

Working together we can save more water

Role of WC/WDM within the KZN Reconciliation Study

Steering Committee Meeting

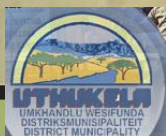
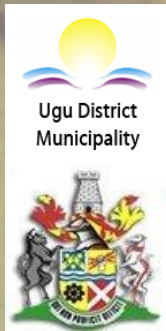
9 September 2015



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Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Toll Free: 0800 200 200 www.dwa.gov.za



Background to Programme

1. Increased regulation from DWS in terms of monitoring and reporting
2. WSA No Drop Assessments
3. Requirement for water balance reporting and water savings reports
4. Poor response from WSA's in KZN
5. Reasons:
 - Lack of human resources
 - Lack of appropriate skills
 - Lack of necessary information



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Background to Programme

1. DWS KZN active with WSA interaction, and created KZN WC/WDM Forum
2. Forum used to canvas needs from WSA's
3. Identified needs and prepared application to ACIP for funding to improve situation



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KZN ACIP Funding for WC/WDM

ACIP made available R23,5 million for 2014/15 FY with the following generic scope of work:

Scope of Work	Primary Objective
Ensure that all WSA's have a current WC/WDM Strategy/Master Plan	Regulatory compliance
Provide technical support to all WSA's, including support for WSA's to comply with No Drop reporting	Regulatory compliance through hands-on technical support and skills transfer
Ensure that water balances can be produced on a regular basis	Regulatory compliance (No Drop)
Ensure that bulk metering is in place to record System Input Volume	Improve system knowledge and demand
Improve monitoring and reporting across all WSA's	Regulatory compliance
Commence projects focusing on system stabilisation	Improving water distribution efficiency; reducing water demand

Programme Outcomes

1. 8 out of 9 WC/WDM Master Plans were completed, bringing the total number of current Master Plans in the Province up to 13 (out of possible 14)
2. Master Plans collectively present an accurate picture (for the first time) of what is happening in the Province
3. We now also know what is realistically possible to achieve with water demand management, and how much it will cost to intervene
4. Baseline for study was 2013/14 FY



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Programme Outcomes

1. Water balance projections over the next five years have been prepared for the following scenarios:
 - Do Nothing
 - Most Probable
 - Do Everything
2. Water balances have 95% confidence limits
3. DWS has selected a number of Performance Measures for reporting purposes, not all of which are in line with international best practice
4. However, these have been presented along with more appropriate Performance Measures

Programme Outcomes

1. Each WSA in the Province now has:
 - Operational schematic for each WSS
 - Meter hierarchy diagrams for each WSS
 - GPS'ed interactive web-based bulk meter asset register
 - Some bulk meters installed

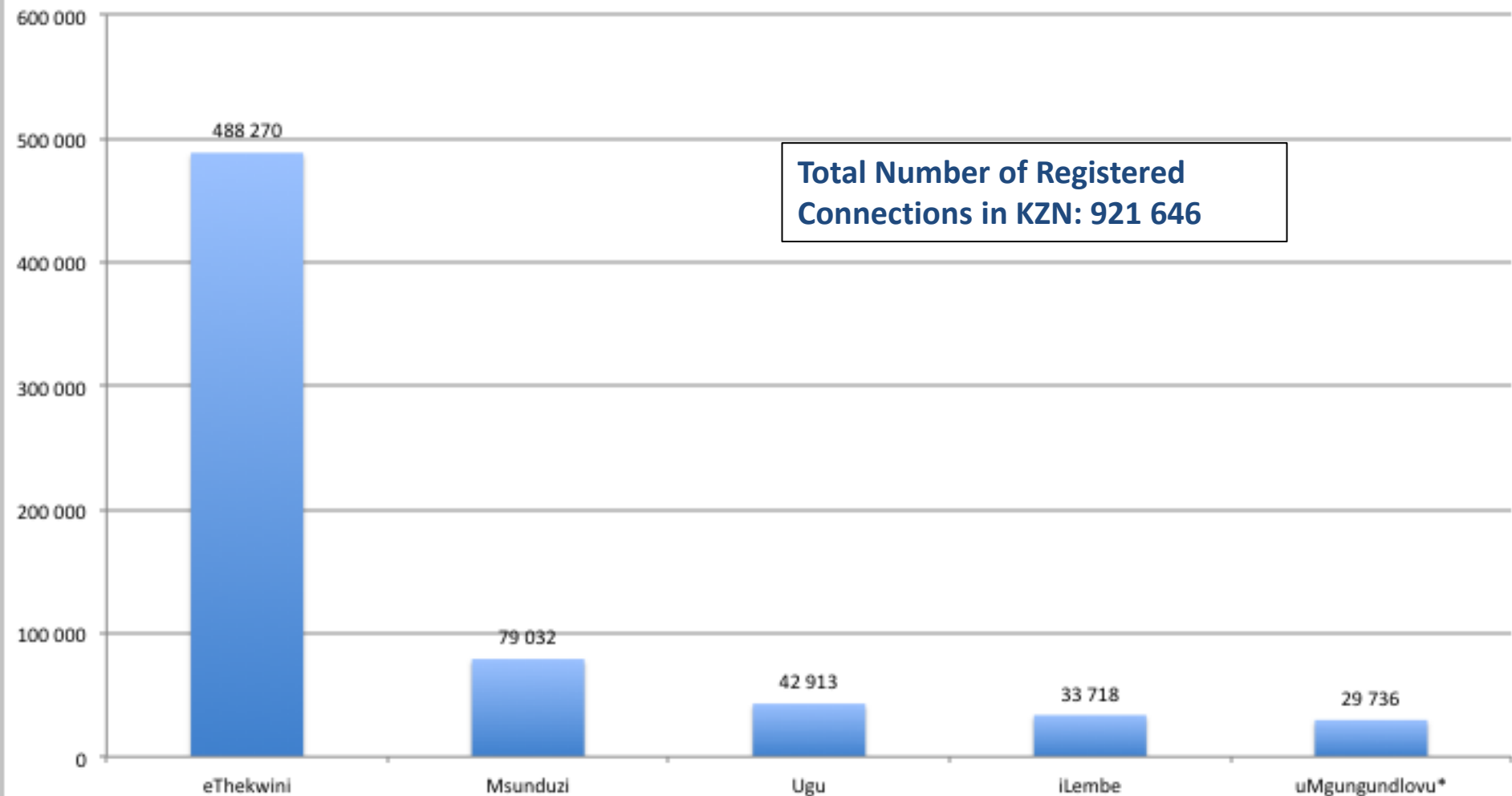


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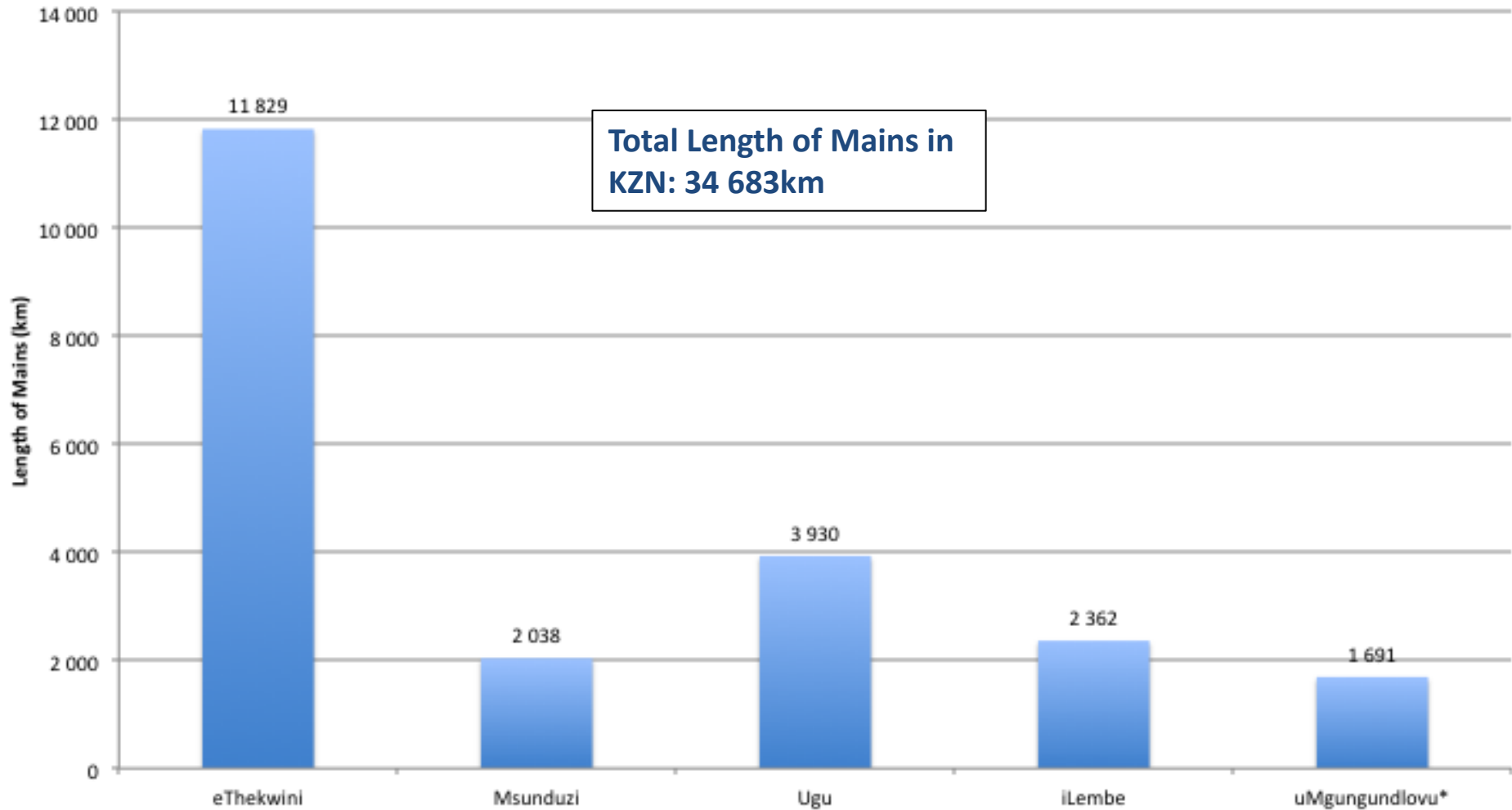
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Programme Outcomes: “Mgeni/Mvoti” Catchment

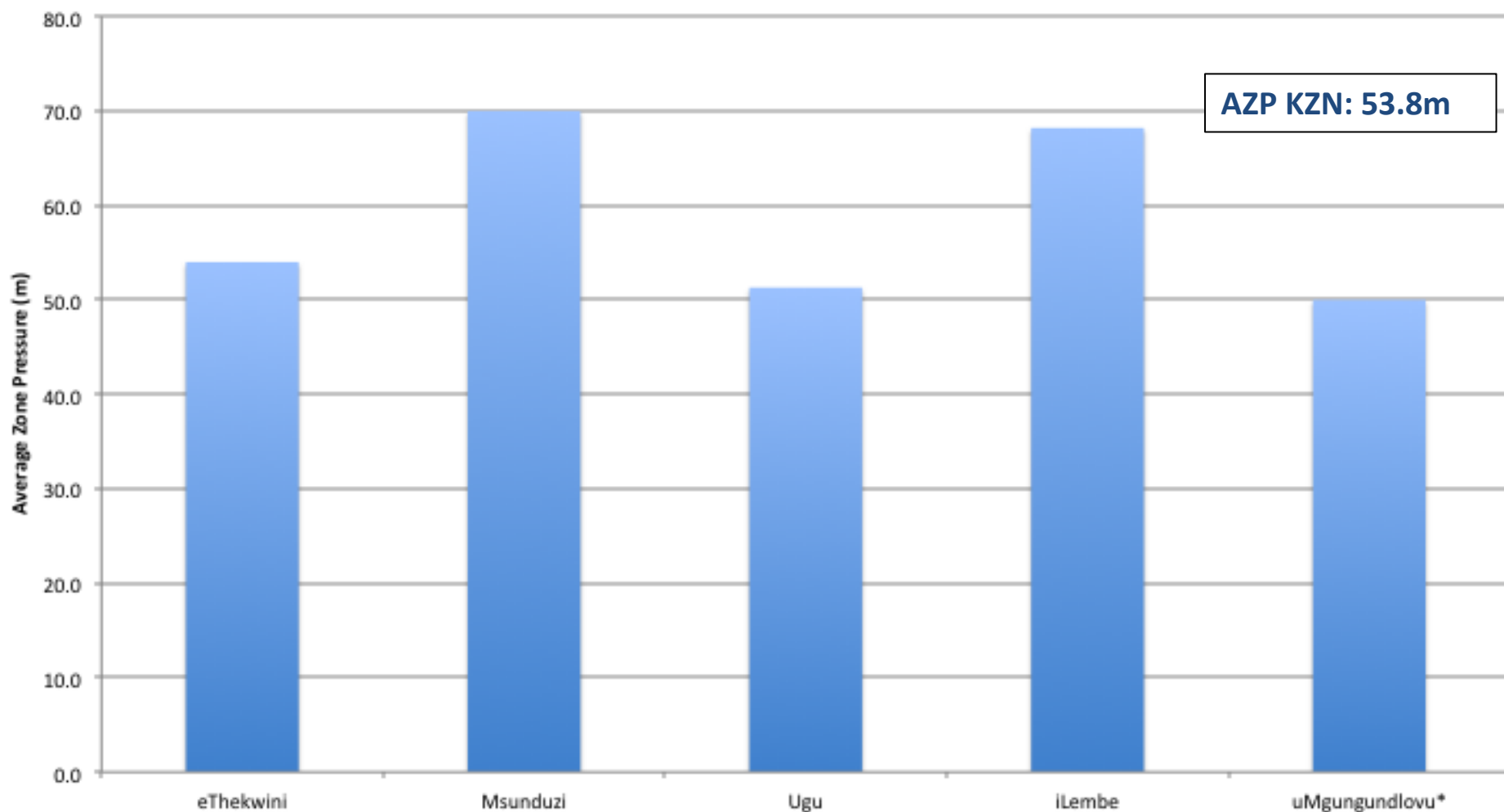
**KZN Non-Revenue Water Assessment
Number of Registered Service Connections (Baseline 2013/14 FY)**



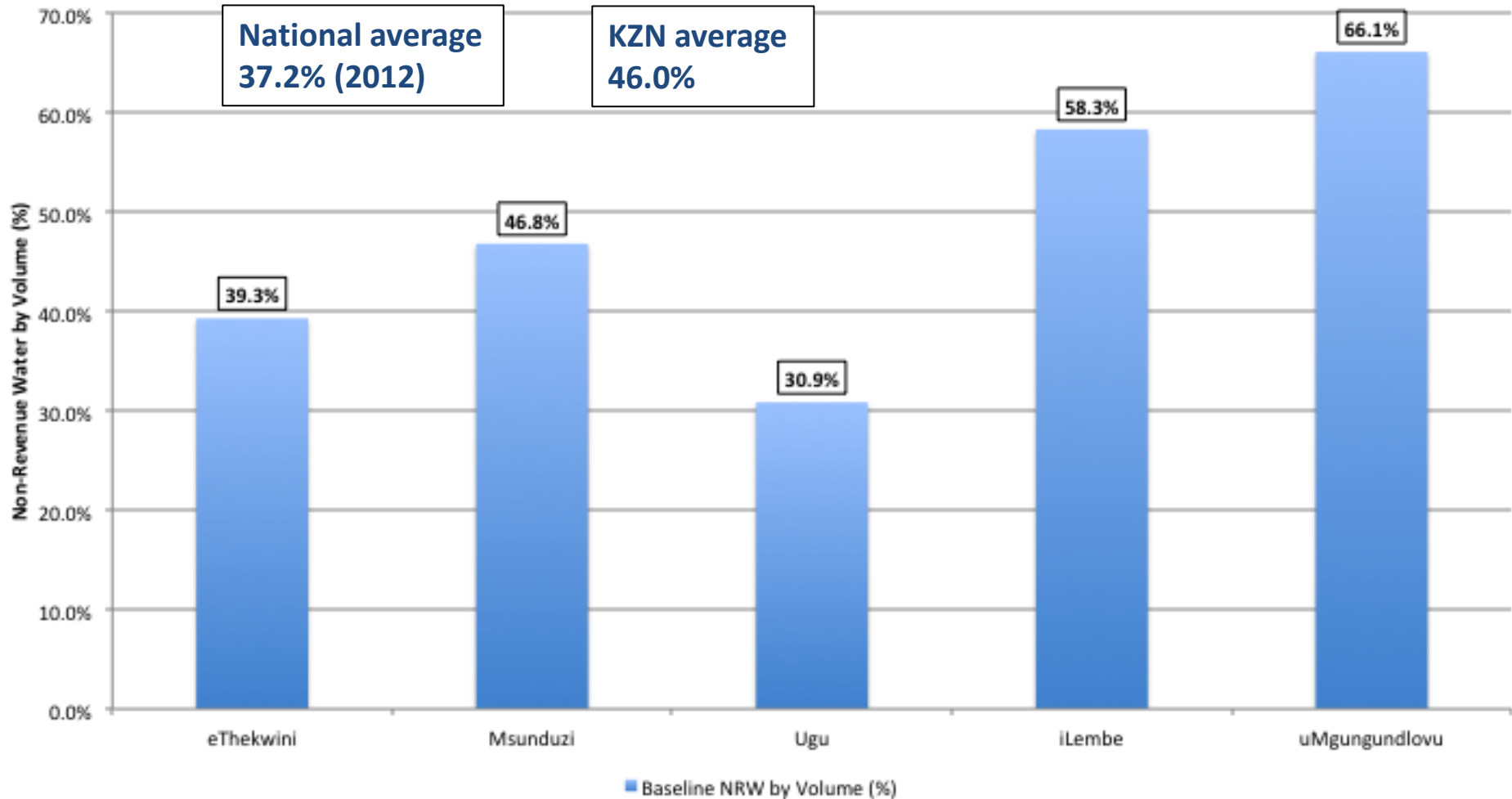
KZN Non-Revenue Water Assessment Total WSS Length of Mains (Baseline 2013/14 FY)



KZN Non-Revenue Water Assessment Average WSS Operating Pressure (Baseline 2013/14 FY)

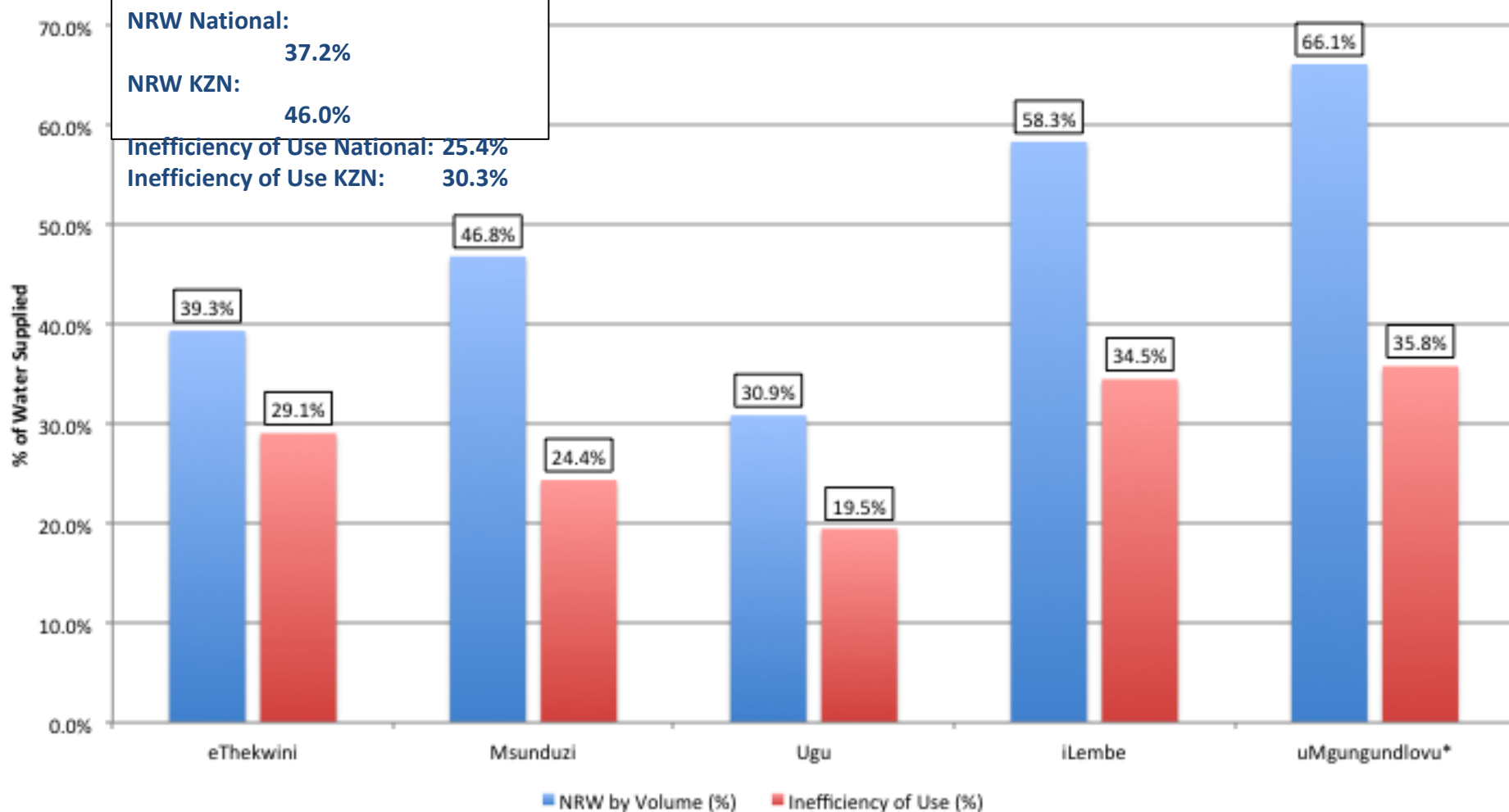


KZN Non-Revenue Water Assessment (Baseline 2013/14 FY)

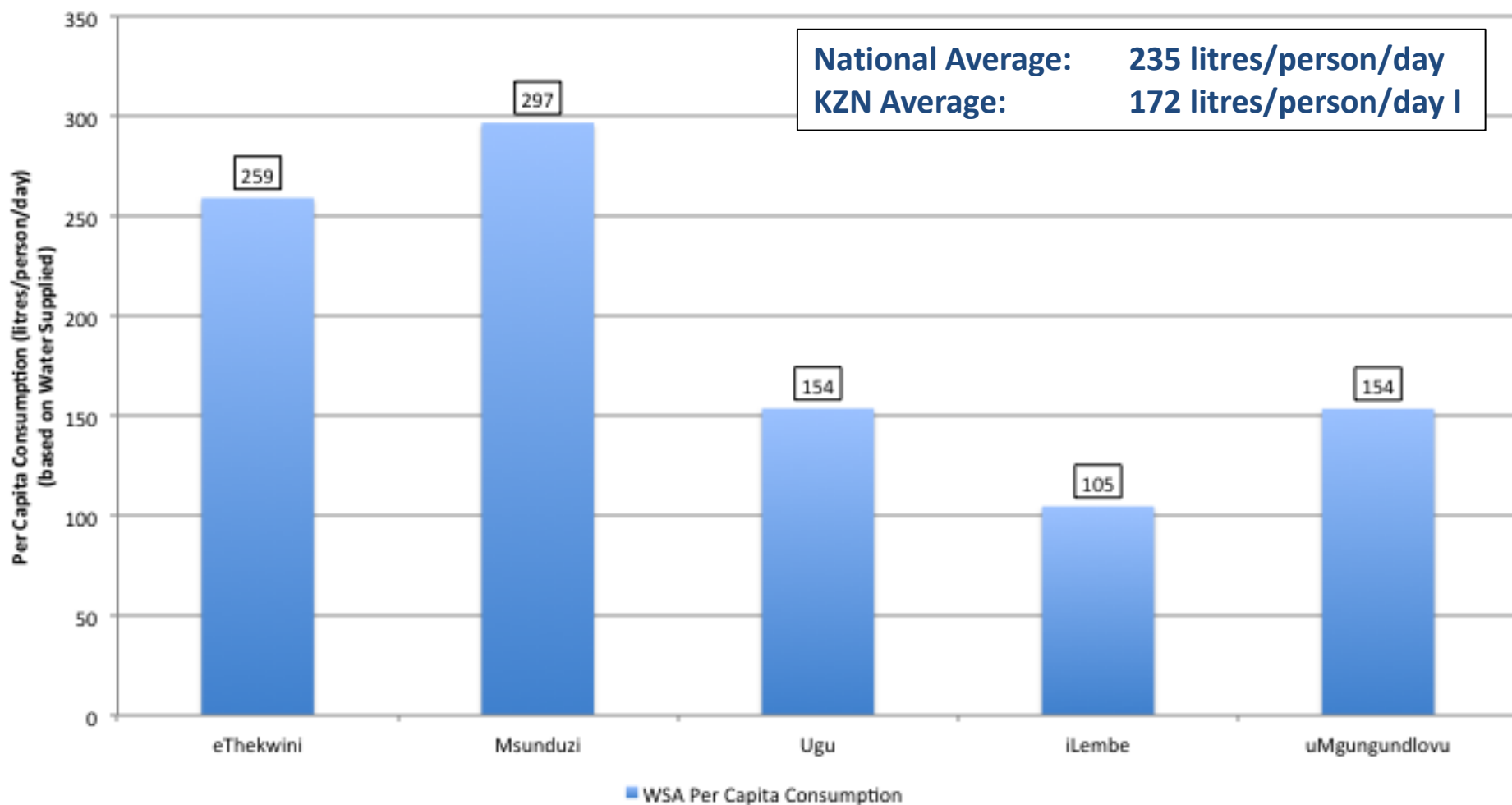


KZN Non-Revenue Water Assessment

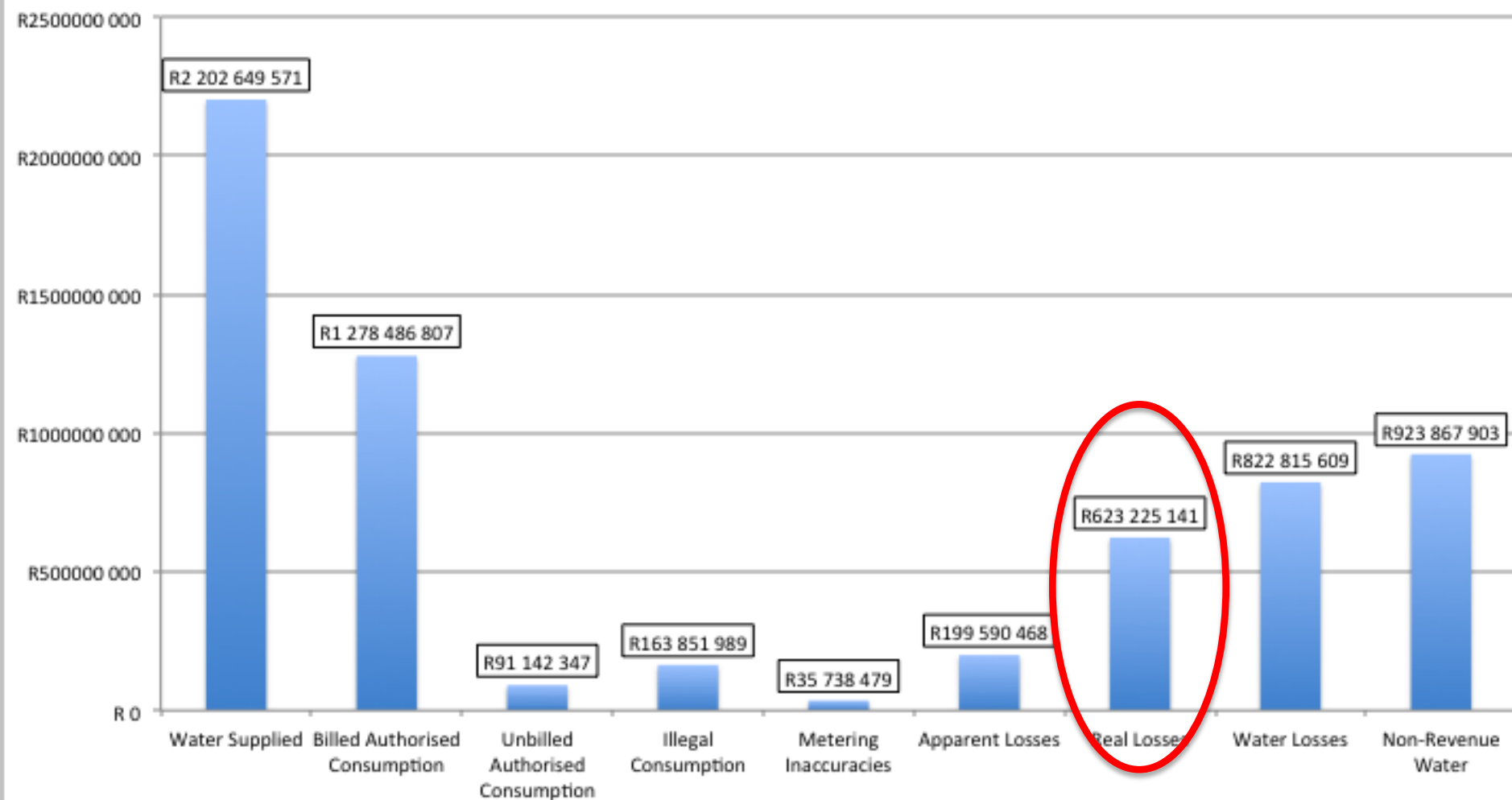
NRW and Inefficiency of Use Comparisons (Baseline 2013/14 FY)



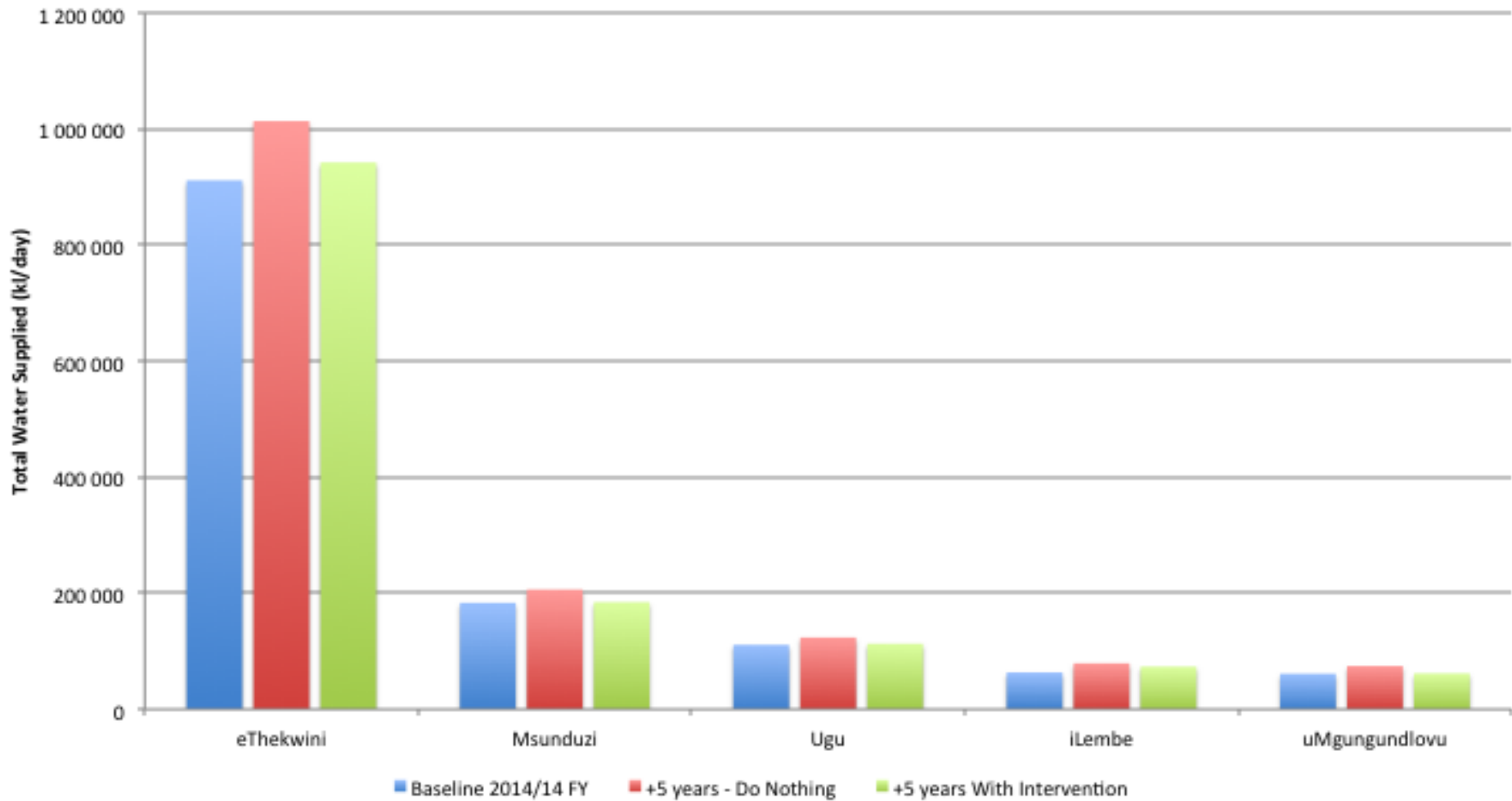
KZN Non-Revenue Water Assessment Per Capita Consumption Comparison (Baseline 2013/14 FY)



KZN Non-Revenue Water Assessment Annual Costs of Water Balance Components (Baseline 2013/14 FY)



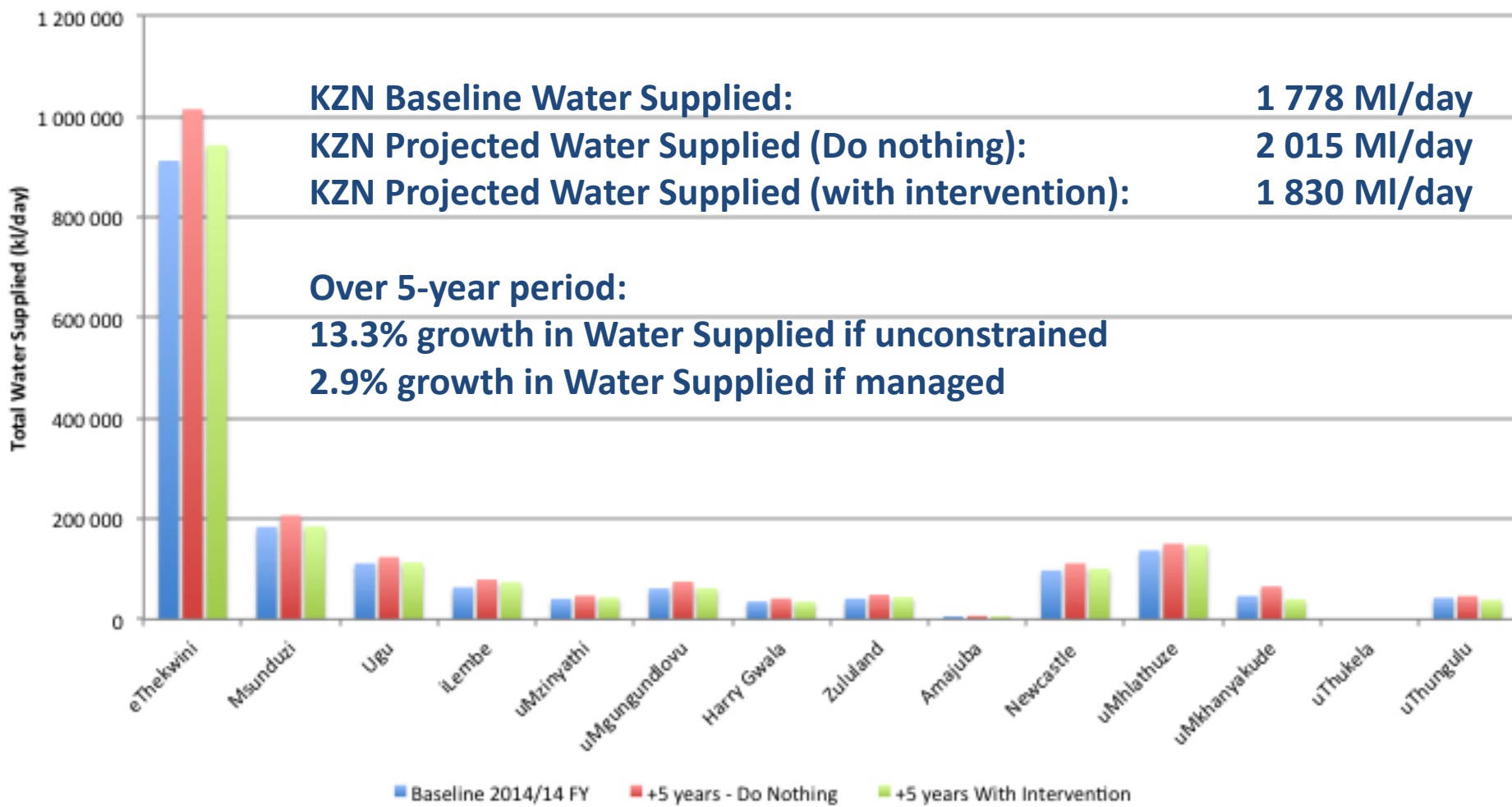
KZN Non-Revenue Water Assessment Water Supplied Projections



KZN Non-Revenue Water Assessment Water Supplied Projections

KZN Baseline Water Supplied: 1 778 MI/day
KZN Projected Water Supplied (Do nothing): 2 015 MI/day
KZN Projected Water Supplied (with intervention): 1 830 MI/day

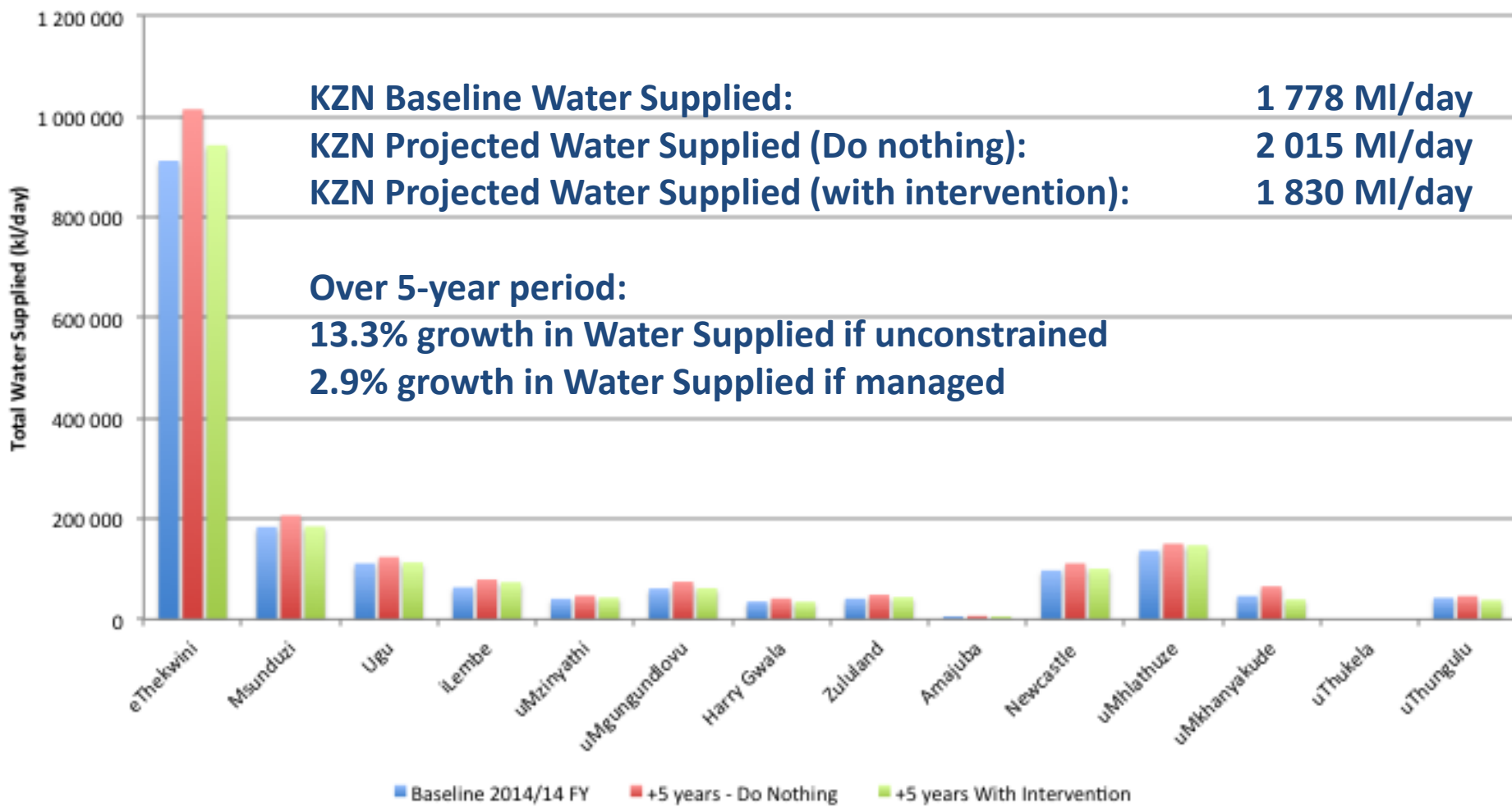
Over 5-year period:
13.3% growth in Water Supplied if unconstrained
2.9% growth in Water Supplied if managed



KZN Non-Revenue Water Assessment Water Supplied Projections

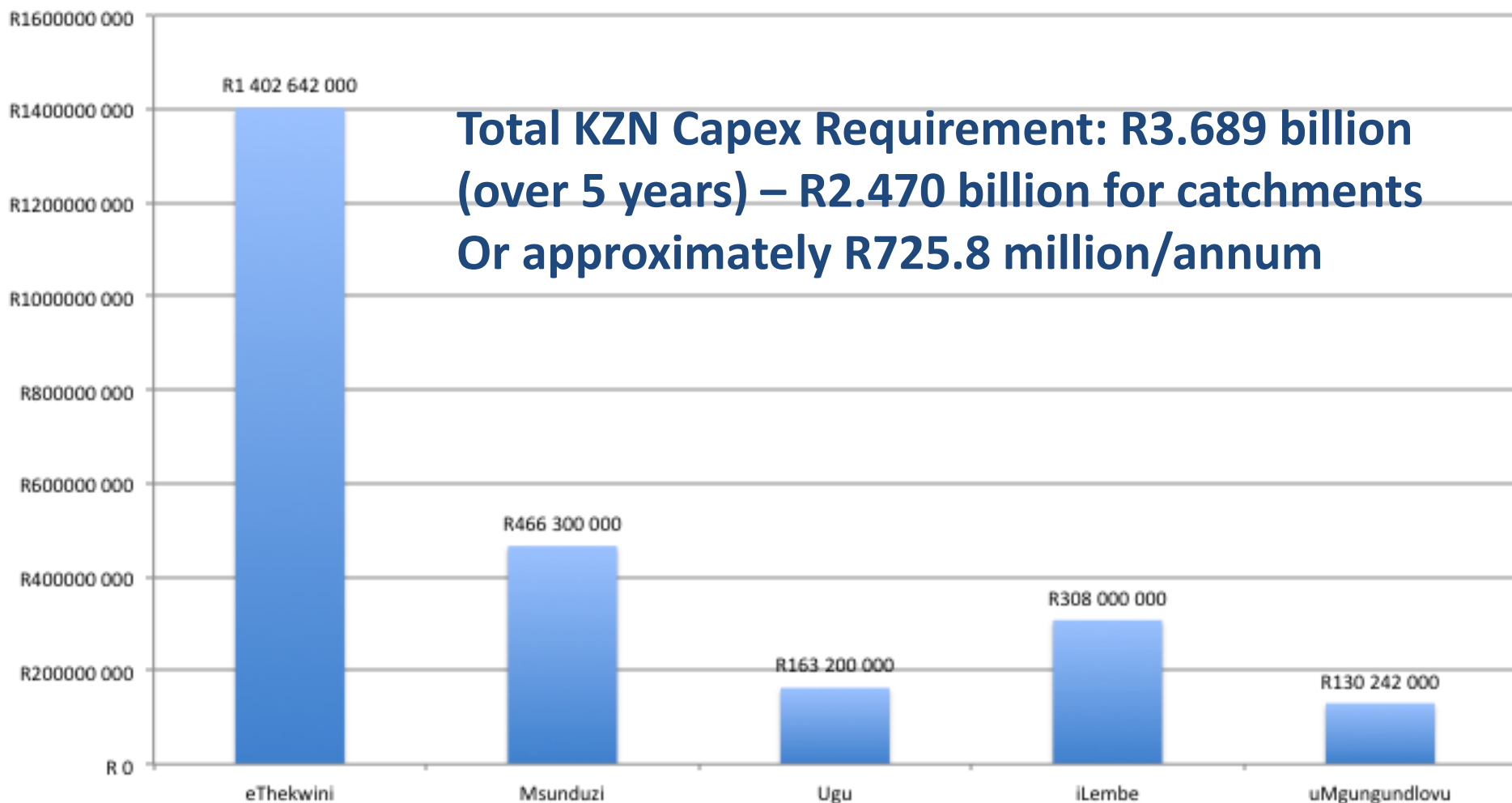
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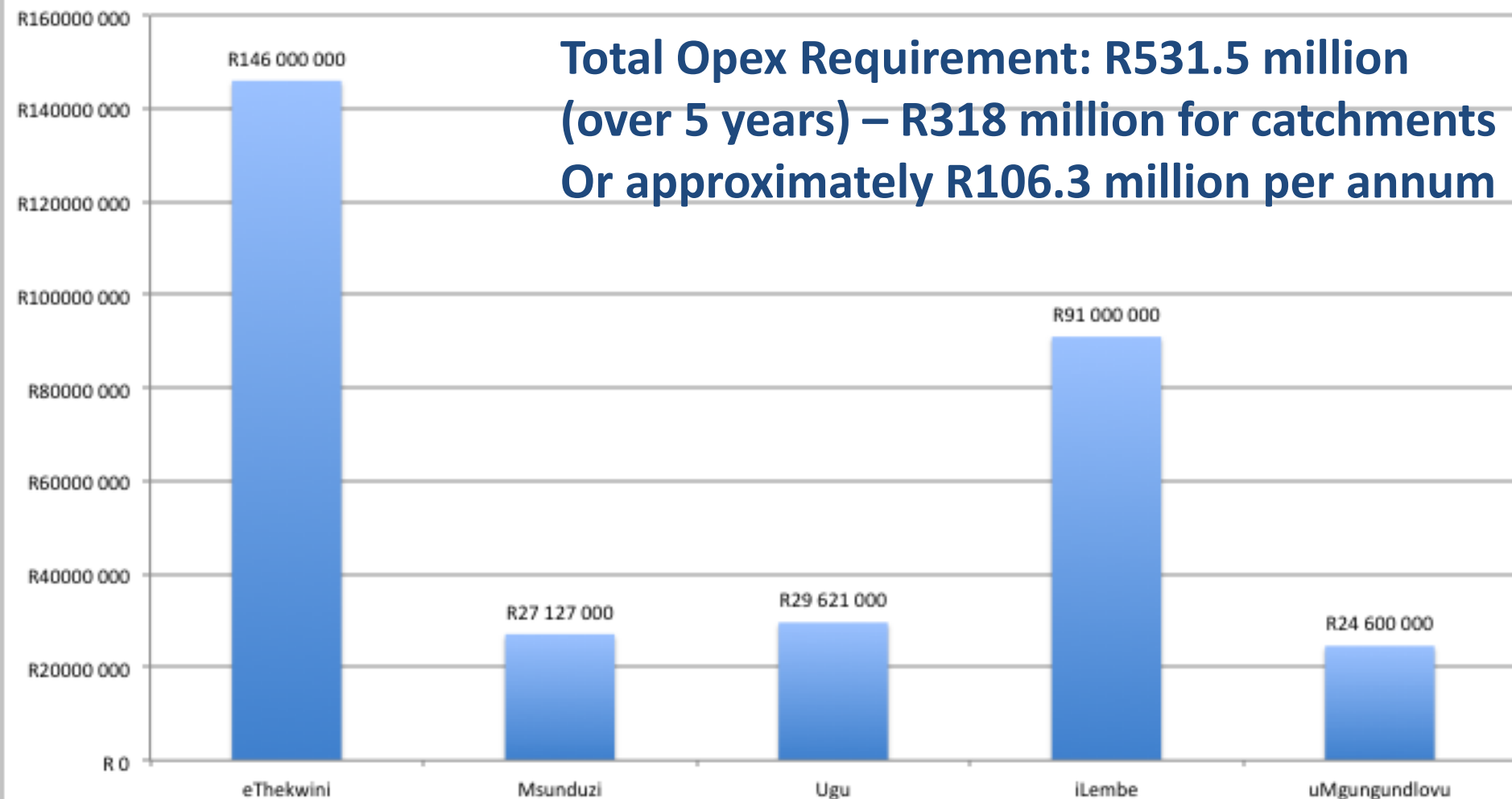
KZN Non-Revenue Water Assessment NRW Reduction Budget Requirements (5-year Capital)

**Total KZN Capex Requirement: R3.689 billion
(over 5 years) – R2.470 billion for catchments
Or approximately R725.8 million/annum**



KZN Non-Revenue Water Assessment NRW Reduction Budget Requirements (5-year Operational)

**Total Opex Requirement: R531.5 million
(over 5 years) – R318 million for catchments
Or approximately R106.3 million per annum**





WHAT ARE WE GOING TO DO TO FUND AND IMPLEMENT WC/WDM AS PART OF THE RECONCILIATION STUDY?

Thank You