HYDRODYNAMIC INTERACTIONS BETWEEN RIVERS AND AQUIFERS: IMPLICATIONS ON ENVIRONMENTAL FLOW IN OGUN RIVER BASIN, NIGERIA

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ABSTRACT

Ogun river, a major river in southwestern Nigeria was studied to determine the interaction between the surface and groundwater in the river system. This was aimed at assessing the contribution of groundwater to environmental flows in the river system. The studies revealed that during the dry months, the effluent condition of the river makes it to receive discharges from groundwater at both the upper and lower reaches. This contribution is essential to maintain the ecology of the river. The study found the assessment useful for planning for environmental flow in the river system.

Keywords: groundwater flow; flow nets; aquifer; wetland.