

## Water and Sanitation in the News

### Cape Town's Precarious Water Supply

Drought has left dams very low but the City is taking steps to secure the future water supply. Six months have passed since the City of Cape Town tightened water restrictions on its customers, with no end in sight. In spite of the restrictions, water supply levels in the dams have fallen to extremely low levels.

As of 6 June, the combined supply of the dams is at 29% of capacity, the lowest level in the last five years at this time ([see up-to-date weekly dam levels here](#)). It is also the lowest of any week in records -- albeit incomplete -- that GroundUp has examined going back to July 2004.

#### Current Water Restrictions

In December, the City Council approved the implementation of level 2 water restrictions, to go into effect on 1 January 2016. These restrictions aim to reduce overall demand by 20%. Residential and business customers are required to reduce water consumption on gardens, cars, and paved surfaces.



*Thewaterskloof Dam on 7 June 2016 (Source: Masixole Feni/GroundUp)*

...According to the City's water utility report from 4 April, the level 2 water restrictions have succeeded in reducing water demand. Measured by a 12-month sum to account for seasonal variations, overall demand peaked in November 2015 at 360,000 megalitres. By March 2016, it had fallen to 343,000 megalitres. The department believes it will soon achieve a target of 337,000 megalitres. However, if the drought continues, water supply will decrease while demand increases.

Cape Town's water supply largely comes from rainfall throughout the Western Cape, particularly in the mountainous areas. Catchment areas funnel the rainwater to more than 14 dams throughout the province with a total capacity of 900,000 megalitres. From there, the water is chemically treated and distributed for customers to use. The national Department of

Water Affairs and the City's Water and Sanitation Department jointly manage this system. Cape Town uses 63% of the Western Cape's total water supply. The City needs the dams to be close to full capacity in October in order to last till the next winter. Last October, the dams were at 72% of total storage capacity. In the past five years, October water supply had never gone below 88%.

#### Long-term Sustainability

Even if the water restrictions and coming winter ease the current water supply problem, there are still concerns for future years. Dr. Kevin Winter is a professor in environmental and geographical science at the University of Cape Town. He has conducted research on water sustainability. He sees the water shortfall as evidence that the climate is becoming increasingly unpredictable. As a consequence, he says the water supply will become uncertain and "social norms with regard to water demand will need to change."

In the short term, Winter believes the City should be implementing more stringent level 3 restrictions, at least until it can definitely ensure adequate water supply. The Mayoral Committee Member for Utility Services, Ernest Sonnenberg, told GroundUp that level 3 restrictions would include tariff increases aimed at reducing water consumption by 30%. While the City has not published a detailed list of level 3 restrictions, similar restrictions by other municipalities included water outages during certain hours of the days, and substantial decreases in water pressure. Even though these restrictions could have short-term impacts on businesses and tourism, Winter believes the alternative of fewer restrictions would be much more damaging and chaotic.

In addition, factors such as increased urbanisation, population growth, and industrial development are predicted to strain the water supply. A 2009 newsletter published by the national Department of Water Affairs predicted that demand would exceed supply for the entire Western Cape region by 2019, and even earlier if Cape Town's water reconciliation strategies were not effective...

Source: [AllAfrica.com](#), 08 June 2016

The **Municipal Assistant™** system enables users to approach water and sanitation from a higher vantage point by recognising and analysing the interdependencies of functions related to demand management and water treatment and supply.

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