Western Cape Water Crisis
How resilient is your organisation in the face of the current water crisis?

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Having too little water, or water that’s too dirty to use or too expensive, can have devastating effects on us as individuals, communities and organisations. There’s no doubt that water is fundamental to business – whether it’s for heating, cooling or cleaning – so what happens when we run out of it?

The key question that meteorologists are trying to answer right now is whether the drought that we are experiencing in parts of the country, in particular the Western Cape, is only a foretaste of the potential impact that climate change may be having over the coming decades, or whether we are already experiencing the new normal.

Cape Town is experiencing the worst drought in recorded history and according to the City, dam levels are currently at their lowest in 19 years. Extreme water restrictions have been put in place in the City of Cape Town and neighbouring towns, and water is being rationed via pressure reduction and other demand-side management interventions. The City’s population has grown by 67% from 2.4m in 1996 to 4 million in 2017. Over the same period, dam storage capability has been increased by only 15%.

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Without drastic measures to further drive down demand and supplement supply, the City of Cape Town anticipates that it is highly probable that acute water shortages will be encountered in the first half of 2018.

The City announced what it calls the ‘Critical Water Shortages Management Disaster Plan’ in October 2017 with the focus on reducing its reliance on traditional groundwater storage through measures such as seawater desalination, water reclamation and groundwater abstraction projects.

Some experts believe that trying to turn the water crisis around at this point will be too costly and that the water may run out before remediation plans can get off the ground. The naysayers warn that it will be too costly for the City to finance and recoup capital projects of this scale via tariffs. There are also concerns about the feasibility of completing such large capital projects within a sufficiently short time span. Only time will tell whether the City will be able to turn the water crisis around through its disaster plan.

Experts are, however, in agreement that there is a very high likelihood of water disruptions occurring before the 2018 rainy season starts.
What impact could the water crisis have on your business?

In the World Economic Forum’s Global Risk Report 2015, the risk of a water crisis was ranked as the top risk in terms of impact – something that has not gone unnoticed by CEOs. In PwC’s 17th Annual Global CEO Survey, 46% of CEOs agreed that resource scarcity and climate change will transform their business in the next five years.

The risk of water scarcity, with its associated impacts, has jumped to the top of many Western Cape businesses’ risk registers. A number of businesses are already putting preventative measures and crisis management plans in place to deal with the expected water disruptions.

Water scarcity does not only impact organisations that are reliant on large volumes of water for their core operations, such as agriculture, food processing and manufacturing businesses; it will also have a significant impact on corporate offices. The table below provides some examples of the direct and indirect impacts of water scarcity on organisations.

**Staff**
- Evacuation of workers away from drought-affected areas for potentially long periods of time
- Unemployment, should less resilient organisations go out of business
- Employees being unable to travel to work or being absent from work for extended periods to care for their own families and properties
- Low staff morale
- Negative impact on local economy as people move away from drought-stricken areas

**Business processes**
- Disruption of manufacturing, food processing, agri and other businesses that use large volumes of water in their core operations
- Increased cost of water making organisations less competitive compared to similar organisations in other regions
- Shortages of drinking, cooking and sanitation water or the increased risk of fire bringing operations to a stop and resulting in the evacuation of buildings

**Infrastructure**
- Increased risk of fire due to dry environment, with large industrial sites and warehousing complexes being at particular risk since a fire on one site can spread more easily to other buildings in close proximity
- Malfunctioning fire suppression systems due to a lack of water pressure, making buildings unsafe to work in

**Supply chain**
- Suppliers being unable to deliver goods
- Increase in prices of certain products and services or lack of availability thereof

**Is the glass half empty or half full?** There is an upside as well. Already we have seen businesses that are quick to adapt thriving in an environment of water scarcity. Take laundromats and car wash operations as examples – those businesses that were agile enough to switch to recycling their water are thriving while their competitors have had to close down. So, too, early adopters of green technology and building techniques have already significantly shrunk their environmental impact and are able to operate with lower water consumption. All of these businesses demonstrate the value of being resilient through the adoption of either proactive or reactive measures.
How can your organisation become more resilient in a time of water scarcity?

The key to becoming resilient in a time of water scarcity and climate change is for organisations to prepare a water scarcity management strategy. Such a strategy would typically be developed using a combination of risk management and business continuity management principles aimed at coping with the expected water crisis and ensuring continuity of operations.

You can prepare for the most likely risks that water scarcity pose to your organisation by putting in place measures such as reserve water tanks, stocking up on bottles of water and converting to chemical sanitary solutions. Your business continuity plan will play an important role in responding to and recovering from the worst-case scenario: the day the water runs out completely (also referred to as “day zero”).

It is critical for organisations to be good corporate citizens now by putting drastic measures in place to reduce water usage while there is still some water left.

These are some of the points you need to consider in implementing your strategy:

- **Put measures in place to conserve water and reduce water usage and wastage.**
- **Perform a risk assessment to determine which operational risks are most likely to materialise as a result of water scarcity. Rank the risks from a likelihood perspective as well as from an impact perspective.**
- **Develop or revise your risk response plan so that it adequately caters for water scarcity and includes proactive and reactive measures for coping and dealing with the crisis.**
- **Perform a business impact assessment to understand what the impact of water scarcity will be on your organisation. It is important to consider the impacts of both the disruption of water supply and poor water quality. As part of the assessment, you should consider how the following aspects of your business may be affected:**
  - Employees
  - Workplace
  - Location
  - Infrastructure
  - Business operations
  - Supply chain
  - Customers.
- **Where practical and cost-effective, mitigate and prepare for the realisation of the highest-ranked risks.**
- **Develop a business continuity plan for a worst-case scenario and for the risks that are too costly or impractical to mitigate or defer. The business continuity plan should allow for the early detection of a crisis that is about to happen. The plan must also allow for an immediate response to the crisis and make it possible for the organisation to recover to an acceptable level of operations within a reasonable time.**
It is furthermore important to focus not only on the short-term risks relating to the current drought by expanding the scope of your strategy to incorporate the medium-term risks and impacts relating to climate change.

How prepared are you?

- Have we assessed our current water consumption and implemented measures to actively reduce it?
- Have we performed a business impact assessment to determine the impact of water shortages or poor-quality water on our employees, workplace and operations?
- Have we considered the impact of water scarcity on our supply chain and customers?
- What proactive measures have we put in place to mitigate and prepare for water disruptions?
- Do we have an early warning mechanism in place to accurately predict when we will reach ‘day zero’?
- Have we reviewed our business continuity plan to confirm that it covers communication, alternative suppliers and sources of water, and workforce flexibility, and that it will allow us to deal effectively with a ‘day zero’ scenario?
Please contact us for a more detailed discussion about the risk of water scarcity and climate change, and what your organisation can do to become more resilient.

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