

**ETHEKWINI  
WATER AND SANITATION**



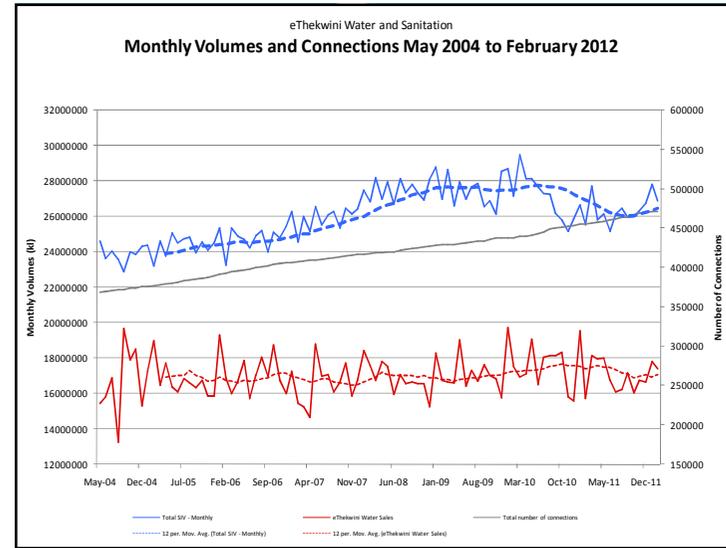
**PRESENTATION TO THE SSC**

**THE eTHEKWINI UPDATE**

**MARCH 2012**



**Municipalities must halve their water losses by 2014 –  
President Jacob Zuma – State of the nation address  
March 2009**



**SIV Reduction – Real Losses**



- Rezoning - New Pressure Standard -2.5bar – 6bar
- Advanced pressure management (optimising existing + controllers)
- Active prv Maintenance
- GSM based failure detection devices on prv's
- Leak detection & Step testing
- AC mains relay (incl rezoning + replace connection pipes) (1800 km)
- New Fault Manager software to assist with analysis of faults data. Improve speed and quality of repairs.
- Performance management System
- Reservoir overflows (incl response time)
- Reservoir integrity (leaks)
- New Asset management Branch created



**Pressure Reduction**

- R160m will secure an additional 50MI / day (20m m3 pa) of potable water
- Best ROI of ANY comparative project
- Proposal submitted to prospective funders for up-scaled pressure reduction interventions
- Turnkey contracts to commence July 2012



## System Pressures

- Average pressure in the UK is 35m. EWS is 52 m.
- UKWIR long term leakage goals reduce average pressures to 25m.
- SANS 10400, NBR and SANS 10090 govern static pressures in the distribution system.
- We are currently providing high pressures that increases losses, bursts, replacements and Capex.

**• Change at a national level is required !**



## Apparent / Commercial Losses



- New standards for meter installations
- Change out programme for meters 40mm and greater and older than 10 years (1000)
- Ensure Top 200 meters < 5 years old
- Change out programme for domestic meters older than 20 years (22 346)
- Checking Council databases for properties with existing buildings or electrical connections that don't have a water connection
- Checking of all Government owned properties for multiple connections
- Checking properties where connections were previously removed
- Amnesty Programme commenced 15 March 2010
- 75 Custody Transfer Points – Bulk Purchase from Umgeni Water (4 upgrades)
- Top 17 sites account for 99% of volume purchased R3m / day



## Social Change

- ❑ **The elephant in the room**
- ❑ Losses can be reduced by 30%
- ❑ Jobs can be created
- ❑ National support is required
- ❑ Peoples mindsets need to change
- ❑ Linkages to energy use



❖ Greater control must be introduced at property level (plumbing standards, material, compliance certificates etc)

## Recommendations

- Funding is sourced and pressure management is rolled out throughout eThekweni, KZN and SA.
- Pressure standards in distribution systems must be minimised as per global trends.
- Social solutions must be explored and implemented in conjunction with capital projects.



**Thank you.**