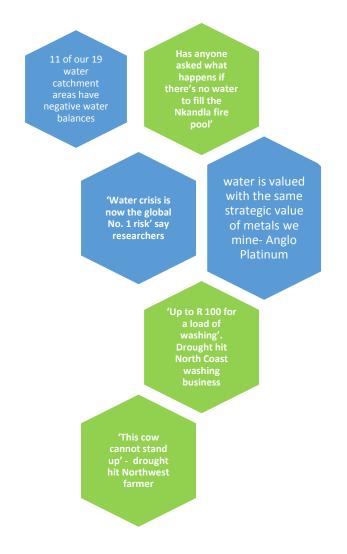
## Water shedding

## Is it the next thing risk practitioners and executives should worry about?

Written by:

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With regular electricity load curtailment events in many parts of the country a frequent reminder that Eskom cannot supply all of its customers the electricity they want or need, many of us often focus on the state of our electricity demand/supply shortfall, from Board level deliberations to dinner table discussions. Are executives and the public at large focussed on 'now' problems, rather than future uncertainties?







Similarly to the supply/demand dynamics at play in the energy sector, it has been known for decades that South Africa (and Southern Africa) is a water scarce region. The amount of available water is extremely limited whilst demand for this life sustaining substance increases, exponentially, unabated. Combine too little supply with increasing demand, rapid urban growth, well publicised infrastructure failings, a lack of skills and planning and industrial growth, and we get a picture where the various factors at play do not add up. The potential for solar power, as a risk treatment to the energy situation, is itself a water hungry process. South Africa is currently ranked as the 30<sup>th</sup> driest country, well above areas like California and India where serious water challenges have already arisen.

Unlike electricity, where we have a level of control and options over its production, there remains few commercially and environmentally viable means of producing water. Sea water desalination seen by many as a silver bullet remains costly, technically challenging and fraught with environmental consequences. In many respect, we are dependent on rainfall patterns, available infrastructure, including dams, bulk water schemes and bulk water treatment facilities and the ongoing maintenance of this infrastructure. We are equally dependent on good demand side management to reduce and re-use the little resource that we have. We are dependent on public perceptions and public behaviour towards water. As a water scarce country, we are one of the few using drinking water quality to flush toilets and run factories. Anyone who has visited Singapore will quickly realise that in that country, this would be considered criminal. If this balancing act is not achieved and our attitudes changed, and we need to aim for it now, the consequences to our country, economy and society will make the power shortages seem insignificant.

When the supply runs dry, the taps run dry. The problem is that the taps will run dry for a long time, not the current 2 or 3 hours experienced with the load curtailment program. What would you do if your house, factory, place of work had no water for a week, a month, 90 days? The solution is never an easy one as it involves a complex range of issues including making the entire water consumer life cycle economically viable, meeting social and development goals, educating the public to become water wise, reducing our current water reticulation waste of 30-40 % at municipal level, funding infrastructure and maintenance requirements against competing interests and many others.

Good work is being done and many plans exist, from individual bulk water utility strategic plans to the Department of Water and Sanitation's 2020 vision and the government's 5 point water and sanitation plan. Much of the current work is however in 'plans' and not in 'actions'. There has been fair media coverage lately intimating that serious political will is necessary to address our water risks. We suggest that waiting for political will is not the answer, every risk practitioner, in the public and private sector, should understand the situation and ascertain the consequences that this risk can have on an organisation and its assets and get the message to the Board or senior structures. The more our society and leaders become aware of the problem, the more focussed we will become at finding the solutions or risk treatment options; only one of them may be political will.