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AN ANALYSIS OF SPATIAL PATTERN OF STREAM WATER POLLUTION IN KADUNA URBAN AREA OF KADUNA

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ABSTRACT: In this study, effect of land use practices on stream water quality of Kaduna river in urban Kaduna were assessed by stratifying the areas into five zones of varying land use activities. Water samples were collected from every zone and analyzed for about twenty (20) water quality parameters (PH, EC, BOD, DO, TFS, FS, S, K, Ca, Cr, Mn, Fe, Ni, ZN, Cu, Br, Rb and Sr). Students test were used to compare the main values of the parameters for pairs of the sampling points. The results obtained revealed that the main values of parameter for the land use zones associated with industrial activites are, in most cases, above the limits specified by FEBA. With exceptions of four(4) parameters (dissolved oxygen, nickel, beryllium and rubiodiun), the parameter determined exhibit significant variation between the compered sampling point. The potential causes of these trends and their implication in the study area have been discussed.

Keywords: Stream water quality, water quality parameters, stratifying, sample point.