

## SLIDE 1

Good afternoon. I'm Stephen Law, Director of the Environmental Monitoring Group. I presenting on behalf of some of my colleagues who were involved in the fieldwork that I'll be talking about.

EMG is a not-for-profit organisation – and NGO – with offices in Cape Town and Nieuwoudtville in the Northern Cape; and an emerging virtual presence in Mpumalanga and the Eastern Cape.

This presentation will look at a few aspects of the City of Cape Town's water conservation and demand management strategy and how they measure up as climate change adaptation responses.

I should make it clear at the outset that this is not a critique of Cape Town's policies as such. The issue we're highlighting are probably replicated in many other large urban settings. Cape Town simply happens to be the place we work in.

Another disclaimer upfront....

What I will be sharing is not the result of an objective and scientific study. But rather, some reflections that have emerged from action-research and learning partnerships with community-based organisations and individual water activists – which are aimed at building their capacity and knowledge-base of the community groups themselves.

Nevertheless, we believe these perspectives are significant.

## SLIDE 2

Some of you may have missed this.

Cape Town was one of a handful of winners of the C40 Cities Awards dished out at the recent climate change COP21 in Paris.

200 applications were received from 94 cities across the world

Cape Town won the "Adaptation Implementation" Category with its *Water Conservation and Water Demand Management Programme (WCWDM)*

The City show-cased its achievement of a 30% reduction in water demand over a 15-year period – despite a population growth of about 30% over the same period.

So this was quite an achievement

This reduction was possible by the City tackling the water demand issue on a whole range of fronts..... (see list)

### SLIDE 3

This massive reduction in water demand was achieved by targeting a whole range of demand reduction areas.

This kind of big target-driven process is a particular kind of adaptation response.

We're interested in the implications at a more micro scale – at the level of the household and individual, and particularly at those already most economically vulnerable.

So let's zoom in on one aspect

### SLIDE 4

Each municipality is left to set its own tariffs, and it's pretty normal for municipalities to have a stepped tariff for water.

This is Cape Town's current scale and it's fairly typical.

Water gets more expensive per kilolitre, the more you consume. So supposedly it provides cheaper water for those who use less, and the big users also subsidise.

Another way to look at it is – If you're a rich household, use as much water as you like, as long as you can pay for it. If you're a poor household, use no more than 10.5 kl/month (about 350l/day) or it can start to get expensive.

It also assumes we all live in tidy 5 person households. So if you have a large household, or another household living in your backyard, that could be a problem.

For the City it's a balancing act. They must recover the cost of providing water, but also make it affordable, and discourage wasteful use by making it very expensive at the top end.

But there are not so many rich households using heaps of water and filling the City's coffers, which possibly explains the next slide...

### SLIDE 5

This shows how water prices per kilo-litre have increased since 2012.

All steps have seen the same % increase EXCEPT the lowest chargeable step (6kl to 10.5kl) where % increases were 2 to 3 times the average.

If you were using only 10kl/month, in June 2013, your water bill would have gone up from R58 to R76 (30%). The chances are that this made a significant dent in an already delicate household budget.

If you were using (heaven forbid) 35kl/m, in June 2013 your water bill would have gone up from R400 to R450 (12%). If you could afford a water bill of R400/month, the chances are you didn't even notice the increase.

So the households that used the least water got punished the most!

Cities face an internal conflict : They have to sell water to cover costs (therefore trying to sell more water to people who can pay) and they need to conserve a scarce resource (therefore trying to limit the use of those who can't pay).

Any real adaptation strategy has to resolve this conflict.

Drilling down further.... Here's an example of a household in Makhaza in Khayelitsha – these numbers are real and while they are not necessarily representative, they are also not entirely atypical of low-income households in other metros.

#### SLIDE 6

These are numbers from a utilities bill of a family living in a badly built RDP home with plumbing that didn't last for more than a few years.

A massive arrears bill was racked up, largely because of water leaks, and after a while the family gave up any hope of ever paying the bill.... And at that point there was no incentive to fix the leak either.

After the Council was persuaded to fix the leak, their water bill dropped, but the total bill was still an unpayable amount.

In Cape Town, and possibly many other metros it is not possible for a householder to determine what part of their bill they want to pay. You hand over what you can afford, and the City decides how to allocate that amount across the different categories that make up a utilities bill.

Unless.....

#### SLIDE 7

Part of the City's water saving has come about through the roll-out of water management devices. These are essentially a **water rationing** devices. The device – which is installed at the boundary to your property where a conventional meter would go – can be set at a pre-determined daily ration. Once the ration is used up, flow drops to a trickle.

A little bit like capped internet, except it's a lot easier to do without internet when you reach your cap.

Unlike the internet, and unlike conventional meters, it is not possible to find out how much of your daily ration you have already used, which is why it is colloquially known as *amafudo* – the tortoise – because you can't open it and look inside.

Cape Town has installed about 140 000 WMD with about 650 000 installed nationally - mostly in poorer suburbs.

The usual arrangement is like this: If your household qualifies as “indigent” and you apply to get added to the indigent register, you get a free water management device installed, the Council does a once-off free fix of all your leaks, and your arrears debt gets frozen for a year. You also get a 350l/d free daily ration of water. If all goes well after a year your arrears could get written off entirely.

If you are not indigent, you pay a small fee to have the device installed and the daily ration is set depending on what you think you can afford. If your account is in arrears, you may still have to do some hard negotiating.

From the City's perspective, this is an easy single solution to three problems

1. Cost recovery
2. Water conservation
3. Separation of those who can't pay from those who won't pay

In our experience, the installation of these devices has caused a lot of unhappiness and frustration.

I'll mention a few of the issues raised by residents that we work with...

SLIDE 8

This water management strategy adds more tension to an already divided city... None of these frustrations are, we believe, very good indicators of city that is adapting to climate change in a way that transforms a vulnerable sector of society into one that is resilient.

I've paraphrased some of the commonly heard issues:

- The City makes us an offer we can't refuse: accept the device and clear your debt..... or make arrangements to pay your arrears. This is not really a choice.
- If we're going to have water rationing, shouldn't it apply equally to all households not just the poor?
- If we're going to have water rationing, shouldn't the ration be calculated based on need (size of family, etc.) not on financial status?
- The water meters are portrayed as a water conservation technology, whereas it is primarily a cost recovery tool

- Neighbours no longer help each other – Households with the water meters won't share their water, for fear that their own daily ration will run out.
- We are treated as bad customers, not as poor citizens
- We feel as if we are being punished for being poor
- We have lost contact with the City. These devices get installed by private companies that we have no relationship with. Problems take a long time to resolve because the City first has to trace who the original installers were. Even the educational component is outsourced.
- Our access to water is used as a political football
- We have lost trust in the City to look after our needs

#### SLIDE 9

Towards a conclusion....

- Adaptation is as much about building stronger relationships between city and citizens as it is about having the right technological fix
- Locally determined alternatives are possible – but it needs capacitated community groups to be met by officials who are open to new ideas, willing to partner, to take risks and experiment.
- The resilience of our cities should be measured by how resilient the most vulnerable sectors are.
- People's health, dignity, livelihoods and creativity must be at the centre any city's adaptation response