

Threat to city's tap water

Raw sewage found in rivers that feed dams supplying Cape Town

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In a crisis described as "beyond dire" and which threatens Cape Town's drinking water, large quantities of raw sewage is contaminating rivers and streams that flow into the dams supplying the city's tap water.

And all the politicians are doing about it is "talk and talk" says a top water expert.

The dams that supply Cape Town's drinking water are situated in the Boland near towns that have failed to provide adequate sewerage services especially for squatter communities.

Experts warn that unless something is done urgently, potentially fatal water-borne diseases could affect communities throughout the city.

Although tap water is purified, officials warn that purification plants may not be able to cope especially if there are more electricity cuts. This could result in contaminated water ultimately ending up in our taps.

There have already been breakouts of water-borne diseases among people living in informal settlements close to contaminated rivers and streams.

Affected dams include Voëlvlei near Tulbagh and Steenbras near Grabouw. Diarrhoea, skin diseases, ear and eye infections and respiratory diseases have also been experienced in some communities coming into contact with untreated water and there is a real danger of outbreaks of typhoid and ultimately cholera, according to Dr Joe Barnes, an epidemiologist specialising in water-borne diseases.

She is based at the University of Stellenbosch Medical School.

Barnes said she had been warning authorities since 1998 of the impending disaster. "But they have done nothing. They have talked and talked, but have taken no action. We are in the midst of what I call a slow disaster.

"The situation is beyond dire; it is critical. The water catchment area of the City of Cape Town is heavily polluted. And disease carries no passports. As people move from one area to another, the cycle continues and spreads. Developments in most Boland towns have outstripped capacity of sewerage plants. This means that when there are power failures, raw sewage overflows and lands up in rivers, streams and the groundwater."

"Large informal settlements have also developed on river banks and near streams throughout the city's catchment area."

"Because these settlements do not have sewerage systems, raw sewage also lands in rivers and streams that feed the catchment dams that supply the city of Cape Town. We are sitting on a health time bomb," said Barnes.

"This is very serious, people can die. We need to stop politicking. We need to work together, we need to do something now."

The Department of Water Affairs and Forestry, the government department tasked with ensuring water quality, confirmed that the situation was serious.

Rashid Khan, Western Cape regional director said: "Bacterial contamination of river systems is experienced in many places throughout South Africa as a result of failing services and informal urban areas that are not adequately serviced.

"Most Boland towns have large tracts of land where informal settlement is taking place. Unfortunately these areas are close to or on the banks of river systems and storm water and tributaries flow into these river systems. Many thousands of people live in these areas with inadequate sanitation."

Khan added that many of the small towns had lost technical staff involved in the maintenance and operation of wastewater treatment works.

"This has resulted in some failures of wastewater treatment works."

Khan confirmed that the recent power outages "resulted in large quantities of raw sewage entering river systems."

The Department of Water Affairs and Forestry has now requested that all 30 Water Services Authorities in the Western Cape supply "contingency and remedial plans" to better manage water pollution as a result of power failures.

Khan said power outages also affected the efficiency of wastewater treatment works that rely on large amounts of power to operate effectively. He stressed that these treatment works were the direct responsibility of local authorities.

Another Water Affairs official who asked not to be named for fear of losing his jobs said: "Urbanisation has had a huge impact. If you look at pre-1994 South African satellite photographs compared to the same photographs today it is clear that informal settlements have mushroomed around small towns and rivers.

"But while the populations of these small towns mushroomed, local authorities did not spend any money on increasing the capacity of sewage treatment works.

"To put it bluntly - politicians, mayors and such love building clinics to be named after themselves or their heroes, but no one want their name on a new sewerage plant.

Khan said all role players had now been made aware of the problems that could result

from the bacteriological contamination of the river systems.

A former city water engineer said while there was a real danger of contracting water-borne diseases in areas without proper sanitation, there were several checks to prevent contaminated water from reaching the taps of home owners.

Unlike small towns that are dependent on electricity for purifying water, large dams such as Voëlvlei and Steenbras that served Cape Town, have their own hydro-electric turbines that power water purification plants below the dams.

Here the water gets purified and chlorine is added to the water to kill off bacteria.

Tap water is also randomly tested and if bacteria is detected, further measures are taken.

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