# Continuation of the All Town Reconciliation Strategies in the Limpopo Province

Strategies Steering Committee Workshop No. 1

26 April 2013

Presented by Tendani Nditwani

**DWA: National Water Resource Planning** 



### Agenda

1	WELCOME AND INTRODUCTION OF MEMBERS	T. Nditwani
2	ATTENDANCE AND APOLOGIES	T. Nditwani
3	ACCEPTANCE OF AGENDA	T. Nditwani
4	PURPOSE OF WORKSHOP	T. Nditwani
5	ROLE OF THE STRATGIES STEERING COMMITTEE	T. Nditwani
6	INTRODUCTION OF THE STUDY	T. Nditwani
7	OVERVIEW OF STUDY ACTIVITIES	M. Esterhuizen
8	BREAK-AWAY SESSIONS (PRIORITY STRATEGIES)	P van Rooyen M. Esterhuizen
9	WAY FORWARD/STUDY PROGRAMME	M. Esterhuizen
10	GENERAL	T. Nditwani
11	DATE OF NEXT MEETING AND CLOSURE	T. Nditwani
12	LUNCH	ALL

#### **Item 4: Purpose of the Workshop**

- To introduce the study to all Stakeholders (SH)
- To establish and define the role of the Strategies Steering Committee (SSC)
- Facilitate cooperation and interaction with the SH's
- To outline findings during the Inception Phase
- To outline the scope of work, methodology, way forward and preliminary study programme
- To obtain comments and input from SH's
- To prioritise the strategies to be updated

### Item 5: Role of Strategies Steering Committee (SSC)

### Role of Strategies Steering Committee (SSC)

- To provide executive guidance to the direction and outcomes of the study
- To provide supplementary information and input from a local and regional perspective
- To facilitate strategic linkages with other initiatives / forums
- To disseminate information from study into the relevant organizations
- Incorporate strategies' recommendations into development plans such as WSDP's, IDP's etc.
- To facilitate the acceptance and sign-off of the updated Reconciliation Strategies

#### Stakeholder Engagement

- Communication Protocol
  - General Enquiries
    - Contact the Study Administrator / Liaison Officer:
      - Northern Planning Region: Ms Leoni le Roux (<u>leonilr@uwp.co.za</u>)
  - Study Management
    - Contact the DWA Study Leader:
      - Northern Planning Region: Mr Tendani Nditwani (NditwaniT@dwa.gov.za)

#### Stakeholder Engagement cont.

- Communication Protocol
  - Technical Enquiries
    - Contact the PSP
      - Northern Planning Region Deputy Study Leader: Ms Monja Esterhuizen (monjae@uwp.co.za)

#### Item 6: Introduction of the Study

#### Background

- 2004: National Water Resource Strategy (NWRS), First Edition
  - Chapter 2 and Appendix D summarised the water resource situation
  - Addressed the scarcity of water in South Africa
  - Fresh water is limited and unevenly distributed
  - Situation varied from area to area

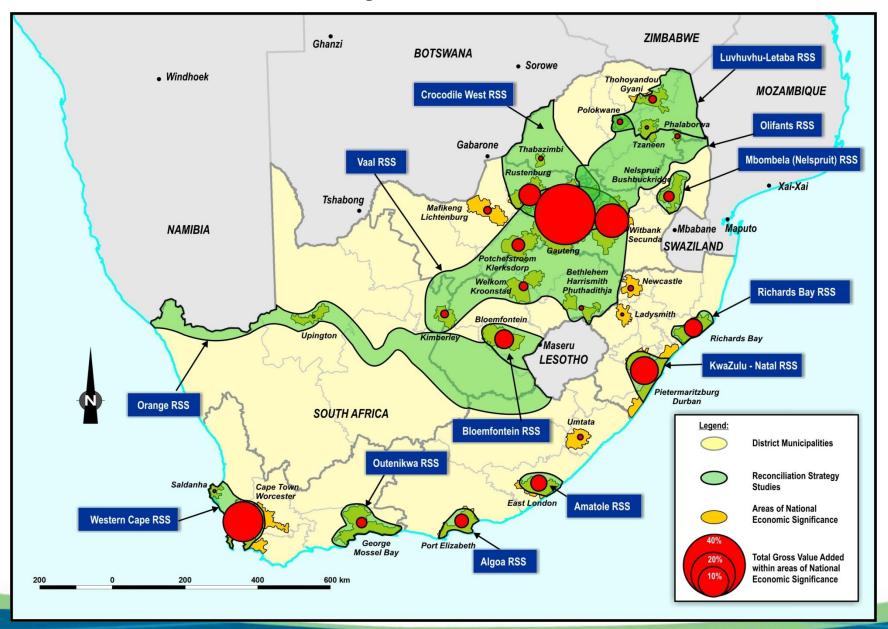
#### Background cont.

- NWRS information on a broad overview level
- Can for instance not be used to build infrastructure
- More detail required
- Internal Strategic Perspectives (ISP's) Catchment
   Management Area level, but still not detailed enough
- Reconciliation Strategies for:
  - Large systems supplying areas of large economic importance
  - Rest of towns covered in "All Town Strategies"

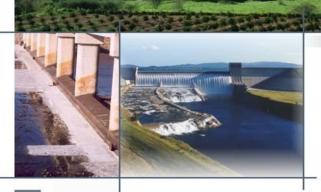
#### Background cont.

- What is reconciliation:
  - Develop future water requirement scenarios in consultation with users
  - Investigate all possible water resources and other interventions
  - Investigate all possible methods for reconciling the water requirements with the available resources
  - Make recommendations for development and implementation of interventions

#### **NSDP:** Key demand centres





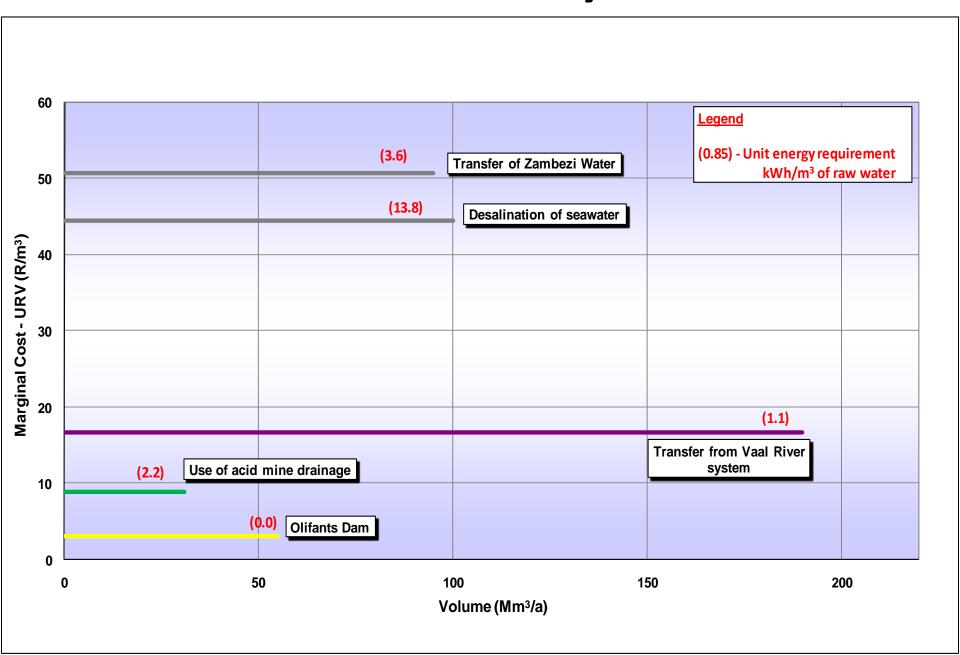


REPORT NO: P RSA 000/00/12610

### Assessment of the Ultimate Potential and Future Marginal Cost of Water Resources in South Africa

SEPTEMBER 2010

#### **Olifants River system**

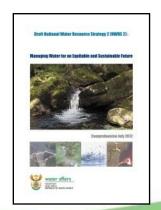


#### Background cont.

- Reconciliation Strategies Key Messages:
  - Confirmed broad reconciliation strategies already in the NWRS1
  - Added desalination as a strategy

#### Background cont.

- 2012 National Water Resource Strategy (NWRS 2, draft)
  - NWRS 2 is building on NWRS 1, not replacing it
  - Putting water at the centre of integrated development planning and decision making
  - Ensuring water for equitable growth and development
  - Protecting water ecosystems
  - Implementing water use efficiency and WC/WDM
  - Optimising water resources
  - Achieving effective water governance and Developmental Water Management



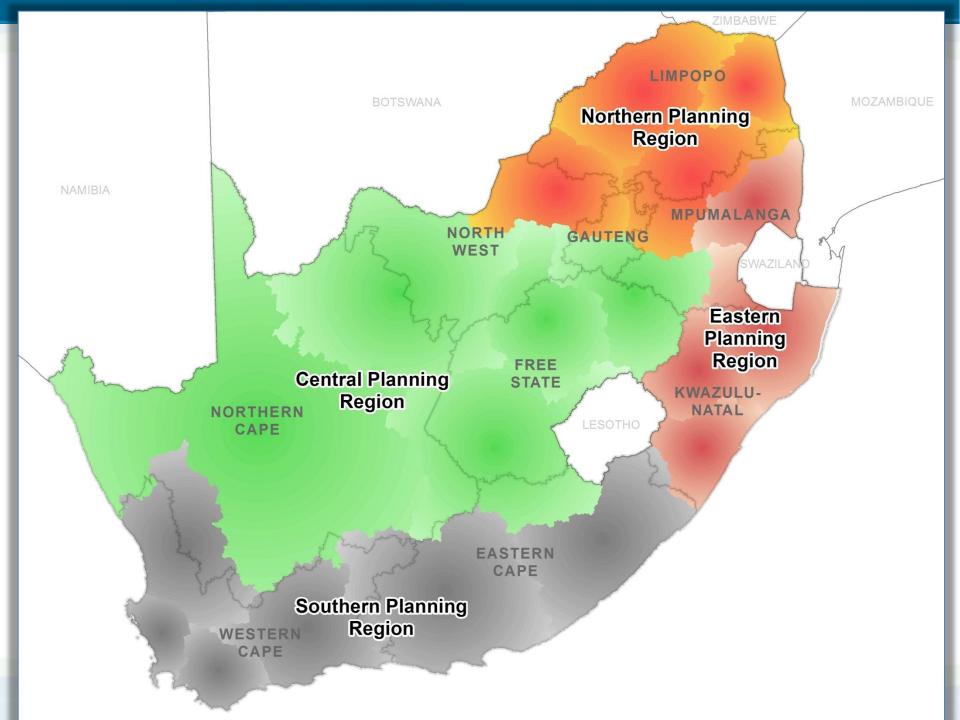
#### **Background to This Assignment**

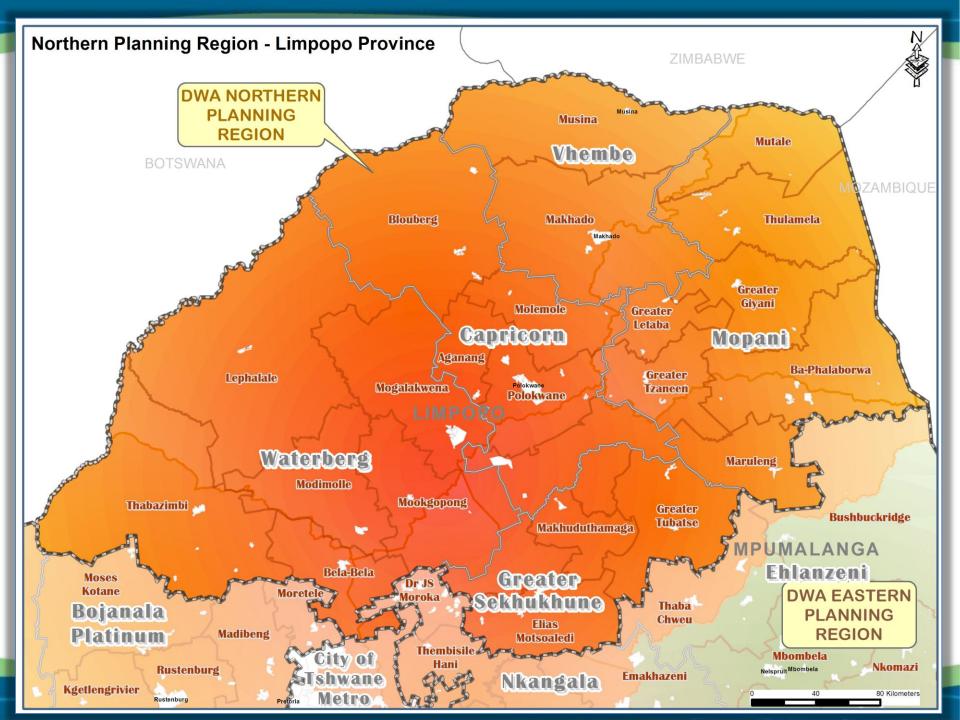
- 2008: Development of Reconciliation Strategies for All Towns
- Key general messages from All Town Studies (2008-2011)
  - Improved management will solve largest portion of immediate problems
  - 55 Towns identified in Limpopo Province where water requirements exceed water resources availability
  - Minimal metering, outdated Water Use Licenses
  - High per capita use in many towns pointing to WC/WDM potential (see also WRC Report: TT522/12)
  - Groundwater remains a feasible source of water for many towns

#### Background to this Assignment cont.

- Key general messages from All Town Studies (2008-2011) cont.
  - Infrastructure constraints rather than water resource availability limitations
  - Rudimentary strategies for all towns improvement required

- 2012: Continuation of the DWA Planning Regions' All Town Reconciliation Strategies: Phase 1
  - Update and review priority strategies three year appointment (till 2015)





#### **Purpose of Study**

- This assignment is the first review and updating of priority strategies
  - Budget constraints dictated that not all strategies can be reviewed and updated during this assignment
- It will be an on-going process even after these studies end
- Assist DWA and Water Services Authorities (WSAs) to:
  - Update and revise priority strategies
    - To remain technically relevant and sustainable
  - Reconcile water requirements and water resources (up to 2035)

#### Purpose of Study cont.

- Assist DWA and WSAs (cont.) to:
  - Evaluation of interventions where shortfalls occur
    - Management and/or infrastructure
  - Align strategies with known development planning processes
  - Provide recommendations for the sustainable management of water resources
- Promote the use of strategies' information in the local, district and national planning environments

### All Town Reconciliation Strategies What is it?

- Plans of action or policy designed to ensure sufficient water is made available to towns over the next 20 years.
- Uses existing information collected (building blocks) on
  - water requirements
  - water use and infrastructure
  - water resources
  - WC/WDM
- Develop scenarios to meet water requirements for current and future use, including optimisation of local resources, improved water services and water resource management

### All Town Reconciliation Strategies What is it? Cont.

- It aims to answer these questions:
  - How much water is needed? now and in the future
  - What water resources are available or can be made available?
  - Which interventions can be consider to achieve a balance between water needs and supply?
- Focuses on the projected annual water balance (high and low growth scenarios)
- Also consider the accuracy of all components that make up the water balance

#### **Reconciliation Strategies: Contents**

#### **EXECUTIVE SUMMARY**

- 1 Introduction
- 2 Population and
- Demographics
- 3 Current Water
- Requirements
- 4 Water Requirement
- **Projections**
- 5 Water Resources

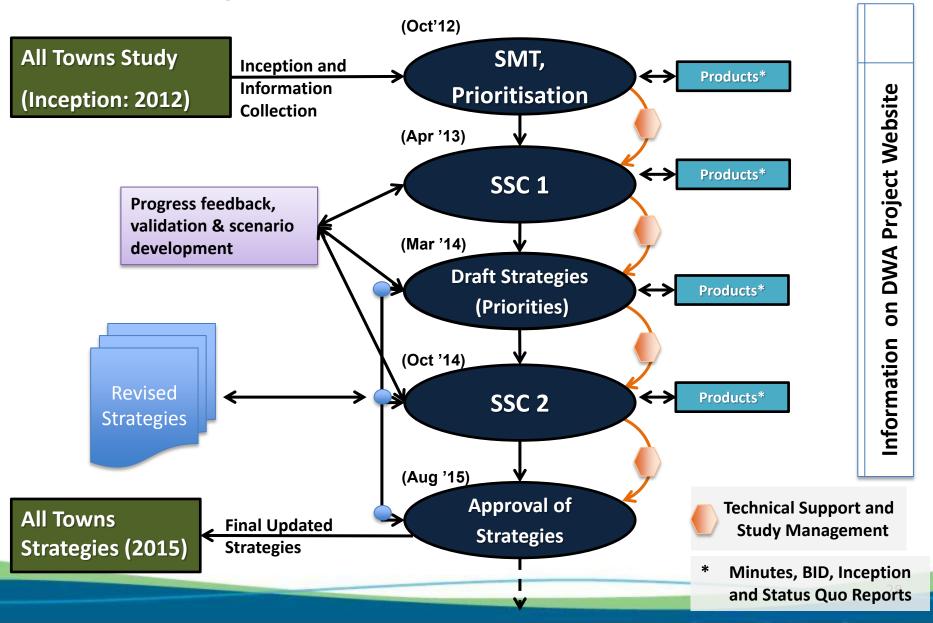
- 6 Water Balance
- 7 Water Supply Infrastructure
- 8 Sanitation
- 9 Reconciliation Options
- 10 Water Balance With
- **Reconciliation Options**
- 11 Recommendations

## Item 7: Overview of Study Activities

#### **Study Phases**

- Inception
- Updating Priority Reconciliation Strategies
- Incorporate Comments and Finalise Reconciliation Strategies
- Study Closure

#### **Study Communication & Process**



#### Inception

- Inception
  - Establish Study Management Teams (SMT)
  - Reconnaissance review of strategies
  - Develop District Municipality Summary Reports
  - Preliminary prioritisation of strategies
  - SSC Workshop 1 (this workshop)
  - Inception Report with adjusted project programme and applicable study budget

# 1. Study Management Team (North)

- Northern Planning Region
  - DWA Study Leader: Mr Tendani Nditwani Chief Water Resource Planner: NWRP (North)
  - DWA Regional Offices (Water Sector Support, Water Resources, RBIG officials)
    - Gauteng Province
    - Limpopo Province
    - Mpumalanga Province
    - North West Province
  - PSP: UWP Consulting (Pty) Ltd in association with WRP Consulting Engineers (Pty) Ltd

# 2. Reconnaissance Review of Strategies

- Northern Planning Region
  - 211 rudimentary strategies (296 water supply scheme areas)
- Limpopo Province
  - 154 rudimentary strategies (263 water supply scheme areas)

#### 3. DM Summary Report

- DM Summary reports developed based on review
- Summary of demographics, water requirements and water balance per individual strategy
- Grouped per District and Local Municipality
- Navigable Excel file
- DM Summary Reports available from DWA Regional Offices

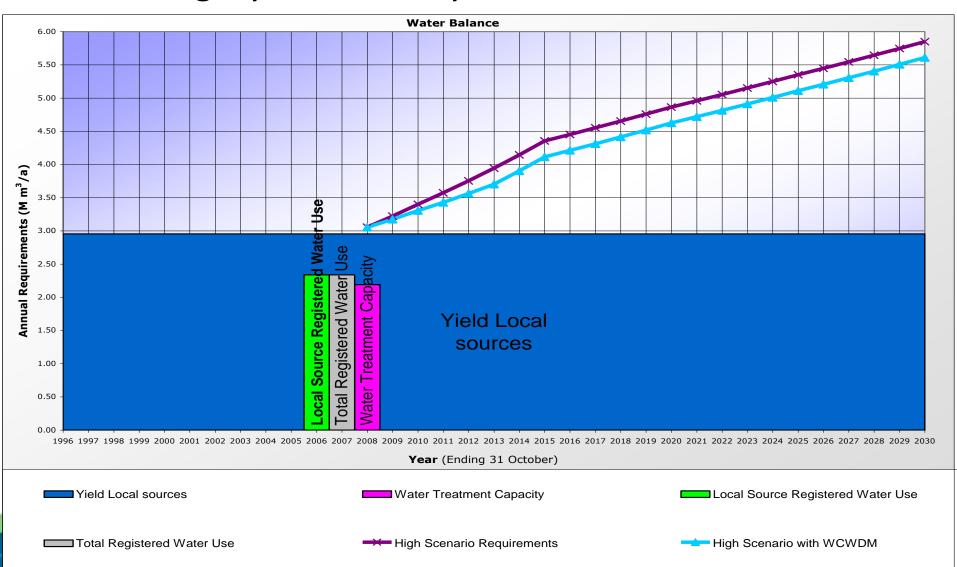
# 4. Preliminary prioritisation of strategies

Strategies are categorised as follows:

Water Balance Status	Category / Priority	
Town is currently in deficit	4	High
Town will be in deficit within 5 Years	3	Medium to high
Town will be in deficit in 5 to 10 years	2	Medium
Town will be in deficit after ten year or later	1	Low

#### **Example**

• i.e. Category 4: Currently in Deficit



#### **Prioritisation Process**

- Step 1: Identification of Category 4 strategies (towns with a water balance currently in deficit)
- Step 2: Eliminate towns where solutions are in an advance stage of planning or implementation (RBIG projects)
- Step 3: Add towns where RBIG or other processes are in an early stage of planning – can still be influenced by strategies' recommendations
- Step 4: Add any other hot spot areas identified on a national, provincial or local strategic level

#### **Prioritisation Process cont.**

- Key focus: water resource availability and quality to meet current and future water requirements
- The preliminary priority selection was confirmed at a screening session held with DWA: National Water Resource Planning (North) and the DWA Regional Office (Limpopo Province)
- Requesting confirmation of priorities from SSC (this workshop)

### **DM Summary**

Mopani District Municipality (MDM)

LM	Strategies	Population (2010)	In Surplus	In Deficit	Preliminary Priority (schemes)
LIM331: Greater Giyani	5	188 157	5	0	5
LIM332: Greater Letaba	3	152 626	2	1	1
LIM333: Greater Tzaneen	7	474 974	7	0	0
LIM334: Ba- Phalaborwa	3	133 746	3	0	0
LIM335: Maruleng	3	106 937	2	1	0
Total	21	1 056 440	19	2	6

Vhembe District Municipality (VDM)

LM	Strategies	Population (2010)	In Surplus	In Deficit	Preliminary Priority (schemes)
LIM341: Musina	2	29 386	2	0	1
LIM342: Mutale	5	59 625	5	0	0
LIM343: Thulamela	9	636 194	8	1	4
LIM344: Makhado	13	632 586	10	3	3
Total	29	1 357 791	25	4	8

Capricorn District Municipality (CDM)

LM	Strategies	Population (2010)	In Surplus	In Deficit	Preliminary Priority (schemes)
LIM351: Blouberg	11	201 555	10	1	0
LIM352: Aganang	6	160 106	6	0	0
LIM353: Molemole	2	111 601	2	0	0
LIM354: Polokwane	14	522 146	14	0	11
Total	33	995 408	32	1	11

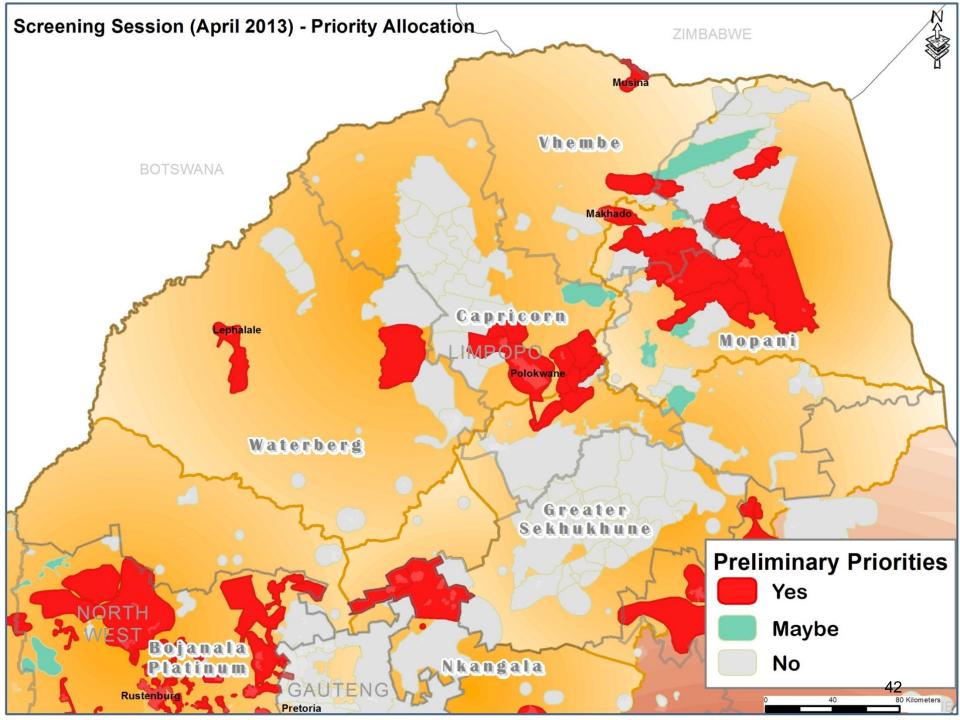
Waterberg District Municipality (WDM)

LM	Strategies	Population (2010)	In Surplus	In Deficit	Preliminary Priority (schemes)
LIM362: Lephalale	5	81 075	4	1	
LIM364:					
Mookgopong	6	32 741	6	0	
LIM365:					
Modimolle	3	64 300	3	0	
LIM366: Bela-Bela	3	33 740	3	0	(
LIM367:					
Mogalakwena	5	328 323	2	3	
Total	22	540 179	18	4	

Greater Sekhukhune District Municipality (GSDM)\*

LM	Strategies	Population (2010)	In Surplus	In Deficit	Preliminary Priority (schemes)
LIM472: Elias Motsoaledi	7	264 368	5	2	0
LIM473: Makhuduthamaga	12	300 639	10	2	0
LIM474: Fetakgomo	3	114 832	2	1	0
LIM475: Greater Tubatse	10	342 130	9	1	0
Total	32	1 021 969	26	6	C

 \* Most consumers to benefit from the newly constructed De Hoop Dam



# Updating Priority Reconciliation Strategies

- Detailed assessment of strategies according to the following themes:
  - Demographics & economic drivers, incl. migration
  - Water requirements (importance of metering!)
  - -WC/WDM
  - Infrastructure
  - Water resources (surface and groundwater)
  - Water quality
- Collate, asses data and identify gaps

# Updating Priority Reconciliation Strategies cont.

- Develop coherent water requirement scenarios
  - Low growth scenario
  - High growth scenario
- Compile water balance diagrams (up to 2035)
- Identify potential development scenarios
   (management and infrastructure) for reconciliation of water requirements and water resources
- Submission of updated priority strategies to DWA
- SSC Workshop 2

### **Updating Reconciliation Strategies cont.**

- Improve the level of confidence in building blocks used for scenario development
- Present the best available situation for short and long term planning
- Develop firm recommendations to be taken into account during planning (WSDP, IDP, water resources) and implementation of studies and projects
- Make a strategy applicable to the intended area of study – clustering of water supply areas
- Our water: to make "some for all" a reality

# Incorporate Comments and Finalise Reconciliation Strategies

- Incorporate comments received from SSC 2
- Include pertinent information that may impact the outcome of a strategy
- Finalise and submit reconciliation strategies
- Update the DM Summary Reports

## **Study Closure**

- Signing off updated strategies by appropriate officials
- Disseminate final strategies and DM Summary Reports via DWA website
- Skills transfer workshop to DWA officials
- Compile study closure documentation for this appointment

## **Item 8: Break-away Sessions**

- Session for each DM facilitated by team member
- Confirm prioritised strategies
- Solicit information from SSC members for inclusion in the strategies

# Break-Away Sessions (Grouping: District Municipalities)

- Group 1: Mopani DM
- Group 2: Vhembe DM
- Group 3: Capricorn DM
- Group 4: Waterberg DM
- Group 5: Greater Sekhukhune DM

# Item 9: Way Forward/Study Programme

- Inception (Current)
- Continuation of the Reconciliation Strategies' Development
  - Detailed assessment of prioritised strategies
  - Update strategies
  - Submission of revised strategies to DWA (continuous)
  - SSC Workshop 2 (October 2014)
    - Presentation, discussion and responses on strategies

# Item 9: Way Forward/Study Programme

- Reconciliation Strategies' Revision and Implementation
  - Consider & incorporate comments of SSCWorkshop 2
  - Prepare final draft reconciliation strategies
  - Update DM Summary Reports

# Item 9: Way Forward/Study Programme cont.

- Study Closure
  - Signing off updated strategies by appropriate officials
  - Disseminate final strategies and DM Summary Reports via DWA website
- End of this appointment: October 2015

#### **Thank You**

- Northern Planning Region
  - For enquiries, contact:
    - DWA Study Leader: Mr Tendani Nditwani
    - Tel: +27 (0) 12 336-8189
    - Email: Nditwanit@dwa.gov.za
  - Or
    - PSP Deputy Study Leader: Ms Monja Esterhuizen
    - Tel: +27 (0) 12 424 9709

Study Website: <a href="http://www.dwa.gov.za/projects.aspx">http://www.dwa.gov.za/projects.aspx</a> (go to All Town Strategies – Strategy Portal)