



Identification of sources of water recharging a Lacustrine wetland; Lake Kyoga

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Abstract

Isotopes are naturally occurring tracers that provide quantitative information about surface water and groundwater interactions. Wetlands are significant elements of the water environment and are often associated with essential ecosystem services. In order to protect and manage the functional role of wetlands, inputs and transport of water within the hydrological capture zone was studied. Environmental isotope techniques were used in evaluating surface and subsurface interaction in wetlands on time scales. In the current study isotopes were used to assess the major exchange processes occurring between the wetland, surface water and groundwater and to estimate qualitatively the time-scale of hydrological processes taking place in the wetland. A combination of conventional hydrological methods and isotopic techniques was used in establishing the interaction between these hydrogeological environments.