



Midmar Dam in the KZN Midlands is the mainstay of Durban's burdened water system. It's overflowing at present, but as soon as the city has a dry summer, water scarcity looms.

Dam it, we're running low

ON A scale of one to 10, the water shortage crisis in eThekweni municipality is an eight.

This is the assessment of senior national Water Department engineer Niel van Wyk, who told the Sunday Tribune this week that the situation was "quite urgent" and that measures to deal with it needed to be looked at – and swiftly.

At its maximum, the Mngeni River system, from which Durban gets its supply, can store 800 million cubic metres of water.

However, there is currently only about 700 million cubic metres available. The annual usage is about 400 million cubic metres, and increasing.

"As it stands at the moment, if by May this year the storage isn't full, then you are going to be on the brink of needing water restrictions. We use about 400 million cubic metres and have storage of 800 million cubic metres, that means that if there is no rain you have no more than two full years' water supply available.

"The situation looks good when the storage dams are full.

Water resources in Durban are under threat and need to be dealt with urgently. **Matthew Savides** looks at the options

But at the moment we are on the brink of concern," said Van Wyk, who is the chief engineer and director of National Water Resource Planning.

Head of the eThekweni municipality's water department, Neil Macleod, said last week that there was a chance of water restrictions as early as next year.

The only thing that had saved residents from having water restrictions in place already, he said, was that there had been better-than-expected rainfall over the past three years.

Macleod said this week: "To avoid protracted water restrictions and the consequent impacts on the local economy and the community, we need to put alternative supplies in place as soon as possible."

As demand increases, so does the need for new water sources. Already tenders have gone out and construction of

the Spring Grove Dam on the Mooi River is mere months away. There are also plans in place to build a dam on the Mkhomazi River, although this is a long-term project.

In the interim there are studies under way into the possibility of building at least one desalination plant in Durban and the construction of wastewater recycling plants.

According to Umgeni Water spokesman Shami Harichunder, the demand for water "is greater than the yield of what the existing system can generate". This means that other sources of water needed to be considered.

Confirming Macleod's comments, Harichunder said a dry winter period when it did not traditionally rain in KwaZulu-Natal could present problems with the water supply, although good rainfall between November and January would have helped.

"We are investigating desalination and recycling of wastewater simultaneously and both of these would augment the existing supply. That tells you there is definitely a need for additional water sources.

"Dam levels are never adequate, because they are entirely dependent on rainfall, and that can vary," he said.

According to water expert and environmentalist Anthony Turton, the country is dealing with a "slow-onset disaster".

"The problem with a slow-onset disaster is that the outcomes are known, but no one knows when those might happen.

"It also doesn't generally get noticed until it's too late and the typical response to people who say something else is to label them as being alarmist. Only when you have the disaster do people take those experts' views seriously," said Turton.

He referred to comments made by former director-general of the national Water Department, Mike Muller, who said two weeks ago at a national seminar that three of the country's metro municipalities – eThekweni, Johannesburg and Nelson Mandela Bay (Port Elizabeth) – were facing a looming water crisis.

"Something needs to be done," Turton said.

Muller told the Tribune on Friday that any new measures needed to be looked at on the assumption that there would be a drought.

"You're at risk, and no one can tell you for sure that it's going to rain.

"I compare it to the situation in Australia. They were vulnerable and then there was a drought. Now people are questioning why something wasn't done sooner and why the warnings weren't heeded.

"If you want society not to

be at risk... you have to invest even though you might not need the investment right now. You are going to need that infrastructure if there is a drought, so it should be built as if there is going to be a drought," he said.

Muller added that if there was better-than-expected rainfall, then that water would not be wasted, but rather stored and used at a later stage.

Van Wyk said that various options were being considered, but that "strictly speaking, we should be starting already".

In terms of infrastructure, there are two dams in the pipeline, along with the possibility of building a desalination plant and a wastewater recycling plant to add additional water into the system.

Also, Van Wyk said that dealing with water losses and making use of the available water was also key.

Macleod said that any infrastructure would take at least three years to build because of the environmental impact assessment process that needed to be undertaken.

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