



*Issued by the Corporate Stakeholder Management Unit
Office of the Chief Executive*

Raw water supply to the Durban Heights Water Treatment Plant (WTP) is increasing incrementally through three urgent interventions that have been implemented by Umgeni Water as part of its strategies to stabilise the system and ultimately restore full distribution.

Durban Heights WTP supplies drinking water to eThekweni Metro for reticulation in north, south, central and inner west regions of Durban.

Four aqueducts transport water from Nagle Dam to the Durban Heights WTP, namely Aqueduct 1, Aqueduct 2, Aqueduct 3 and Aqueduct 4. In the torrential rain events from 8-11 April 2022, Aqueduct 1 and Aqueduct 2 broke in massive rock falls close to Molweni, Inanda. It was subsequently discovered in ongoing assessments that these aqueducts were also damaged at other points along their route from Nagle Dam and to the Durban Heights WTP.

They have since been taken out of use due to risk they pose to property and people. On average, Aqueduct 1 conveys 100 megalitres (million litres) of raw water per day and Aqueduct 2 moves 150 megalitres per day.

The urgent actions that have been implemented by Umgeni Water to augment raw water resources are:

- Optimisation of Aqueduct 3 and Aqueduct 4 by moving additional water through them in order to partially compensate for temporary decommissioning of Aqueduct 1 and Aqueduct 2. This strategy has made it possible for more potable to become available from the Durban Heights WTP in the aftermath of the storms. These aqueducts carry, on average, 200 megalitres each
 - Additional raw water, estimated at 100 megalitres, is being drawn from Inanda Dam and transported to the Durban Heights WTP using shaft pumps
 - Repairs to damaged infrastructure is being conducted in-house and on a daily basis to assist with stabilisation of the system
- These strategies have produced much needed short-term gains that have allowed Umgeni Water to minimise uninterrupted supply of potable from the Durban Heights WTP. Their effectiveness is pronounced in the following:

Immediately after damage to Aqueduct 1 and Aqueduct 2, the amount of potable water supplied to eThekweni Metro was, on average, 380 megalitres. The shortfall then amounted to approximately 200 megalitres. Implementation of the above measures has resulted in average increase in output of approximately 100 megalitres of potable water.

Umgeni Water is confident that incremental increases in raw water supply through Aqueduct 3 and Aqueduct 4, ongoing augmentation from Inanda Dam and other interventions will assist in optimising supply from Durban Heights WTP. In line with a mapped project schedule, it will be possible to reach the daily average that is taken by eThekweni Metro.

Good progress is also being made with completion of comprehensive assessment of damage. On Tuesday, 19 April 2022, additional aerial surveillance of damage was conducted using a helicopter that was chartered by Umgeni Water. Severe damage to some roads made it impossible for staff of Umgeni Water to instantly gain access to infrastructure for inspection purposes, therefore, helicopters have had to be used on at least two occasions.

Once a full assessment is completed, a clear picture will emerge of extent of damage, financial resources required to repair or replace infrastructure and duration of work before full restoration is achieved. One of the priorities from the assessment report will be preparation of scope of work (SOW) by 24 April 2022 for service providers and contractors to implement when appointed.

Work is continuing on increasing potable water production at Hazelmere WTP, in the north of Durban, as raw water quality improves. On Wednesday, 13 April 2022, production of potable water was temporarily halted due to extremely high turbidity in raw water from the plant's supply source, Hazelmere Dam. The plant began operating again on 15 April 2022 when raw water quality improved. This plant supplies eThekweni Metro, iLembe District Municipality and Siza Water for distribution to outlying northern areas of Durban and parts of iLembe, including Newedwe and Ballito, respectively.