

## **Why water is becoming a big deal in residential communities.**

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Water has been taken for granted, but things are changing fast. As infrastructure failure has accelerated, the Eskom crisis became acute. But not far behind that has been the water crisis, now exacerbated by the largest El Nino drought event in recorded history.

In KZN, an area hard hit by drought, we are starting to get an indication of the way the state is responding. In the small district municipality of Ugu, centred roughly on Port Shepstone, the response has been harsh. In effect the state is shifting its responsibility for assurance of supply onto Body Corporates, Home Owners Associations, and others.

What is assurance of supply (AOS)?

In the case of energy it is the guarantee of supply at any given moment in time and space. In the case of water, it is about six key elements: the guarantee of a given volume, at a given pressure, of a given quality, at a defined price, supplied at a specific time and place. The government has traditionally provided AOS, but the accelerated rate of infrastructure collapse, exacerbated by the deteriorating capacity to provide basic services, has changed this central assumption. From now on AOS in energy will be in the form of a standby generator, or greener options like going off the grid with wind or solar. In the water space, it will be in the form of an uninterrupted water supply system (UWSS).

Just as an uninterrupted power supply (UPS) provides safe backup for computers, so too will a UWSS provide safe backup for all water users, specifically in areas that cannot be without reliable supply for whatever reason (schools, hospitals, retail malls, hotels etc). These units will be very sophisticated, capable of storing enough water to carry an entire community through a crisis period. They will also be capable of processing water of an increasingly deteriorating quality, making it safe, wholesome and reliable. This will be done seamlessly, using cutting edge technologies sourced from leading global suppliers, but assembled and supported locally.

A growing risk is the contamination of rivers and dams by dysfunctional sewage works at municipal level. The effect of this is increasingly being seen as an overload of the potable water supply systems, never designed to process sewage effluent into safe drinking water. Central to this is the growing risk of toxicity from blue green algae. At present 63% of SA's bulk water storage in large dams and rivers is contaminated. No bulk water treatment plant is currently designed to remove these toxins, so this technology will be made available in the UWSS units soon to be introduced to the market.

Residential estates give a certain quality of life. One of the advantages of this is the capacity of such communities to self-organize and provide solutions that are beneficial to all residents in a cost effective manner. Gurumanzi (Pty) Ltd is very active in the development of these

technologies and is working with a range of reliable service providers to support the needs of residential estate communities.