



INTERNET ARTICLE

Minister Majodina commissions world's highest Piano Key Weir dam in KwaZulu-Natal to improve water supply in eThekweni Metro and surrounds

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Water and Sanitation Minister, Ms Pemmy Majodina, has commissioned the world's highest Piano Key Weir dam, Hazelmere Dam, located in the Mdloti River in KwaZulu-Natal, on Friday, 25 October 2024, with an aim of improving water supply to eThekweni Metro, iLembe and Kwa-Dukuza municipalities in the North Coast.

The commissioning of the state-of-the-art dam comes after the Department of Water and Sanitation successfully completed a project to raise the dam wall by 7 metres to increase capacity of storage and to augment the water supply to areas such as Verulam, Groutville, Blythedale and Ballito.

Speaking during a community engagement on Friday, 25 October 2024, Minister Majodina emphasised the important role that municipalities have to play in order to ensure the reticulation of water to households.

"The Department of Water and Sanitation upgraded the Hazelmere Dam wall to meet the needs of the increasing population in the North Coast as it is our role to ensure bulk water supply. The concerned municipalities should now roll up their sleeves to ensure that water is directed to households," said Minister Majodina.

The North Coast of KwaZulu-Natal has experienced rapid growth in recent years, especially in the housing sector which resulted in an increased demand for potable water. The raising of the dam wall will address water challenges in some parts of the three municipalities.

The project scope of the work entailed the raising of the dam wall by 7m (from 86m to 93.00m) and this included the construction of retrofitting a Piano Key Weir (PKW) onto an existing dam spillway structure, the installation of 83 rock anchors as well as foundation grouting and other minor related works.

Minister Majodina expressed that the Hazelmere Dam forms part of the country's state-of-the-art dams.

"The Hazelmere Dam can now be measured against world class standards due the type of spillway selection, technology and innovation used in implementing the project," said Minister Majodina.

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The dam has an uncontrolled PKW spillway, this was done to ensure that the dam wall withstands extreme concentration of floods of between 6 and 8 hours for the dam catchment area.

Some of the employed technologies undertaken to upgrade the dam wall included the world's highest Piano Key Weir, world's largest anchors were installed to improve stability of the concrete gravity dam wall structure, and the largest capacity post-tensioning stressing jacks were deployed during construction.

Some of the technologies also employed included the use of innovative data management software for real-time monitoring of anchor performance and 3D digital crack meters.

The upgrading of the wall assisted with the creation of employment opportunities for 187 locals of which 16 were women and 53 were youth. The total number of Small Micro Medium Enterprises (SMME) appointed were 11 with two were women-owned. In addition, successful training of 14 engineers took place during the project, with some subsequently obtaining professional registration, marking a significant achievement in capacity building.

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