

## ASSESSMENT AND MAPPING OF NATURAL RESOURCES AND LAND USE WITHIN NAIROBI RIVER AND MBAGATHI SUB-BASIN

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### ABSTRACT

Natural and human activities have impacts on the quality of water within a basin over time. Nairobi River Basin and Mbagathi Sub-basin are affected by diverse land use activities and changes within the upper, middle and lower sections of the basins. A comprehensive approach was used to examine the effects of land use activities within the basins. GIS spatial analysis was employed to examine the spatial relationship of the effects of land use activities in the basins. There was a significant change in the quality of water due to sewer line discharges, effluent from water services providers, solid waste disposal, industrial effluent from settlements and pesticides and herbicides from agricultural areas. From the above findings, there is need for stringent measures on conservation of the riparian for the rivers traversing the informal settlements as they are all non-point sources of pollution and discharge solid waste and raw effluent directly to the rivers through establishment of buffer zones and water quality monitoring programme.

**Keywords:** *Mapping, Natural resources, Basin, Land Use, Point Pollution, No-Point Pollution*