



NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL

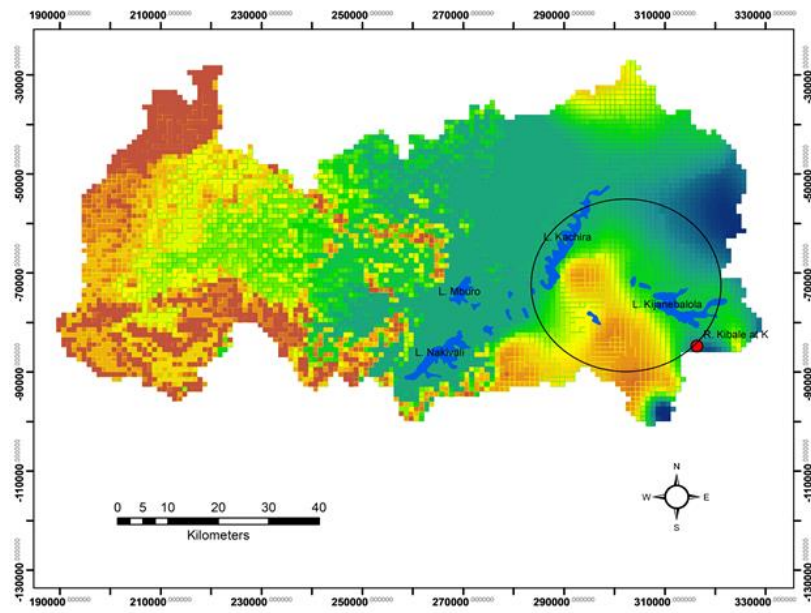
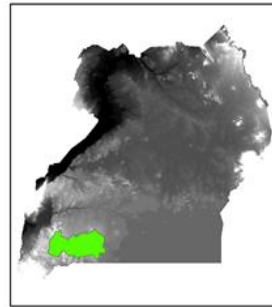
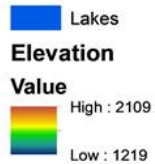


DRASTIC WATER LEVEL DROP IN LAKE KACHERA AND FLOODING AROUND LAKE KIJANEBAROLA IN RWIZI CATCHMENT, UGANDA

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Problem

Legend

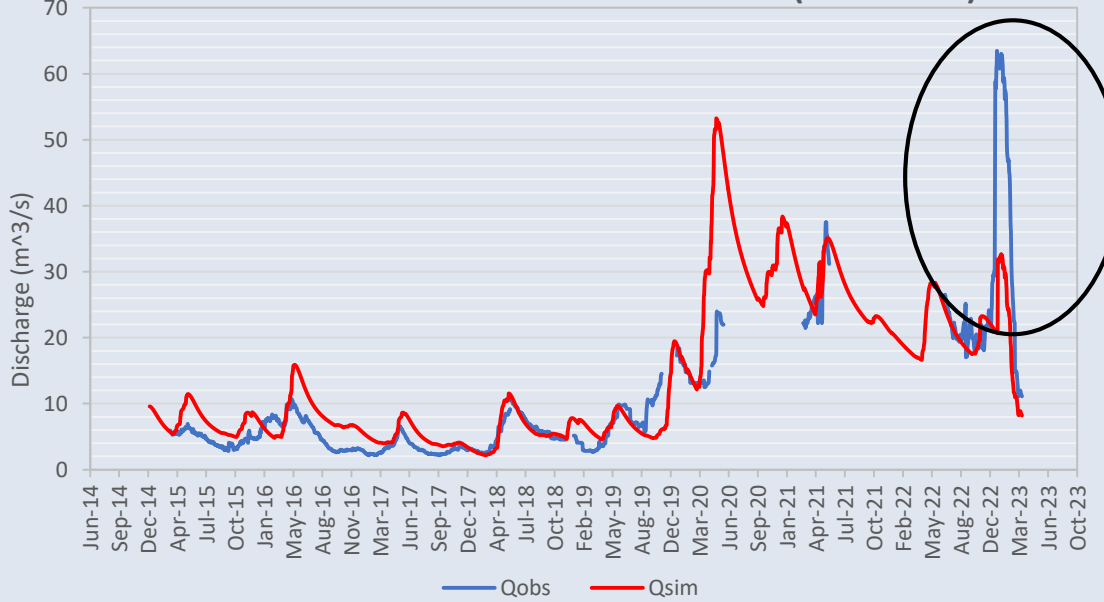


- Drastic drop of L. Kachera water levels by over 1m disrupting water supply to Lyantonde and flooding downstream;
- 400 people displaced;
- 11 people reported dead;
- Rakai-Isingiro connecting bridge

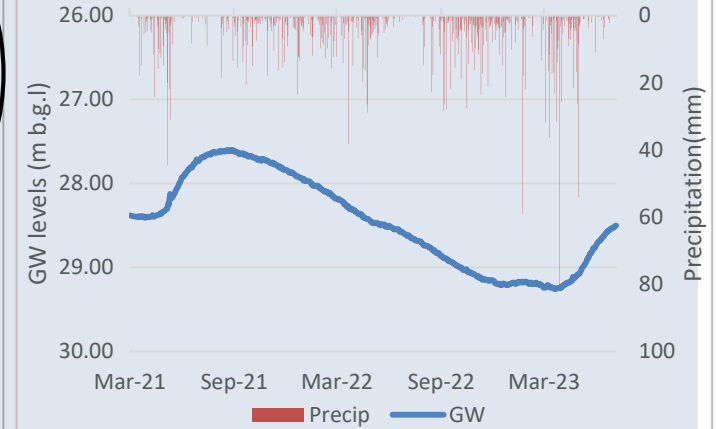


Results

AVERAGE DAILY DISCHARGE FOR R. KIBALE (2015-2023)



GW-RAINFALL CORRELATION



Katatenga-Nyanga bridge



Recommendations

IMPROVE MONITORING

With the observed behavior of these satellite lakes, NWSC and other stakeholders should pick interest and support installation of monitoring equipment at both Lakes Kachera and Kijanebarola. This will guide proper water supply planning with the understanding of the upstream and downstream system dynamics.

ADEQUATE WATER DEVELOPMENT DESIGNS

Water development projects and investments should carry out adequate hydro-geological assessments to ensure designs do not significantly alter the natural wetland dynamics of water storage and conveyance. Such occurrences transfer system pressures and threats like wetland invasive species downstream. Catchment management approaches should be strengthened to provide a platform for stakeholders dialogue at all levels of the project cycle.

SURFACE-GROUND WATER INTERACTION

Given the nature of ground formations in this area, there is need to carry out detailed Isotope hydrology studies to establish the ground water source, age, movement and interactive roles with surface water within the catchment. Understanding the water flow dynamics will guide on appropriate mitigation of such water shocks in the future.



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**THANK
YOU!**