

Wet summer predicted as Vaal Dam drops to 37%

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As the level of the Vaal Dam dropped to a low 37% last week, water sector experts in the Upper Vaal catchment remained upbeat. They expect a good summer rainfall period in the catchment.

The Vaal Dam is the prime source of water supply for Gauteng's 14 million residents and the province's major industries. The dam also provides water to bulk commercial consumers downstream, as far west as the currently drought-stricken Northern Cape.

At last week's meeting of the Vaal Dam Forum, Rand Water's experts explained that the water supply from Lesotho to South Africa had to be turned off for three months in 2019. Essential maintenance work had to be done. Since the Lesotho supply came online again at the end of November 2019, the Vaal Dam has not yet been able to fill up to full capacity.

Responding to questions from civil society and industry stakeholders at the half-yearly Vaal Dam Water Forum, Rand Water's Reveck Hariram explained that the Vaal Dam needed an inflow of 70 000 litres per second every 24 hours of the day to maintain its current level.

Two prime tributaries of the Vaal Dam, the Wilge and the Liebenbergsvlei are unable to cope with the daily demand. Currently the dam level drops at a rate of 4% per month. Rand Water and the energy sector, mainly power stations, require a consistent daily supply of large quantities of water.

At present, the Lesotho Highlands water supply into the Eastern Free State's Liebenbergsvlei River is about 24 000 litres per second. But large commercial operati-



A shocking sight as Vaal Dam level drops to 37%. Photo: Dricky Gouws (Dricky's Pix)

ons, downstream of Bethlehem abstract large quantities for their operations, according to Marc de Fontaine of Rand Water. Apart from the reduced inflow to the Vaal Dam, the large water storage facility is relatively shallow. Therefore, the dam is prone to high evaporation rates as the current winter daily temperatures start to rise. Rand Water's Management Team remains confident that the level of the Vaal

Dam is bound to rise. Working from more than 50 years' data from the Upper Vaal River system, they say a good rain season is in the offing. The winter was cold, and the August winds were on schedule for a normal rain season. Should they be wrong, the Vaal Dam can drop to 22% of capacity. Rand Water can potentially extract water up to a dam capacity of 15%. But usually the utility's abstraction stops at 20%, according

to Hariram. In critical times, the upstream Sterkfontein storage in the cool Drakensberg Mountains can be tapped to provide strategic water supplies. It was last used to supply the Vaal Dam at the time of the drought in 2016-17.

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