Modelling Relationship between Land Use and Groundwater Quality

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By

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Abstract

The objective of this study is to examine the groundwater quality and develop the spatial relationships with the land use under the research area. It will leads to model the mobility of basic elements within the urban river basin according to different land uses. The highest turbidity value, lowest sodium level and lowest pH is from groundwater from stream and river areas. Lowest turbidity, lowest potassium level, lowest magnesium level, lowest sulfate level, lowest calcium level, lowest Eh and highest copper level has the groundwater of Coconut plantation areas. Highest pH value, highest nitrate level, highest chlorine level, highest conductivity value, highest Eh, lowest bicarbonate level and lowest iron level has the groundwater of home and garden areas. Highest bicarbonate level, has the groundwater of marshy areas. Highest potassium concentration, highest iron level, lowest nitrate level, lowest chlorine level, lowest conductivity and lowest copper level has the groundwater of paddy areas. Highest magnesium level, highest sodium level, highest sulfate level, highest calcium level has the groundwater of built up lands.