

Quarterly Report on Status of Water Resources and Projections on Rainfall

Issued by the Corporate Stakeholder Management Unit Umgeni Water Thursday, 10th September 2020

Weather prediction data provided to Umgeni Water suggests that above average rainfall – or the La Nina effect – is expected in the East Coast region of KwaZulu-Natal from the end of spring and going into early 2021.

This comes as good news for the region, which experienced below average rainfall from October 2019 to July 2020; the exceptions to this phenomenon were November 2019 and April 2020 when a significant amount of rainfall was received, resulting in stabilisation of the levels of most dams in Umgeni Water's operational area.

Projections of the La Nina effect and wetter conditions occurring in the Southern African region, including the East Coast of KwaZulu-Natal, have been made by the International Research Institute (IRI) and data from the South African Weather Service concurs with this scenario. Information relating to projections of above normal rainfall, from November 2020 to January 2021, was discussed at a risk analysis conducted by Umgeni Water last month and has been factored into Umgeni Water's planning of water resources for the vast service area of the organisation which is situated in the East Coast and the interior of KwaZulu-Natal.

Planning and management of water resources are contained in a quarterly report (May-August 2020), titled Status of Water Resources, that has been released by Umgeni Water to create awareness among municipalities and other stakeholders about the status of current and expected future water resources availability.

Information of this nature is used as reference when planning future water services provision to consumers and in business and industrial environments that are extensive water users.

An analysis conducted by Umgeni Water and published in this report shows that despite the generally less than normal rainfall in the 10-month period – October 2019 to July 2020 – the majority of dams in Umgeni Water's operational area remained at acceptable levels. This made it possible for Umgeni Water to meet the full water demands of eThekwini Metro, Msunduzi Local Municipality and iLembe, Ugu, Harry Gwala, uMgungundlovu and uThukela District Municipalities. Full supply and uninterrupted operation of water treatment works by Umgeni Water during the various stages of COVID-19 lockdown came as relief to the Department of Water and Sanitation and municipalities during intensified water provision in informal housing settlements to curb the spread of the virus.

Albert Falls, the largest dam in Umgeni Water's operational area and one of three dams in the Lower Mgeni System, remains of concern to Umgeni Water due to its consistent level of below 40%. This dam provides the water needs of parts of Durban and because of inadequate water resources in it, water has to be pumped from Inanda Dam to augment Durban's water requirements.

In the onset of spring, 16 of the 17 dams in Umgeni Water's operational area continued to remain at acceptable levels, which means there is adequate water to meet full demands of the seven municipal customers of Umgeni Water and there is no risk of bulk supply failure occurring in the rest of 2020 and into the new year. However, the need for sparingly use of water still remains as massive spikes in demand could result in rapid reduction of levels of smaller dams.

On Thursday, 10th September 2020, the levels of dams operated and managed by Umgeni Water were:

Upper Mgeni System

Mearns	53%
Spring Grove	49%
Midmar	94%

Lower Mgeni System

Albert Falls	35%
Nagle	80%
Inanda	80%

Collective storage in the Mgeni System amounted to 64, 66% which is considered by hydrologists to be acceptable and sufficient to meet the needs of the three municipalities that are served from this system – eThekwini, Msunduzi and uMgungundlovu – without supply failures occurring.

North Coast System

Hazelmere	44%
iMvutshane	88%

South Coast System

Nungwane	80%
EJ Smith	73%
Umzinto	44%
Mhlabatshane	47%

Collective storage in the South Coast System is at approximately 65%, which is considered to be acceptable and sufficient to meet the full demand of Ugu District Municipality without supply failures occurring.

North West Region

Woodstock	82%
Spioenkop	85%
Wagendrift	92%

Ixopo System

Home Farm	45%

Water resource availability in the North West Region (Ladysmith and within the uThukela District Municipality) and Ixopo, within the Harry Gwala District Municipality, is considered to be adequate.

