

## **A Spatial Database of Hydrological and Water Resources Information for the Nyangores Watershed of Kenya**

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### **ABSTRACT**

Advances in environmental remote sensing have provided an opportunity to monitor water resource systems in vulnerable regions with data scarcity. The spatial datasets can be used to build spatial models of reality to enable derivation of catchment-based characteristics, also often required by models in hydrology. The derived estimates can then be mapped and cartographically presented to support water resources planning within the concerned developing regions. This contribution presents a database of water resources information for an upstream catchment of the Mara River Basin of Kenya developed from freely available spatial datasets. Additionally, water quality parameters (pH, electrical conductivities, and total dissolved solids) selected as essential indicators of the suitability of the water resources for domestic applications were measured and mapped. The database, packaged as spatial maps, has been presented to the local stakeholders for developing appropriate catchment management strategies within the important watershed.

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