



Using a Water Services Vulnerability Assessment to Prioritise What Needs to be Done

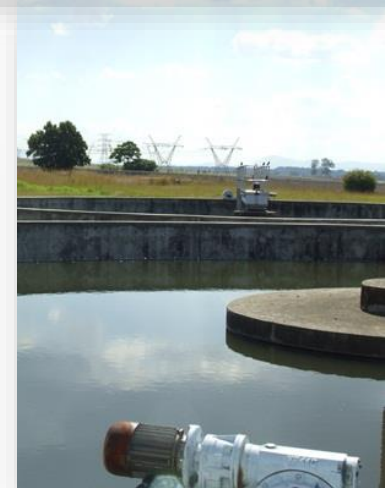
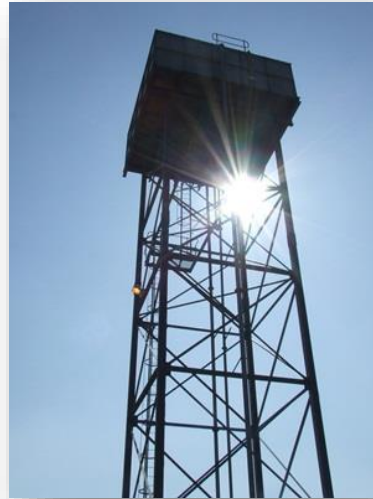
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17th October 2013





What Does Success Look Like?



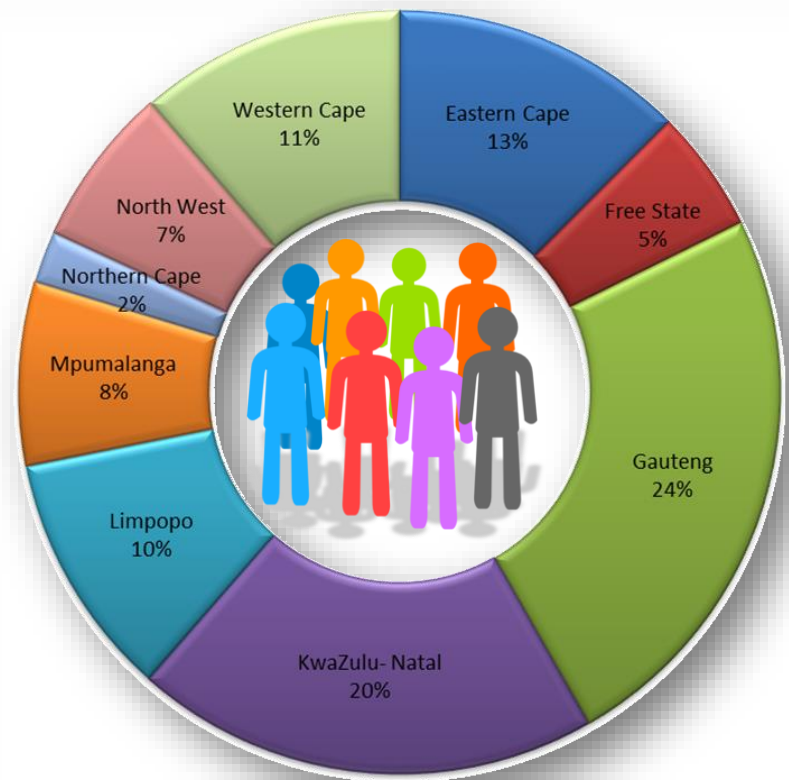


South Africa Snapshot

- Key South African Service Delivery targets:
 - All have access to basic water supply by 2014 (currently 85%)
 - All have access to basic sanitation facility by 2014 (currently 63%)
 - Services to be sustainable

→ **Water Services Provision is a Local Government function**

52 982 000



Source: Stats SA Mid-year population estimates 2013



Challenges to Effective, Sustainable Municipal Water Services

- Changing **workforce** with rising **lack of technical skills**
- Aging water **infrastructure**; increasing investment needs
- Availability/adequacy of **water resources**; **climate change**
- Shifting patterns in **water demand**; rising **energy** costs
- Increasing/expanding water **regulations**
- Challenge to meet **Basic Water Supply/Sanitation Targets**
- **Competing political priorities** within municipalities
- Uncertain **economy**, with water services provision often a **“bankrupt business”**
- Poor water services **planning & prioritization**





Solving the Challenge



Navigating to effective, efficient, sustainable Water Services can be a challenging maze



Addressing the Challenge

Which actions do we prioritize?

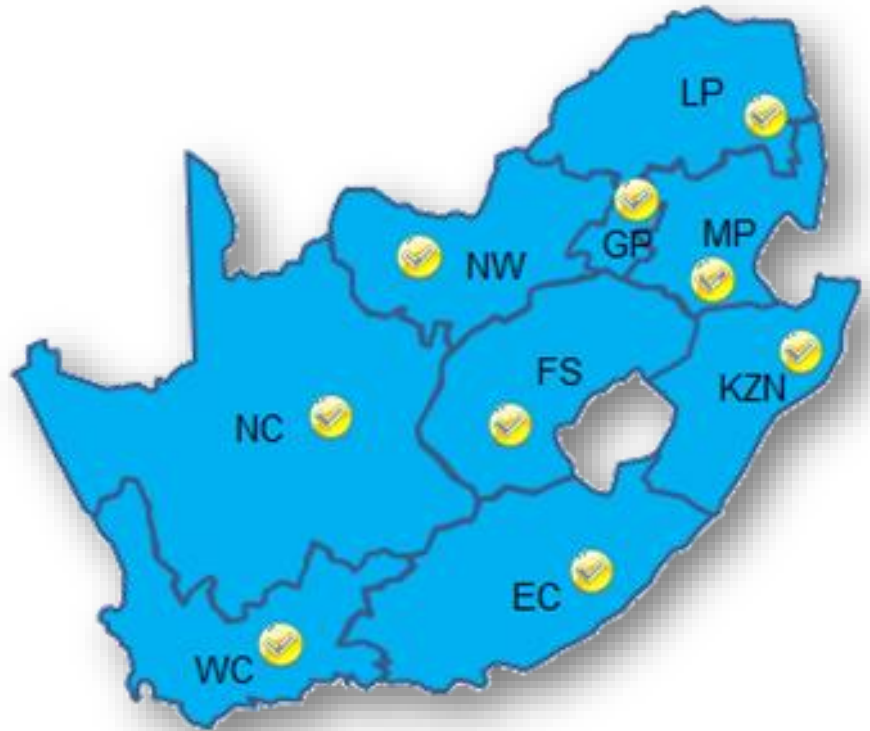
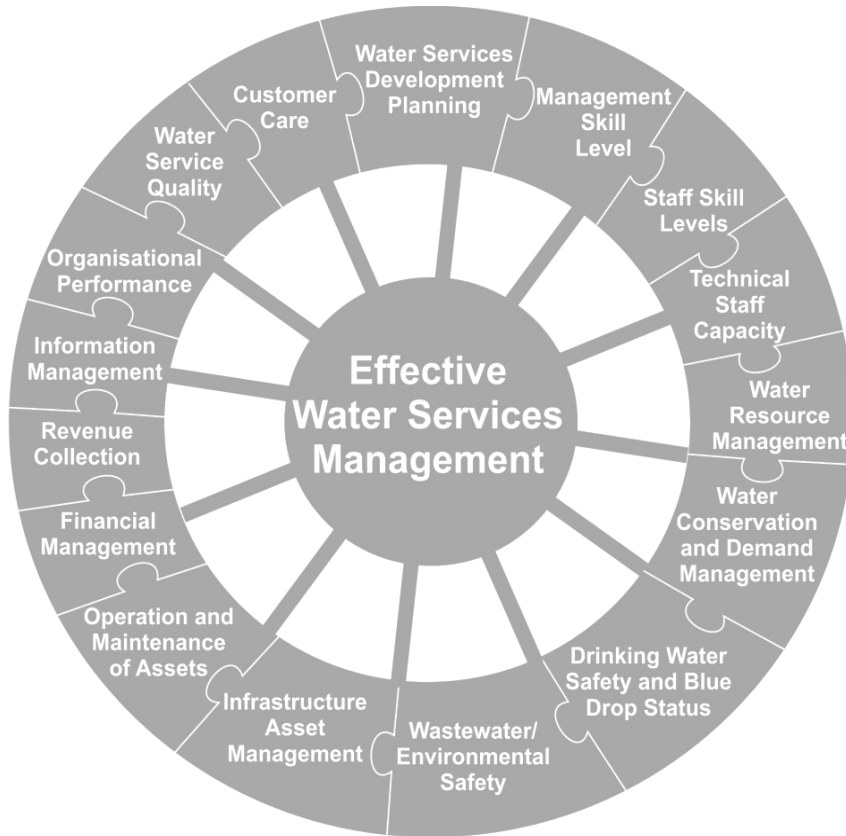
What direction do we take?





Solution: Determine & Address Vulnerability

MuSSA: Municipal Strategic Self-Assessment



All 152 WSAs are surveyed annually



Water Services Vulnerability via MuSSA Process

- MuSSA focuses on assessing **overall Business Health** of WSA to fulfill water services function
- Determines **Vulnerability** of **16 Key Functional** Water Services **Business Attributes** at a strategic / high level
- Provides **strategic flags** (vs. deep technical detail captured via other programs) as to Business Health
- **5 Essence Questions** per Functional Business Attribute
- **Vulnerability score** for each Business Attribute
- Combined output: **Municipal Vulnerability Index**
- Based on Self-Assessment, which is **reviewed** and **confirmed** in close consultation with DWA: Regional office



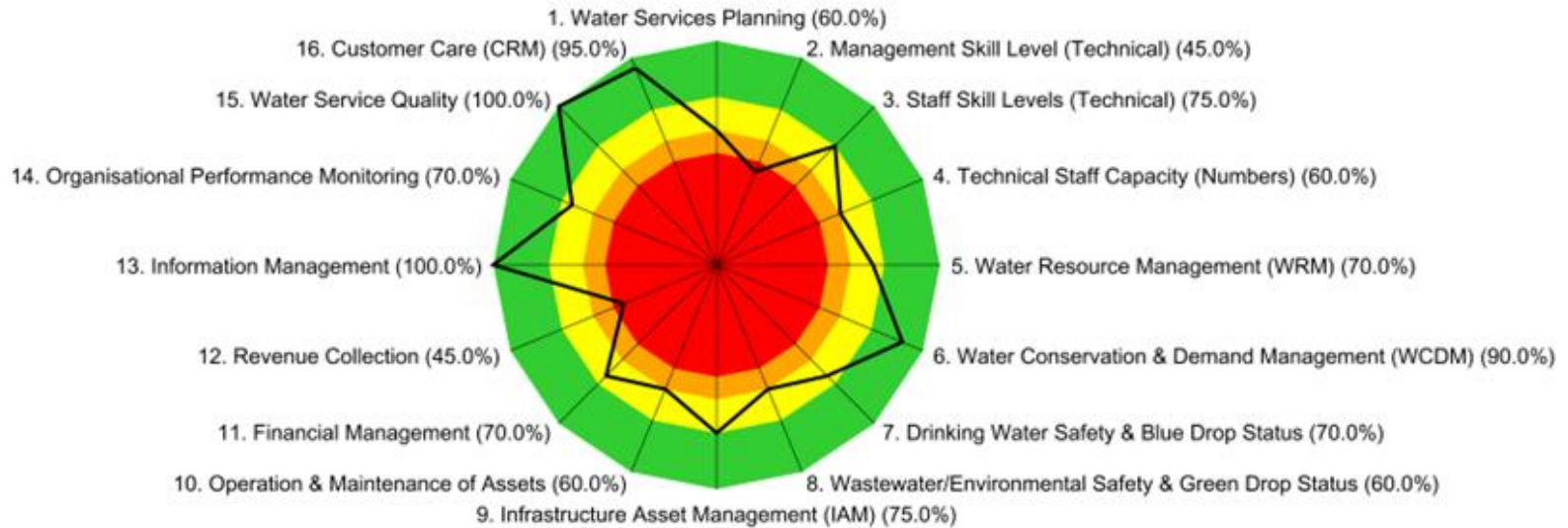


MuSSA Output: 2012/2013

Assessed MuSSA Confidence Level: Green

Municipal Strategic Self-Assessment of Water Services (MuSSA) (2012)

■ 0 - 50% (Very High Vulnerability) ■ 50 - 60% (High Vulnerability) ■ 60 - 75% (Moderate Vulnerability) ■ 75 - 100% (Low Vulnerability)



Very High Vulnerability

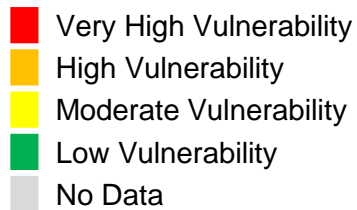


High Vulnerability

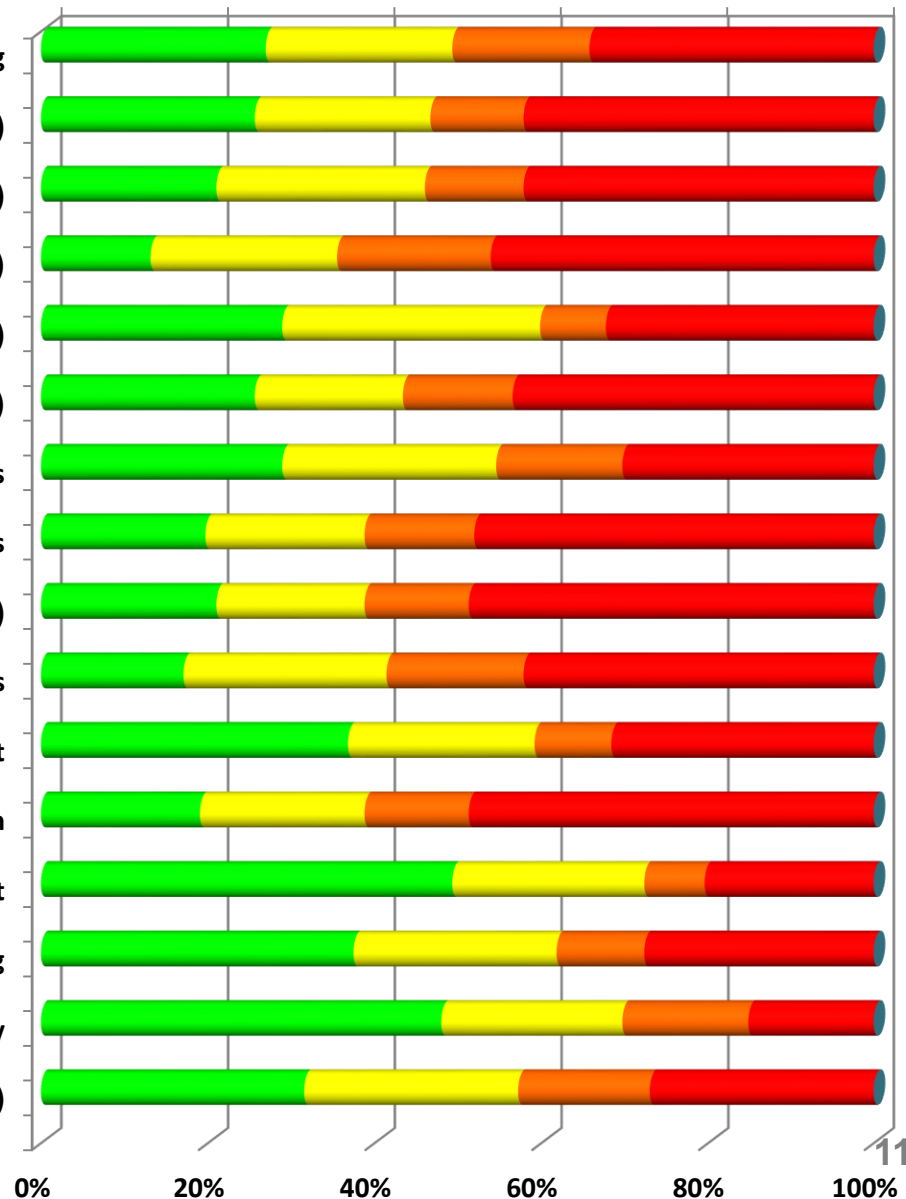


National Hot Spots

- Water Services Planning
 - Management Skill Level (Technical)
 - Staff Skill Levels (Technical)
 - Technical Staff Capacity (Numbers)
- Water Resource Management (WRM)
- Water Conservation & Demand Management (WCDM)
- Drinking Water Safety & Blue Drop Status
- Wastewater/Environmental Safety & Green Drop Status
- Infrastructure Asset Management (IAM)
- Operation & Maintenance of Assets
- Financial Management
 - Revenue Collection
- Information Management
- Organisational Performance Monitoring
- Water Service Quality
- Customer Care (CRM)



Hot Spots impairing Sustainable Water Services

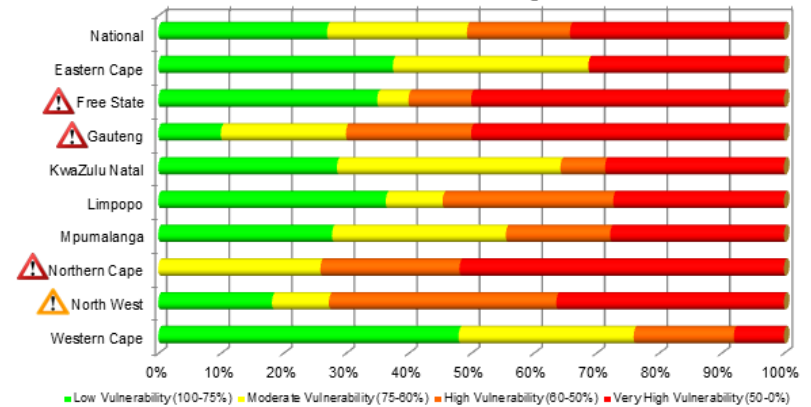




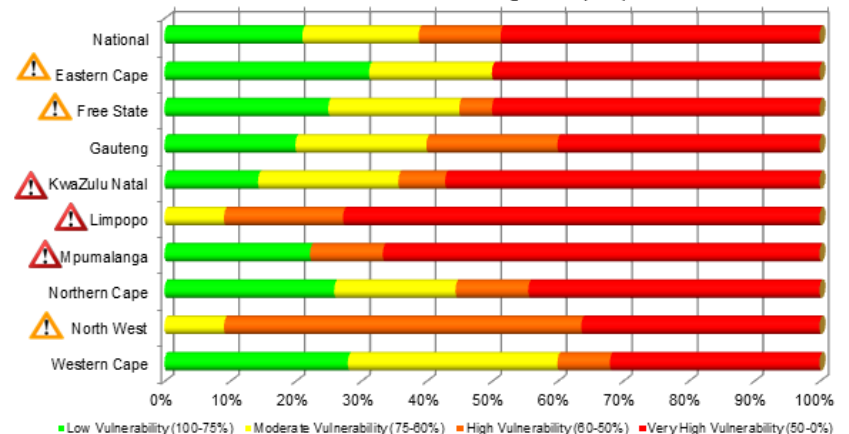
Topic Focus



1. Water Services Planning



9. Infrastructure Asset Management (IAM)

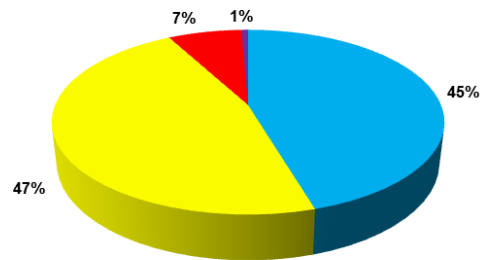




Specific Vulnerabilities:

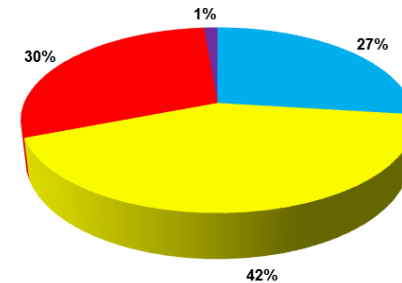
9. Infrastructure Asset Management

9.1 You have an appropriate and up-to-date water services Asset Register (includes asset name, location, condition, useful life, risk analysis, etc.) - National



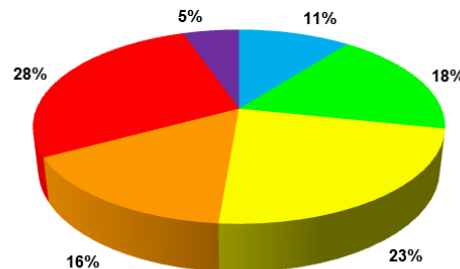
■ Yes, strongly agree ■ In place, but not ideal ■ No, disagree ■ Don't know

9.2 You have an appropriate Infrastructure Asset Management (IAM) Plan for your WSA (including replacement values) - National



■ Yes, strongly agree ■ In place, but not ideal ■ No, disagree ■ Don't know

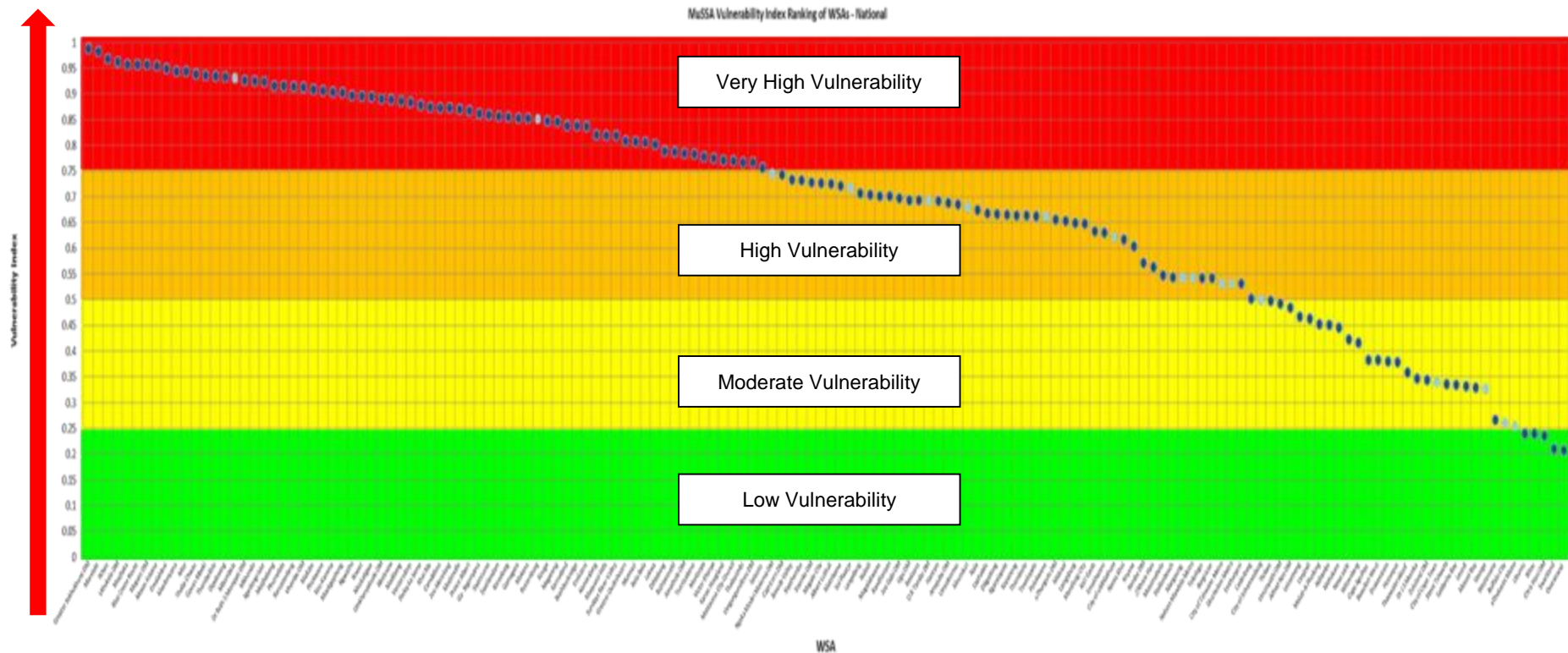
9.3 You have implemented an IAM Programme in your WSA (including allocation of appropriate budget and staff) - National



■ Yes, strongly agree (i.e. 100% implemented) ■ Mostly agree (i.e. >75% implemented)
 ■ Agree somewhat (i.e. >50% implemented) ■ < 50% implemented
 ■ Not implemented (i.e. 0%) ■ Don't know

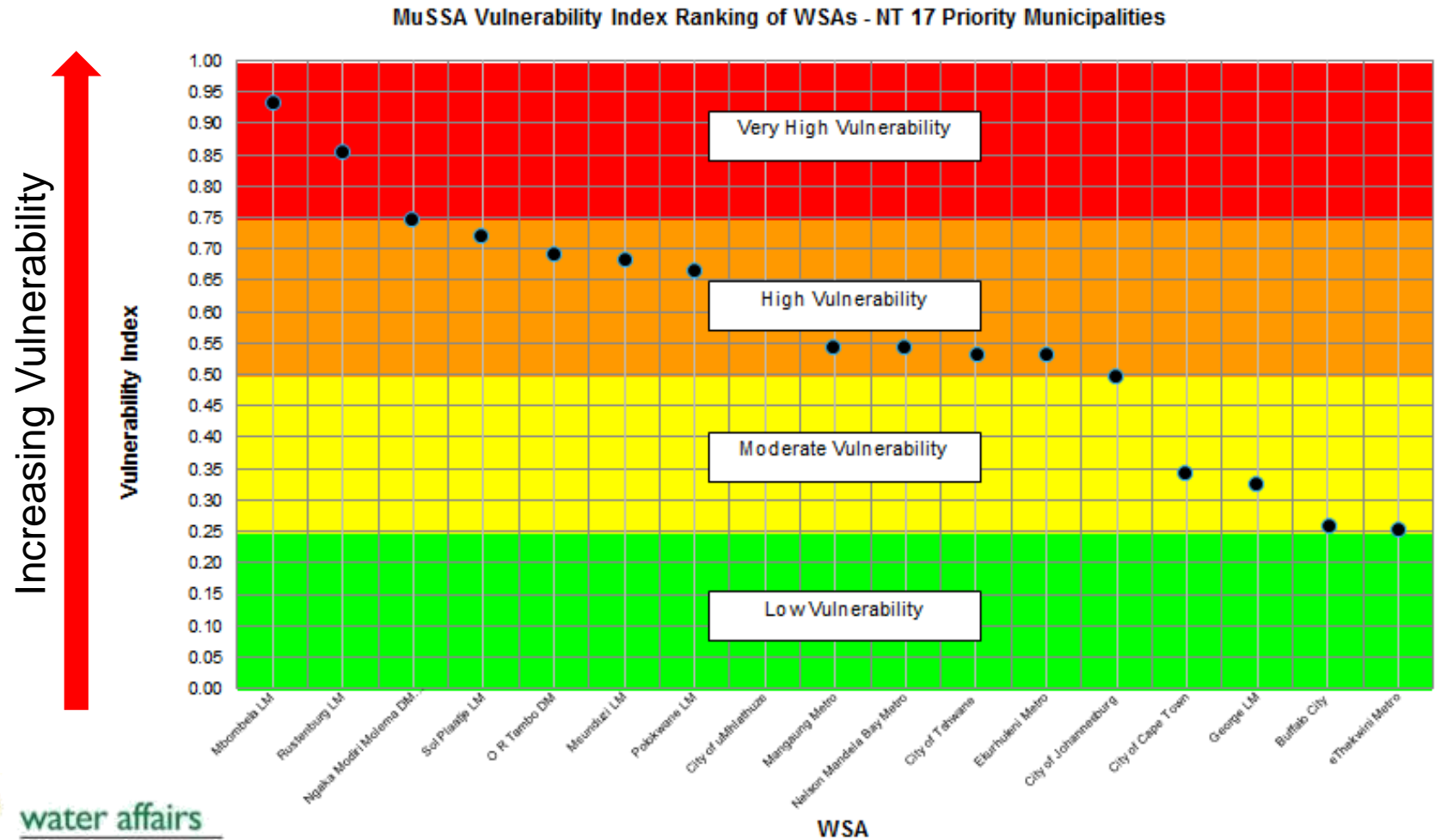


Vulnerability Index Ranking: South Africa





Vulnerability Index: Top 17 Municipalities





MuSSA: In Summary

- Identifies **critical business vulnerabilities** that need to be addressed at **municipal, regional, national levels**
- Provides a **common language** between:
 - Technical and financial municipal officials
 - Appointed and politically elected municipal officials
- **Tracks Vulnerability Trends** at local/regional/national levels
- Supports **inter-departmental collaboration** in addressing key threats to sustainable services delivery
- Compliments **regulatory and planning** processes
- Feeds into and **supports Performance Improvement** processes, including National Municipal Benchmarking
- Cost effective **Sector Monitoring & Evaluation** tool

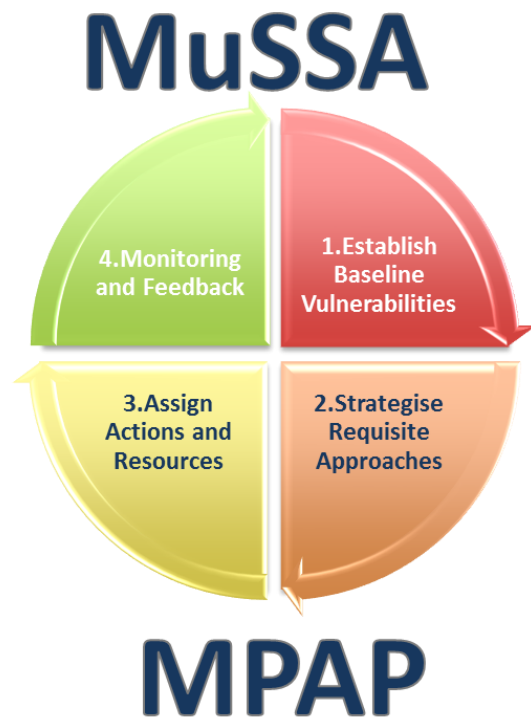




Practical Steps to Improve Water Services Business Health



Municipal Priority Action Plan (MPAP) Supporting Continual Improvement Cycle



MuSSA output is used to engage with municipalities to:

1. **Confirm Baseline Vulnerabilities** via MuSSA
2. Jointly Resolve Key Issues through an MPAP between Municipality, DWA & other key role players
3. **Assign Actions and Resources** (WHO, WHAT, WHEN, COST)
4. **Monitor, Evaluate, Communicate** progress, including updating of MuSSA



Municipal Priority Action Planning Process



MuSSA

MuSSA Confirmation Workshop

MPAP Drafting Workshop

Municipal Management Signoff

Council Signoff

Final MPAP inclusion into Master Plan

WSA MPAP Implementation

MuSSA Update



**Water Affairs ,
SALGA & Sector
Supports
Prioritised Actions**





Key Conclusions: Moving Towards Success

- Water Services faces **multi-level challenges**
- MuSSA provides a quick, simple means to **identify key Vulnerabilities** threatening Sustainable Services
- The MPAP provides a **simple “start-to-finish” iterative improvement approach** to address key Vulnerabilities
- MuSSA and MPAP are effective in bringing about **key stakeholder alignment and engagement**
- MuSSA and MPAP **support prescribed sector Planning, Regulatory and Support programs**





Thank You!