

RESIDENTS MAY HAVE TO DRINK PURIFIED SEWAGE

New dams set to supply Durban and Maritzburg

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AT LEAST two new big dam projects are on the drawing boards to meet growing water demand in Durban and Pietermaritzburg – but local residents may have to start drinking ultra-purified sewage water until the dams have been completed.

The Water Affairs Department said yesterday it planned to have the new Spring Grove Dam near Mooi River running before April 2102 and to raise the height of the existing Hazelmere Dam, near Verulam, by 2011. However, both projects would not meet water demand in the Durban, Pietermaritzburg and North Coast regions in the short to medium term.

This was because higher-than-average rains over the past few years had filled local dams, masking the extent of the shortage, which has also been partly attributed to water leaks and wasteful use by communities which do not pay for water.

Earlier this year, nearly 40 percent of the water sold to the eThekweni Metro was being lost to water leaks, theft or non-metered consumption.

The department said it had also finished pre-feasibility studies to build new dams on the Umkomaas and Mvoti rivers, and was urging large

municipalities on the KZN coast to curb the water revenue lost from leaks and non-payment.

“Neither Spring Grove nor a larger dam at Hazelmere will be sufficient to deal with the demand, and other less-commonly used options have to be investigated.”

This included the option of re-using the effluent waters from sewage treatment works, directly or indirectly. This could involve purifying sewage effluent directly to drinking water standards using reverse osmosis technology similar to salt water desalination.

Standards

Alternatively, partly purified sewage effluent from Pietermaritzburg could be released into the Umgeni and other rivers, and then recaptured and purified to drinking water standards further downstream.

The department’s director-general had now requested the eThekweni Municipality to investigate the possibility of expanding the process to meet “urgent short-and medium-term water shortages”.

“Umgeni Water is also conducting a study into the feasibility of the re-use of treated effluent at the Darvill wastewater treatment works (in Pietermaritzburg).”

The department noted that Namibia’s capital, Windhoek, had been recycling sewage water to drinking quality since 1969.

It said people would not notice the difference if sewage water was recycled locally for direct drinking-water supplies, as the water would be purified according to strict safety and quality standards.

The eThekweni water and waste chief, Neil Macleod, said the 39 percent non-revenue volume for January was partly due to a major ongoing programme to replace outdated asbestos cement pipes with stronger new pipelines.

The replacement of the old pipes had increased pressure in some areas, causing further leaks in the old system.

The non-revenue volume had dropped to 37 percent, and it was hoped to reduce this to 33 percent by June 2010, with further reductions thereafter.

Macleod said about 10 percent of this volume was attributable to direct theft or unmetered use (equivalent to about R100 million a year).

However, over the past few months eThekweni had reduced revenue losses by about R30 million a year by implementing a new pressure-management system in the CBD. Leaks from old pipes had been reduced by reducing water pressure.

