

1 MARCH 2018

STATEMENT BY THE CITY'S EXECUTIVE DEPUTY MAYOR, ALDERMAN IAN NEILSON

Cape Town water crisis update

Cape Town is still in the midst of the worst drought we have experienced in recent times. In order to successfully navigate the drought, the water supply system must not run out of water. This has required the City of Cape Town to implement various demand management measures to manage the water drawn down from the dams, and to add additional water to the system through the City's water augmentation programme. At the same time, we must continuously assess the risk of uncontrolled and unknown variables, such as rainfall.

Regardless of rainfall or water supply augmentation, Cape Town needs to continue striving to reduce average daily consumption to 450 million litres a day (MLD). This must be done not only to stretch our supplies as far as possible, but also because the National Department of Water and Sanitation has imposed a 45% restriction on the City's water use for the current hydrological year (1 November 2017 – 31 October 2018). If we do not adhere to this restriction, there is a chance that the National Department may impose even more stringent restrictions on Cape Town in November 2018.

Consumption over the past week averaged 516 MLD, with dam levels dropping 0.4% to 24%. The City needs to continue reducing consumption in line with Level 6B water restrictions if we are to avoid Day Zero.

Our latest Day Zero projections take into account the continuing drop in urban consumption over the past weeks, the Groenland water transfer, and the discontinuation of the agricultural releases for this hydrological year.

We are now also in a position to exercise greater control on the consumption side with the implementation of Level 6B restrictions, the increasing roll-out of pressure management across the City and the installation of water management devices to limit the consumption of high water users.

These interventions, along with the water savings efforts of our residents, have seen our consumption drop from an average of 1 200 MLD in 2015, to 900 MLD a year ago, to just over 500 MLD this year. This amounts to a reduction of 400 MLD in the past year. The increased roll-out of pressure management interventions alone has resulted in savings of 50 MLD over the past two months.

It is important to note that previously we did not pre-emptively assume the effects of any of these interventions on Day Zero projections, but rather fed them into the model as they occurred.

In calculating Day Zero, we believed it would be irresponsible not to take a conservative approach which assumed the worst-case scenario. Using a conservative projection meant that the date would shift out under more favourable conditions, but this was deemed less of a risk than assuming a less conservative approach, and then having the date move closer if conditions were less favourable.

Of course, the one factor we are still unable to predict is the rainfall expected this winter.

We have therefore drafted three different scenarios for Day Zero, based on no rainfall, rainfall at 100% and rainfall at 85% of the rainfall received in 2017.

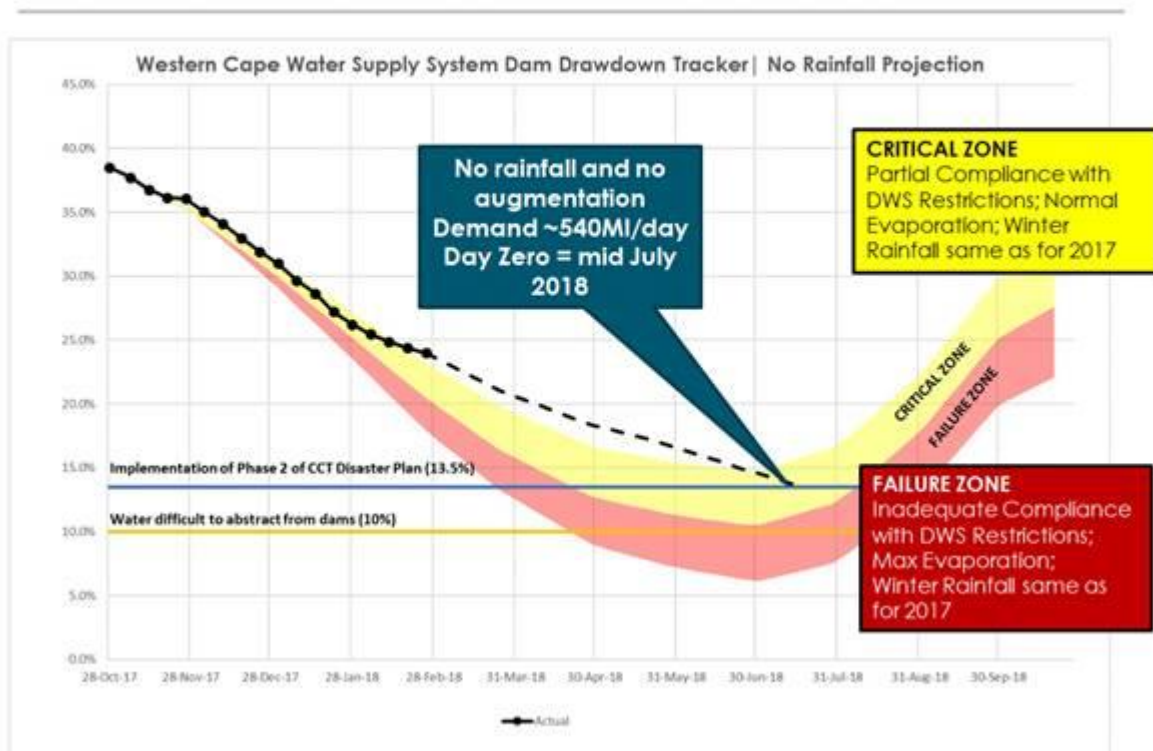
These projections can be further adjusted to reflect different levels of consumption. The graphs below show projections for consumption of 450 MLD (our target) and 600 MLD (where we were tracking a few weeks ago).

The impact of our augmentation programme was also considered, with the graphs indicating the impact of no yield from augmentation, and 80% yield (once again, we are projecting conservatively).

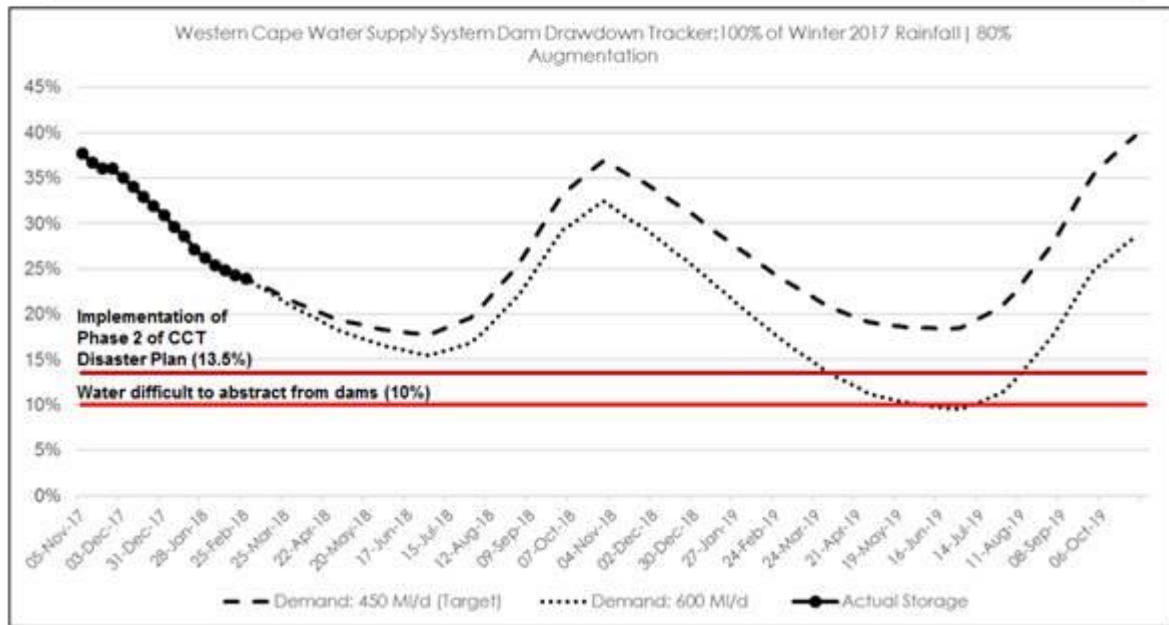
Finally, these projections assume that the agricultural users have complied with the restriction target of the National Department of Water and Sanitation, and that they will continue to do so for the remainder of this hydrological year.

The first graph shows how the Day Zero date has been calculated up to now.

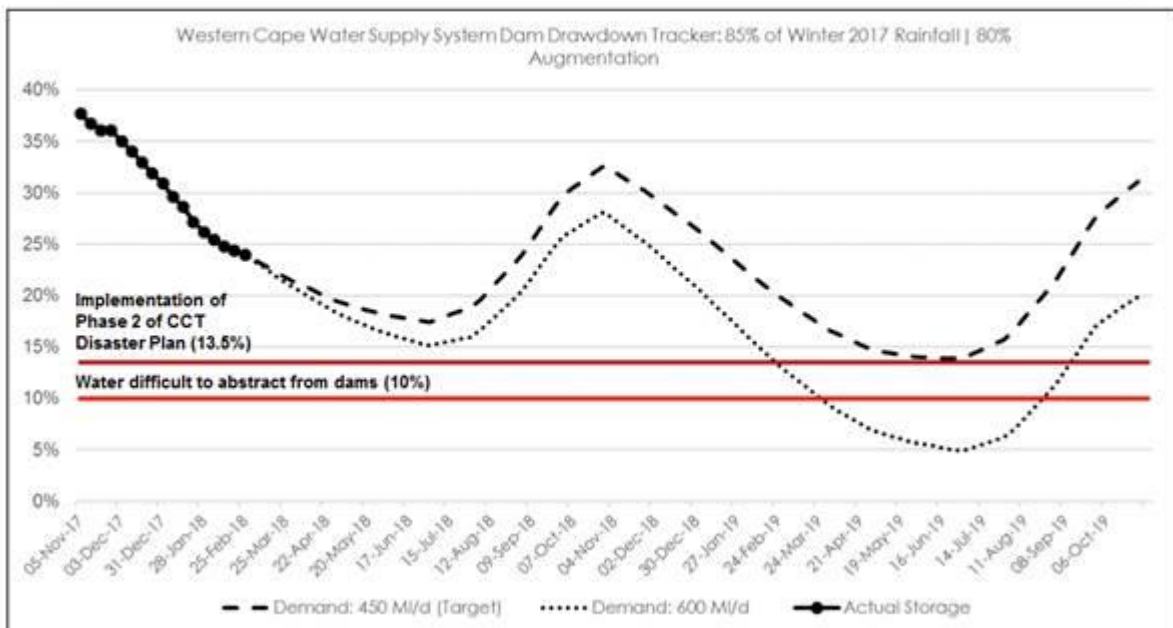
Graph 1: No Rainfall | No Interventions | Average Demand ~540MI/day



Graph 2: 100% Winter 2017 Rainfall | 80% Augmentation | Max Evaporation



Graph 3: 85% Winter 2017 Rainfall | 80% Augmentation | Max Evaporation



Over the coming months, as our water augmentation programme begins to scale up and rainfall impacts on the dam levels, we will have more concrete data to feed into the models.

Water augmentation programme update

The various projects currently under construction and those already completed will augment the City's water supply by around 180 MLD: approximately 150 MLD is sourced from groundwater; 16 MLD from temporary desalination; 10 MLD from water re-use; and 4 MLD from the City's springs.

The City's three small-scale emergency desalination plants will add approximately 16 million litres of water a day into the system by May 2018:

- The Strandfontein plant is on track to supply its first water in March 2018 and will supply 7 million litres of water a day when fully operational.
 - Phase 1 – 2 MLD completion: second half of March 2018
 - Phase 2 – full 7 MLD completion: first half of May 2018
- The plant at Monwabisi will also add 7 million litres of water per day and will reach full production in May 2018.
 - Phase 1 – 2 MLD completion: first half of April 2018
 - Phase 2 – full 7 MLD completion: second half of May 2018
- The plant at the V&A Waterfront will add 2 million litres of water a day and is anticipated to go online during the second half of March.
 - All seven containers have been delivered to the site. Construction on the water tanks has started.

The three ground water abstraction projects will at their peak supply almost 150 million litres of water a day to the City:

- The Cape Flats aquifer is on track. Drilling is progressing well in all areas. Additional exploration holes have been identified next to Cape Town International Airport, and the City is in the process of negotiating access to the area. We expect a yield of up to 83 million litres of water a day from June 2018.
- Drilling at the Table Mountain Group aquifers began in November last year. We expect to add approximately 50 million litres of water a day into the system by June 2018.
- The aquifer at Atlantis is already producing 12 million litres a day, and we are expecting a further 20 million litres of water a day between May and October 2018.

We are currently reassessing the water re-use augmentation programme to align it with the licensing conditions of the aquifer water use licences received from the national Department of Water and Sanitation. The temporary 10 MLD re-use plant at Zandvliet is on track to begin full production in June 2018.

As regards the City's natural springs, the Albion spring in Newlands contributes approximately 3 MLD to the City's municipal supply, and the New Main Spring at Oranjezicht, a collection chamber that receives water from three different springs on Table Mountain, is routing between 1 and 2 MLD into the Molteno Reservoir. We are currently investigating the feasibility of adding additional water from springs into the system.

If conditions are favourable, we hope at some future point to be in a secure enough position to consider relaxing the current Level 6B water restrictions. Right now, our best hope of getting to that point is to continue saving water.

The City's Disaster Risk Management Centre will continue working to finalise its Day Zero operational plan so that it can be rolled out at any point in the future if required. We will continue to take a conservative approach with our planning to ensure that we are prepared for the worst-case scenario.

It must be reiterated that avoiding this worst-case scenario is dependent on keeping our water consumption down over the coming months, in compliance with Level 6B restrictions.

I would therefore like to urge all residents to keep up the good work a little longer. If each one of us continues to use 50 litres of water a day, we can not only beat Day Zero this year, but also be in a better position to avoid it next year.

Click on the link below to view graphs showing the Day Zero projections as at 1 March 2018:

<http://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%20material/Day%20Zero%20Projections%20-%202018-03-01.pdf>

Issued by: Media Office, City of Cape Town

Media enquiries: Alderman Ian Neilson, Executive Deputy Mayor, City of Cape Town, Tel: 021 400 1306 or Cell: 083 306 6730, Email: ian.neilson@capetown.gov.za (please always copy media@capetown.gov.za).