Effect of watershed rehabilatation on streamflow characteristics at Sakaerat Environmental Eesearch Station Amphoe pak Tongchai, Changwat Nahkonratchasima.

SOMCHAI ONARSA.

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ABSTRACT

This research was conducted during June 1992 to May 1993. Four subwatershed were selected namely, Haui Wanasart (natural dry evergreen forest), Haui Koked (natural dry evergreen forest), Haui Tayoo (natural succession with some forest plantation) and Haui Namkhem (forest plantation mixed natural dry evergreen forest).

The potential streamflow after 10 year watershed rehabilitation of Haui Wanasart, Haui Koked, Haui tayoo and Haui Namkhem were measured about 23,880, 720, 279,800 and 108,780 cu.m/sq. km. or 56.5, 72.7, 73.6 and 98.9 % of the previous rehabilitation in year 1982-1983. The rainfall showed irregular distribution in this year, as compared with the previous recorded. It was very high evapotranspiration which the soil and low moisture content and streamflow. The rainfall-streamflow relationship of all rubwatershed were non-significant in statistics expect Haui Wanasart due to irregular rainfall distribution with the coarse soil texture, high soil porosity with low organic matter and shollow soil including so many crack of bedrock that the water would loss by leakage from the watershed.