Socio-Economic Impact of the Outcomes Relating to the uMkhomazi-Mgeni Augmentation Scheme

SSC Meeting
9th September 2015

Richard Gevers

The scope of the study

- Assesses the impact of augmentation and the impact of non-augmentation in the Umgeni System over the next 30 years.
- It serves to update previous studies and has strong links with various studies that consider the uMWP and that have taken place over the past 15 years
- Study Area: UW water supply in eThekwini, Ugu, and Msunduzi

UMGENI WATER · AMANZI

GMA Innovations.

Economic model framework

Option (Augmentation/ Non-augmentation)

Demand Impact Multiplier Model and/or Base Growth

Supply Impact Customer Impact Model

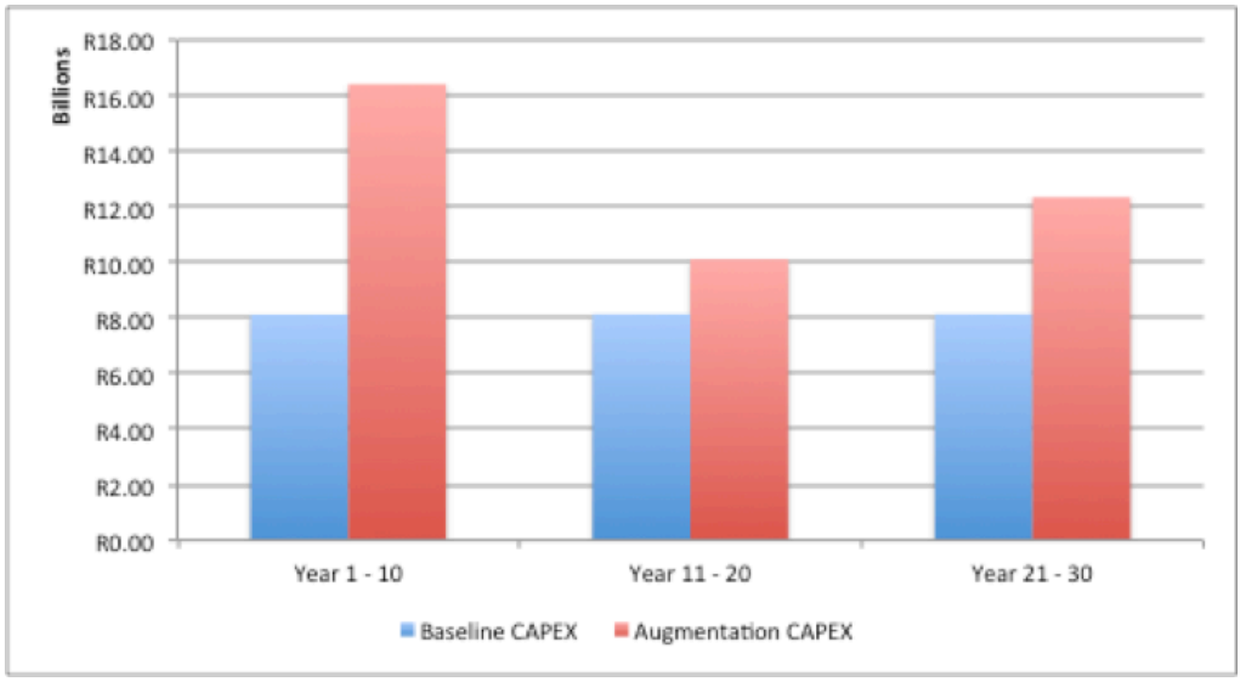
Impact on GVA; Employment; Etc

Impact on Water Security and Risk, Customers and Revenue

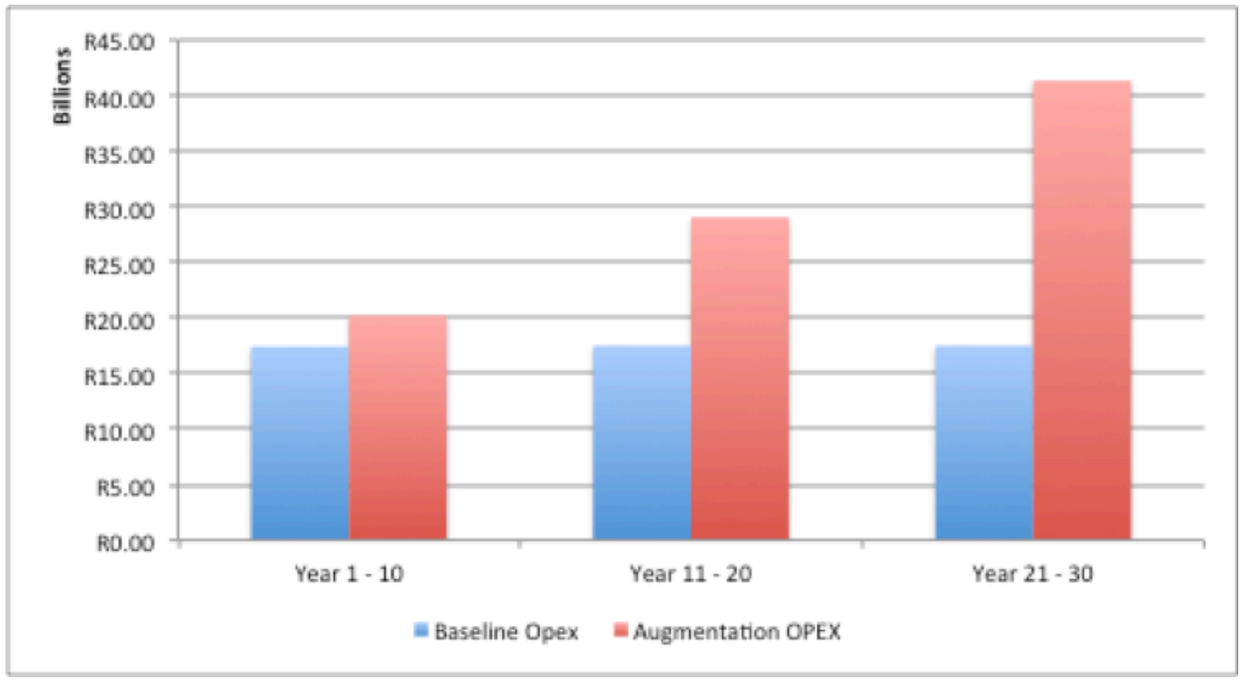
UMGENI WATER · AMANZI

GMA Innovations.

Impact of non-augmentation



CAPEX



OPEX

UMGENI WATER · AMANZI

GMA Innovations.

Impact on employment

- The GAP amounts to:

  - 4 341 jobs from CAPEX and 401 jobs from OPEX to the economy over the first ten years,

  - 1 117 jobs from CAPEX and 1 663 jobs from OPEX to the economy over the second ten years, and

  - 2 366 jobs from CAPEX and 3 431 jobs from OPEX to the economy over the third ten years.

UMGENI WATER · AMANZI

GMA Innovations.

Summary

The economic cost of non-augmentation, apart from the direct uMWP Impact, will be to “lose” approximately 420 jobs and R3.7 billion (2014 Rands) of gross value added to the South African economy every year for 30 years

Supply analysis

- Daily snapshot data (in kilolitres per day), which describes the total consumption in a day per individual site or household

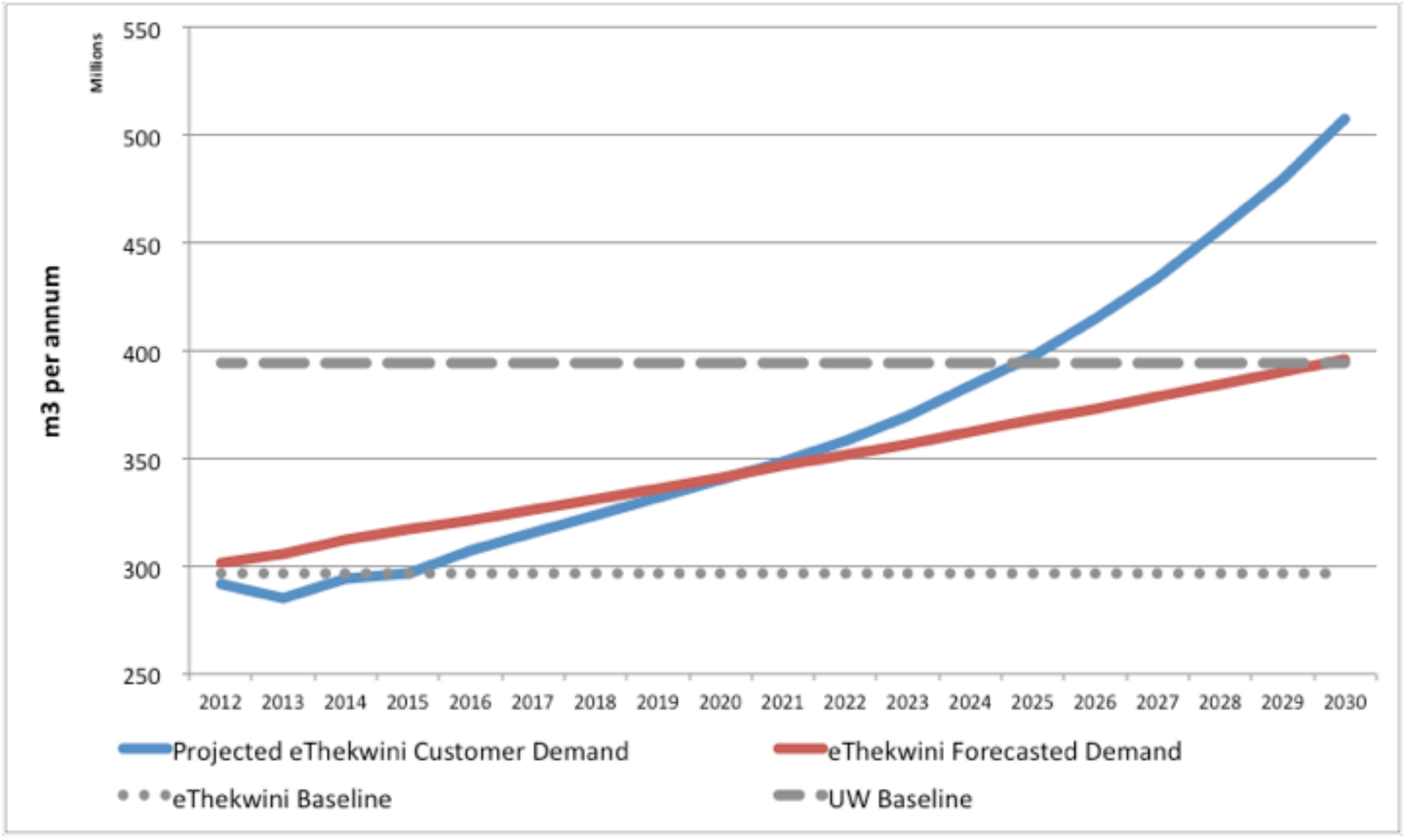
- eThekwini municipality (75% of sales volume), extending study to Ugu and Msunduzi customer usage data

- Dataset consists of twenty-six total consumption snapshots, starting from October 2011 and ending with the final dataset being September 2014

UMGENI WATER · AMANZI

GMA Innovations.

Projected eThekwini customer demand



UMGENI WATER · AMANZI

GMA Innovations.

Extension of study

- Expand revenue and infrastructure analysis to whole supply chain (DWS, UW, eThekwini, Ugu, Msunduzi)

- Expand consumption analysis to full Umgeni Supply Area (Ugu and Msunduzi)

- Granular and spatial insight into whole supply network

- More visualisation and case studies of big industrial/ commercial relocation/un-development

UMGENI WATER · AMANZI

GMA Innovations.

Thanks!

Richard Gevers
e-mail: richard@gmainnovations.com
mobile: +27 83 722 8227
skype: richarddirkgevers
twitter: @richardgevers
linkedin: richarddirkgevers

UMGENI WATER · AMANZI

GMA Innovations.