION OF RUNOFF FOR REDHILLS WATERSHED USING SCS METHOD AND GEOGRAPHIC INFORMATION SYSTEM.

G.B.Geena* and P.N. Ballukraya+

*Research Scholar, Department of Applied Geology, University of Madras Guindy campus, Chennai – 600 025, India. Email id – <u>geenagbabu@gmail.com</u>

*Professor, Department of Applied Geology, University of Madras Guindy campus, Chennai – 600 025, India. Email id – <u>Ballukraya@hotmail.com</u>

Summary. Soil Conservation Service (SCS) model has been applied in the present study for the estimation of runoff from an agricultural watershed. The REDHILLS watershed is about **85** km² is a part of Korattaliyar river basin catchment, which is situated in Thiruvallur district of TamilNadu state. In this method involves various types of information related to Hydrologic soil group, vegetation, antecedent moisture condition etc. The soil map has been prepared based on the landsat imageries. Erdas Imagine 8.4 software was used for rectification of topographical map, soil map and land use map of the study area. The SCS model was then applied to estimate the runoff for daily storm and was validated with the measured runoff.