

# Management

## Case studies illustrating scientific support to eThekweni Municipality, Durban South Africa

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Good science leads to sound policy

Without data - it is just an opinion

Municipal support means always  
being available and all knowing

... to identify potential problems  
before they become a crisis ...

A continuous sequence of small interventions and an occasional big one

Scientific support enables professional staff to take bigger chances knowing there is back-up

Provides a platform for Municipality to partner with funders such as WRC and BMGF

Provides an easy link to the whole university and to other universities

# Big slow interventions: anaerobic baffled reactor

- 2004 PRG started at 5 litre scale on high-strength soluble substrates
- 2006 BPD funding for 15 kl reactor at a wwtw
- 2008 Met Borda and initiated partnership
- 2010 Newlands Mashu Demonstration site
- 2012 CABs and Prefabricated ABRs with Hering and Borda
- 2015 Application for Licences
- 2016 Potential for 100 CABs + ABR + agricultural area
- 2017 ..... we solve the next problem

# Quick Fixes

- Don't put faecal sludge in sewers to WWTW
- Improved Ascaris analysis in environmental samples
  - Disproves certain processes
  - Provides deeper insight into all faecal sludge handling and processing
- Pit emptier personal protective equipment
- Quantitative Microbial Health Assessment for emptying UD toilets

# Long term planning

- Community surveys on a range of topics
- Use of wastewater for agriculture
- Support the concept of a pro-poor rising block tariff
- Co-digestion of organic wastes
- Deep understand pit filling rates
- Quantification of dual pit pour-flush toilet filling rates



# Acknowledgements

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