



Lake Rukwa Basin Water Board September Hydrological Bulletin

1. Overview

This Basin Monitoring bulletin aims at providing a shared understanding of patterns of some of the water cycle components in our changing environment based on observed (collected) data. Estimates of water cycle parameters provide insights into available opportunities for water use, and water conservation and thereby enhance water use efficiencies.

The September 2022 Hydrology Summary Bulletin outlines the flows in rivers, rainfall, and lake levels in Momba and Songwe Catchments.

In Rukwa Basin, September is the critical dry month which goes together with October. In this case, the amount of water in the river also decreases as well as Lake Levels.

2. Rainfall Trend in the Basin

The monthly distribution of rainfall over the basin is characterized by unimodal rainfall patterns (End of October to Mid of May).

In September 2022, the Rukwa Basin received NO rainfall as is the period of the dry season.

3. Flows in Rivers

The river flows fluctuations in September 2022 as indicated in **Figure 1**, most recorded flows in the basin are significantly low compared to that recorded in 2021 which shows the continuation of a decrease in water quantity in the rivers during the dry season.

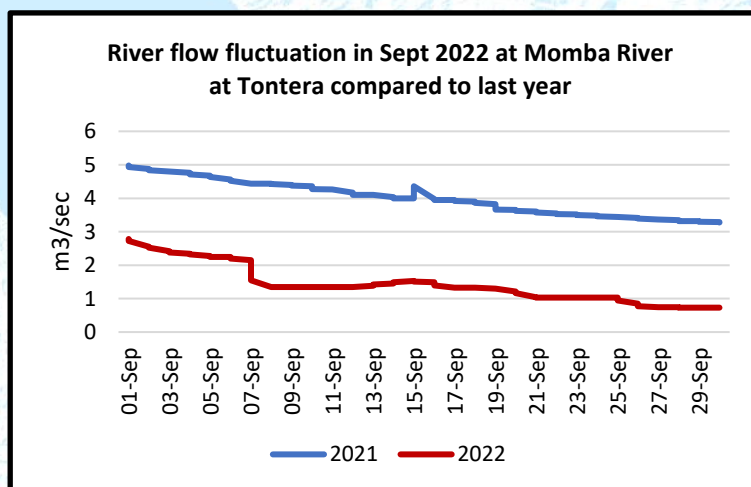
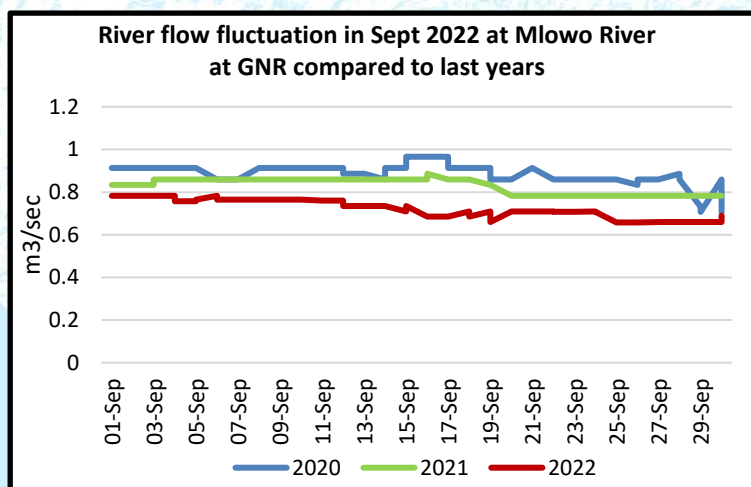


Figure 1: River flows variation



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4. Water level in Lake Rukwa

The main source of water for Lake Rukwa is the main rivers that depend on rainfall for their survival, as discussed above the decrease in the quantity of water tends to affect the water level in the Lake. The lake height for September 2022 is seen to be lower by 0.45 meters as compared to 2021 as indicated in Figure 2.

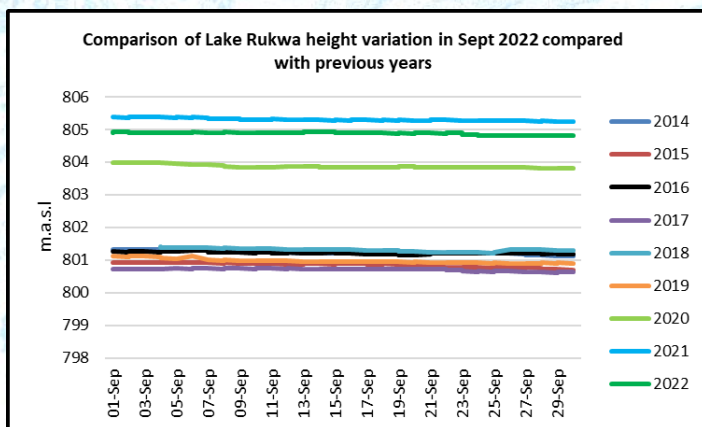


Figure 2: Water level in Lake Rukwa at Mbangala

Conclusion

The hydrological situation from September 1st to 30th, 2022 is characterized by the continued fall in the water level in all compartments of the Momba and Songwe Catchments, leading to a rapid decrease in flows on the main course of the Momba and Songwe Rivers and its tributaries.