

THE USE OF GIS IN ESTIMATING THE REAL CAPACITY OF RAIN EROSION (THE FOURNIER CASE STUDY FOR KHOSHK RIVER IN SHIRAZ)

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Interpolation, the generalization of point data to scatter data, and combining maps are cases of important applications of geographic information system (GIS). In this study, it has been tried to make the estimation of rain erosion capacity (Fournier method) more real through using GIS capability in interpolation and the generalization of point data to scatter data. In Fournier method, the rain erosion capacity is calculated through the use of two climatic parameters (annual precipitation and the rainfall mean in the rainiest month of year) and two physiological parameters (the height and slop of the region). The findings of this study indicated that there is significant difference between these two methods of calculating rain erosion capacity. Using the means of rain erosion potential was estimated to be almost 33.4 tons per square kilometres annually while this amount was estimated to be 59.3 tones per square kilometres annually by using GIS capabilities.

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