



Monthly Hydrological

Bulletin Report (JNHPP)

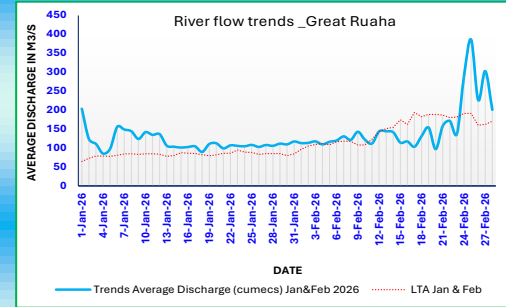
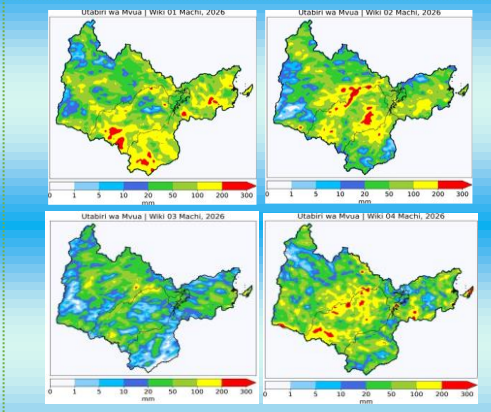
February (2026)

1 Summary of water status

Rainfall across the Rufiji Basin during February 2026 was recorded as average to above average at several monitoring stations. This rainfall pattern contributed directly to improved river flows from the Great Ruaha, Kilombero, and Luwegu catchments.

Average discharge rose from **448.7 m³/s in January to 818.9 m³/s in February**, an **82% increase**, with all rivers performing within their long-term averages. The increase was largely influenced by continuous rainfall across the upstream catchments, which supported reservoir inflows and improved system reliability for hydropower generation.

Reservoir levels also reflected this positive trend. Water levels rose from **175.2 m.a.m.s.l. on 20 February to 175.5 m.a.m.s.l. on 28 February**, representing a rise of about **0.3 m**. Even small rises in reservoir levels result in substantial volumetric gains, enhancing water security for hydropower generation and downstream management.



3 River flow Situation

During February 2026, river flows from the three main catchments — **Great Ruaha, Kilombero, and Luwegu** — that **contribute to the JNHPP Reservoir** continued to **increase** compared to the previous month. Average discharge rose from **448.7 m³/s in January to 818.9 m³/s in February**, representing about an **82% rise**. This increase was **largely influenced by continuous rainfall** across the upstream catchments, which has contributed to the improvement of reservoir water levels and enhanced stability for hydropower generation.

Below Table 1: Monthly Average Flow (MAF) (Feb 2026) Compared with Historical Maximums (2000–2024).

S/ N	Station Code	River	MAF Cumecs (Feb) 2026	LTA MAF Cumecs 2000-2025 (Feb)	Remarks
1	1KA3 B	Great Ruaha at Msolwa	155.31	149.7	Within Average
2	1KB1 7	Kilombero at Swero	273.16	265	Within Average
3	1K3C	Luwegu at Mbarang'andu	351.97	340	Within Average

River flow Outlook -- March 2026

Rainfall across the Rufiji catchments is expected to remain near average, according to TMA. This could lead to river flows rising by over 90% above current inflows, strengthening reservoir recovery and securing dependable water for hydropower, agriculture, and ecological needs downstream.

4 Reservoir Water Levels

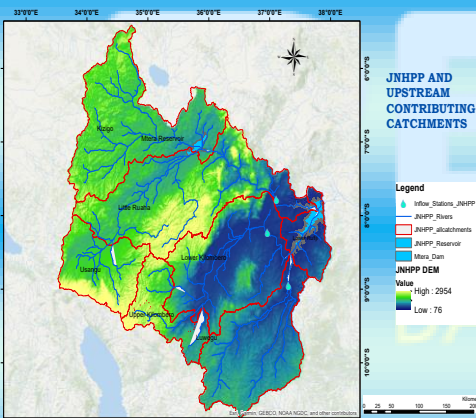
During February 2026, the JNHPP Reservoir continued to receive steady inflows from the upstream catchments. Water levels rose from **175.2 m.a.m.s.l. on 20 February 2026 to 175.5 m.a.m.s.l. on 28 February 2026**, representing a rise of about **0.3 m**.

Analysis

- **Upstream inflows:** Ongoing rainfall across the three contributing catchments has maintained positive inflow trends.
- **Storage implications:** Even a small percentage increase translates into substantial volumetric gains, reinforcing water security for hydropower generation and downstream regulation.

March 2026 Outlook

By 31 March 2026, the reservoir level is projected to rise above 178.00 m.a.m.s.l., a cumulative increase of 2.8 m (equal to 32%) from the minimum level reached.



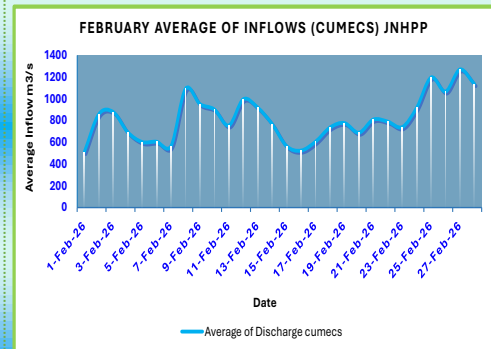
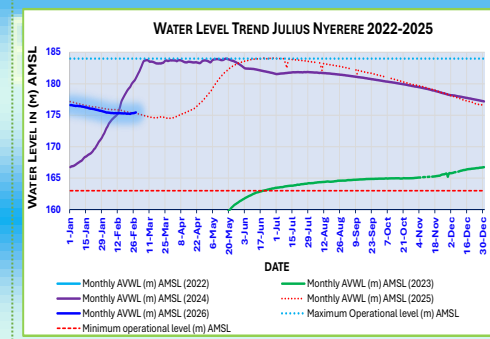
2 Weather Situation

Weather Summary – February 2026:

Records from weather stations show that rainfall in some parts of the catchments was **average to above average** during February 2026. This rainfall pattern had a clear impact on river flows across the basin. It raised water levels in the rivers and contributed to changes in the overall water situation.

Weather Outlook – March 2026:

During March 2026, many areas of the Rufiji Basin are expected to receive above-average rainfall. Figure 1 above present the forecasted weekly distribution of rainfall across the Rufiji Basin for the entire month of March 2026, as issued by the Tanzania Meteorological Authority (TMA).



5 Recommendations

Proper water use must be observed, including careful management of turbine operations, to ensure that inflows are conserved for future needs. It is further advised that all water users downstream of the JNHPP Reservoir continue to use water cautiously and responsibly, as levels may rise due to ongoing rainfall across the catchments. In addition, protecting infrastructure and safeguarding water sources is strongly recommended to enhance sustainability and resilience.