



MEDIA STATEMENT

UPDATE: Lesotho Highlands Tunnel to close from 1 October 2024 to 31 March 2025 for scheduled maintenance

17 March 2024

The Department of Water and Sanitation would like to inform the water users of the Vaal River System about the planned maintenance work on the transfer and delivery tunnels of the Lesotho Highlands Water Project (LHWP) over the six-month period, from 1 October 2024 to 31 March 2025.

The tunnel system consists of a Transfer Tunnel, linking Katse Dam with Muela Power Station and Muela Dam, and a Delivery Tunnel, linking Muela Dam with the Ash River Outfall Works between Clarens and Bethlehem. Inspections and maintenance of the tunnels are conducted at intervals not shorter than five years and not exceeding 10 years. The last maintenance was conducted in 2019.

During the shutdown of 2019 it was found that the steel liners in the tunnel urgently need extensive maintenance on both the RSA and Lesotho side. This process cannot be done in a shorter period than six months.

The planned maintenance work is being overseen by the Lesotho Highlands Water Commission (a joint governance body between the Republic of South Africa and the Government of Lesotho) and will be jointly undertaken by the Lesotho Highlands Development Agency LHDA) and the Trans Caledon Tunnel Authority (TCTA).

The work required to be undertaken during the period includes grit-blasting the steel-lined section around the entire circumference and re-applying corrosion protection on the tunnel lining, as well as other maintenance and repair work identified during the 2019 maintenance shutdown. This work to be undertaken requires lot of time as it is expected to protect the infrastructure for another 20-30 years.

This much-needed maintenance is critical to maintain the integrity of the delivery tunnels as a tunnel failure will risk the transfer of the 780 million m³/annum to the Integrated Vaal River System (IVRS), from which Rand Water draws water to supply its customers. The 6 months period required to conduct maintenance is thus crucial to avoid any catastrophic event which may result from lack of maintenance.

As a result of the tunnel shutdown, 700 million m³ per annum will be transferred in 2024, and only a shortfall of 80 million m³ from the annual transfer volume will be impacted. After the

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shutdown period, the water transfers will be increased to enable the shortfall in transfers to be recovered.

It must be noted that for the IVRS, transferring the full volume (780 million m³) on an annual basis from Lesotho (regardless of the status of the IVRS) does not yield the most efficient use of the system yield.

An analysis was undertaken in May 2023 to assess the risk to the IVRS' performance as a result of the outage, and to determine the impact of the shutdown on water availability to users in South Africa. The results showed that the impact of the outage on the overall IVRS will be insignificant considering that dams in the IVRS such as the Sterkfontein Dam and others are relatively full.

The standard operating rule is that Sterkfontein Dam releases water to the Vaal Dam when the Vaal Dam reaches a minimum operating level of 18%. The Department's analysis indicates that this is unlikely to occur at any probability level in the 2023-2024 operating year (1 May – 31 April). Hence, releases from Sterkfontein Dam to support the Vaal Dam are not envisaged for the current 2023-2024 operating year and Sterkfontein Dam remains full to date. Further analysis will be undertaken in May 2024 to ensure that there are also no likely risks to water supply from the IVRS in the 2024-2025 operating year.

The shutdown will however have implications of water supply to users along the Liebenbergsvlei River and its tributaries during that period as the river directly receives outflows from the tunnel. Therefore, the towns of Bethlehem, Reitz, and Tweeling as well as licensed irrigators will be affected. The reason for these users being affected is that there will be a significantly reduced amount of water in the Liebenbergsvlei River and its tributaries, from which these users draw their water. In order to secure water during the shutdown for these local users, the Saulspoort Dam will be filled up at the commencement of the shutdown period. DWS analysis indicates that a full Saulspoort Dam will be able to provide water for local requirements including those of Bethlehem, Reitz, and Tweeling for a period of up to 9 months which is more than the 6 months tunnel outage.

In 2021, the Department started engagements with all the affected municipalities, as well as other interested and affected stakeholders and government departments, informing them of the planned tunnel closure. Subsequently, the Department initiated and has been continuously holding meetings with these stakeholders to discuss action plans compiled by the municipalities and the stakeholders, to mitigate any challenges and bottlenecks as the planned maintenance programme gets implemented.

The Department has also developed communication and stakeholder engagement plans, that ties in with the stakeholder engagement plans that each of the 3 affected municipalities must also have in place and these are currently being rolled out to ensure that all water users including members of the communities that will be affected are informed and participate in relevant activities that will ensure that the programme is implemented successfully with minimal disruptions to livelihoods.

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The Department would like to urge all water users who will be affected by the planned tunnel maintenance to use water sparingly during this period, as a means of managing any unforeseen risks. A water restrictions notice is being prepared in this regard.

END

Issued by the Department of Water & Sanitation

For more information, contact Wisane Mavasa, Spokesperson for the Department of Water and Sanitation on 060 561 8935 / mavasaw@dws.gov.za

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