

Continuation and Maintenance of Reconciliation Strategies for All Towns in the Northern Planning Region

NEWSLETTER

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Purpose of this Newsletter

The purpose of this document is to provide an update of the study on the continuation and maintenance of water reconciliation strategies for towns in the northern region by the Department of Water and Sanitation (DWS).

The newsletter provides background information to the study, explains the rationale for the study, the strategies that were prioritised and updated as well as the participation of stakeholders who assisted and provided inputs to the study.

The study followed a transparent process and included stakeholders as prescribed by the National Water Act of 1998, through an extensive public engagement process. As part of this process, a Strategies Steering Committee (SSC) was established, that is representative of sectors important to the study. The SSC was established in 2013 in each of the Limpopo, Mpumalanga and North West Provinces.

One SSC workshop was held in each of the provinces in 2013 and 2015. The purpose of the 2013 SSC Workshop 1 was to establish the SSC and confirm the final selection of priority strategies to be addressed by the study.

The purpose of the 2015 SSC Workshop 2 was to present the updated/revised strategies, to obtain comments, further guidance and agreement on the acceptability of the results and agree on the preferred development scenarios.

The total number of strategies that were prioritised and updated per province is shown below:

- Limpopo: 38
- Mpumalanga: 8
- North West: 7
- **Total:** **53**

INTRODUCTION AND CONTEXT

In 2012 the Department of Water and Sanitation (DWS) commissioned four three-year studies for the continuation and maintenance of the bulk water supply reconciliation strategies for all towns in the country.

The studies cover the four Water Resource Planning Areas - North, South, East and Central and **this study covers the Northern Planning Area.**

The strategies were originally developed in 2011 and need to be revised to remain relevant under prevailing conditions. The study is part of an on-going process to ensure sufficient water can be made available for pertinent developmental imperatives in and around all towns.

Although each town's strategy is different, key common themes were highlighted as listed below:

- Improved management will solve a significant portion of immediate problems.
- In the Northern Planning Region, the water requirements in 2010 exceeded water resources availability in 64 towns.
- Lack of water metering impedes the confidence in planning and the strategies.
- High per capita use in many towns points to the potential of saving through Water Conservation and Water Demand Management (WC/WDM).

- Groundwater remains a viable source of water for many towns.
- Supply problems relate to infrastructure constraints rather than water resource availability limitations in many towns.

Study Area

The Northern Region study area includes the entire Limpopo Province, the north-west part of the North West Province and the northern parts of the Gauteng and Mpumalanga Provinces respectively (see **Figure 2** for more detailed information).

The area covers eight Districts, one Metropolitan Municipality and as a result, 229 separate town strategies were originally developed.

A number of towns in this region are supplied from Water Boards, which to a large extent, are already incorporated in the larger Reconciliation Strategies for the Vaal River (2009), Olifants River (2011), Crocodile (West) River (2012) and Luvuvhu and Letaba Rivers' (2014) Water Supply Systems respectively.

Documentation on these strategies is available on the DWS web page: <http://www.dwa.gov.za/DocPortal/>

In brief, this study is a further endeavour to aspire to make the slogan, "some for all", become a reality.

The intention is to continue the maintenance, review and implementation of the reconciliation strategies even after completion of this study and phase.

OBJECTIVES OF THE STUDY

The primary objectives of the study were to review all strategies, identify priority or “hot spot” towns requiring full revisions and document the progress on how the recommended interventions (strategy actions) were implemented.

This is carried out in collaboration with the respective Regional Offices (ROs) in the Northern Planning Region. The ROs served as the conduit through which the study team engage with the designated Water Service Authorities - either Local or District Municipalities.

A further key objective was to promote the reconciliation strategies as a core planning product giving the actions needed to secure the required water resources.

The vision is for the strategies to be considered and incorporated when other plans such as the Water Services Development Plans and Integrated Development Plans are developed.

RECONCILIATION STRATEGIES: COMPONENTS

Lessons learned from strategies being reviewed and implemented in other parts of the country identified the components shown in **Figure 1**, as the main elements to consider in a reconciliation strategy. At the centre of the diagram the questions regarding how much water is **needed**, what water resources are **available** or could be made available, and which **interventions** can be considered to achieve a balance between demand and supply should be answered.

The coloured boxes indicate how each question is answered by undertaking various investigations and synthesising the results of several processes to formulate the most suitable strategy for an area and plan to reconcile the water resources with the requirements.

The particular tasks and activities relevant to the Northern Region were identified from the generic complements provided in **Figure 1** and are presented in the following section.

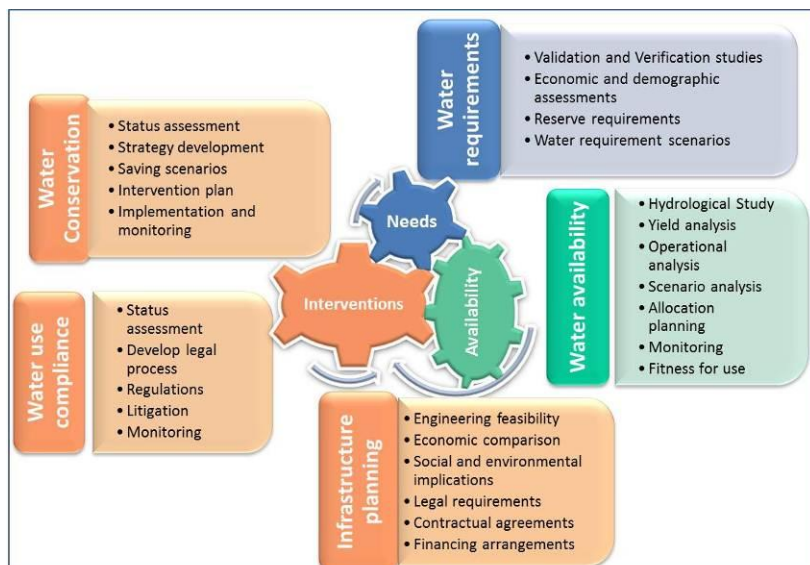


Figure 1: Reconciliation Strategies: Components

STUDY ACTIVITIES

Strategies Steering Committee Workshop 1

The purpose of the SSC Workshop 1, which was held with each of the provinces, was to confirm the strategies that were identified as priority strategies as part of the Inception Phase. The strategies were reviewed and evaluated on their completeness and preliminary priority towns were identified. The priority list was presented at the workshop and the final selection was confirmed.

Updating priority reconciliation strategies

This phase of the study encompassed the bulk of work required for the execution of this study, including the engagement of stakeholders, information sourcing and verification of data, modelling, evaluation of scenarios and determining of reconciliation measures. Typical activities involved in the updating of the prioritised reconciliation strategies included:

- Detailed assessment of the water requirements, demographics, service levels to derive future water requirement projections a planning horizon of at least 25 years (up to 2035).
- The status and impact of WC/WDM interventions within the relevant WSAs were evaluated and an assessment

of potential target savings that can possibly be achieved through WC/WDM were estimated.

- Opportunities for water re-use were identified.
- New schemes such as RBIG or other grant schemes were incorporated in the intervention timeline.
- Potential gaps or inaccuracies in the surface and groundwater availability estimates will be identified and addressed.
- Water quality related planning activities that are necessary to improve and sustain the quality of the water resource in the prioritised areas where this is an issue, were identified.
- Compared water requirements with the water resources availability to confirm the water balances status over the planning period i.e. whether and when deficits/shortfalls occur.
- Identified development scenarios/options that can meet the long term water requirement projections for areas where shortfalls/deficits occur over the planning period with preference to utilising local resources first (groundwater, re-use etc.).
- The reconciliation strategies for supply areas that depend on the same water resource were combined

(where appropriate) in order to confirm the combined strategy and water balance situation.

The deliverable of this task is the updated reconciliation strategies for the prioritised towns.

Steering Committee Workshop 2

The strategies were distributed to stakeholders and a SSC Workshop 2 as arranged with each of the provinces with the following objectives:

- To present the updated/revised strategies, to obtain comments, further guidance and agreement on the acceptability of the results.
- Agree on the preferred development scenarios and on the way forward for the compilation of the reconciliation strategies.

Updating of Reconciliation Strategies

The reconciliation strategies were completed and finalised through the following processes:

- Comments received from the SSC Workshop 2 were incorporated and further studies required to finalise the reconciliation strategies were undertaken where possible.
- The prioritised strategies were update with any additional/revised information received.

- Any new significant developments, augmentation options, etc. identified through the SSC Workshop 2, were added where applicable.

Based on the above, the final reconciliation strategies were compiled and submitted to the DWS for approval.

Study termination

Once approved by DWS, the final priority strategies will be distributed to the stakeholders for signing off by the identified stakeholders.

All study reports and study deliverables will be finalised and submitted by September 2016. The final strategies will be incorporated into DWS's database which will then be uploaded onto the DWS's website.

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For more information on the study, visit the Department's website at: <http://www.dwa.gov.za/projects.aspx>

STRATEGY PRIORITISATION PROCESS

The steps that were followed by the study team to identify the priority towns are presented below:

- **Step 1:** Identification of Category 4 strategies (towns 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 and can still be influenced by strategy recommendations.
- **Step 4:** Add any other hot spot areas identified on a national, provincial or local strategic level.
- **Step 5:** Final selection was confirmed at Strategy Steering Committee Workshop 1 (see **Table 1, 2, 3 and 4**).
- **Step 6:** Additional strategic areas identified by DWS (Matibidi, Rustenburg, Thembisile Hani)

Table 1: Number of Prioritised Strategies per Province

Province	Number of Priority Strategies
Gauteng	0 (part of the Larger Vaal Reconciliation Strategy Study Area)
Limpopo	38
Mpumalanga	8
North West	7
Total	53

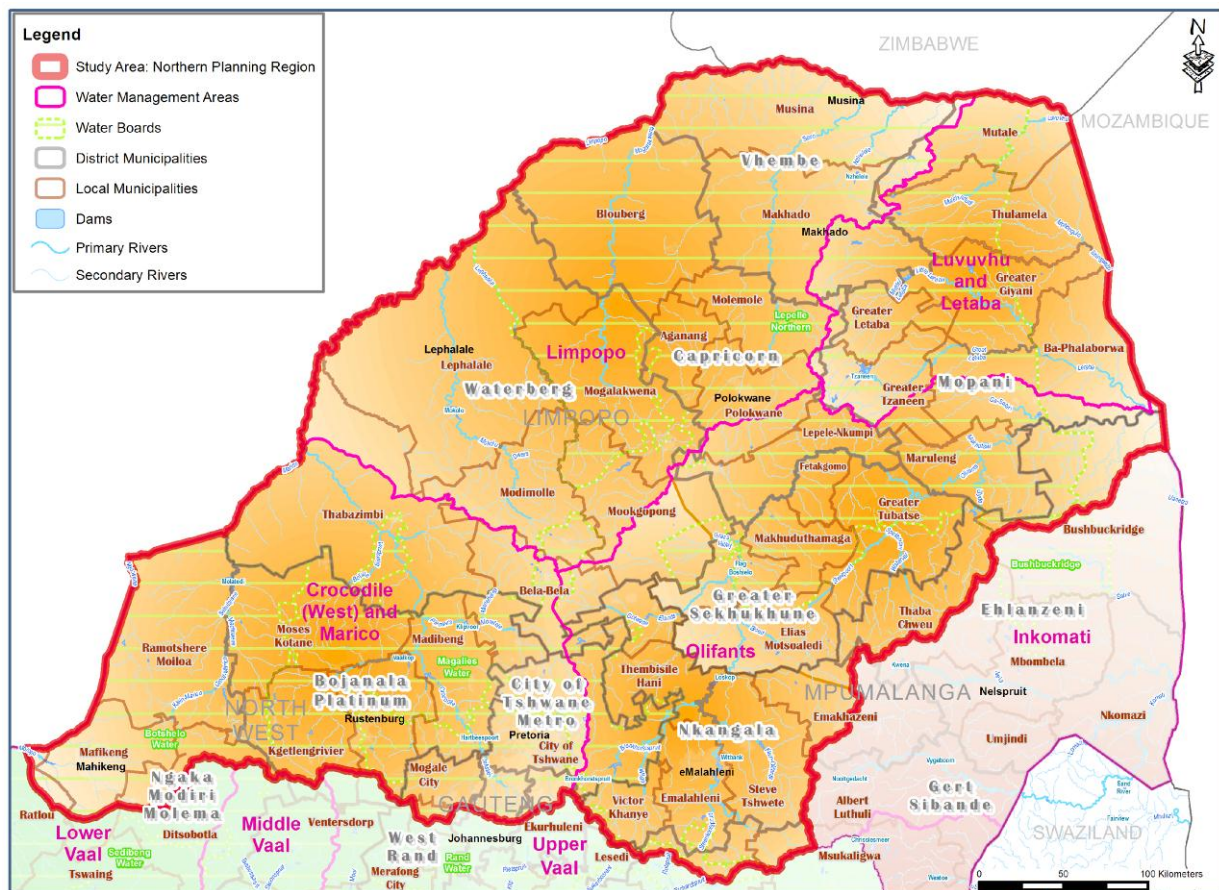


Figure 2: Study Area

UPDATED PRIORITISED STRATEGIES

Table 2: Updated Prioritised Strategies in the Limpopo Province

Province	District Municipality	Local Municipality	Strategy		
Limpopo	Mopani	Greater Giyani	Giyani System A and B WSS	Combined Strategy: Giyani Cluster	
			Giyani System C WSS		
			Giyani System D WSS		
			Giyani System F1 WSS		
			Giyani System F2 WSS		
		Greater Letaba	Sekgosese GWS		
		Greater Tzaneen	Modjadjiskloof Scheme		
			Thapane RWS		
			Tours RWS Scheme		
		Ba-Phalaborwa	Namakgale - Lulekani RWS Cluster		
		Greater Giyani	Mapuve System N WSS	Combined Strategy: Malamulele West/Mapuve System N Cluster	
	Vhembe	Thulamela	Malamulele West WSS		
			Malamulele West WSS		
			Makhado Mapuve System RWS		
			Lambani Thulamela		
			Tshifudi RWS		
		Makhado	Nzhelele Thulamela RWS	Combined Strategy: Nzhelele Cluster	
			Nzhelele Makhado RWS		
			Makhado		
			Middle Letaba RWS		
		Musina	Musina		
	Capricorn	Blouberg	Senwabarwana GWS		
		Molemole	Molemole West		
		Polokwane	Hout River RWS	Combined Strategy: Polokwane Cluster	
			Moletje East RWS		
			Moletje North GWS		
			Moletje South GWS		
			Olifants-Sand RWS		
			Badimong RWS		
			Laaste Hoop RWS		
			Mankweng RWS		
			Mothapo RWS		
			Segwasi RWS		
			Sebayeng-Dikgale RWS		
			Boyne RWS		
			Chuene Maja RWS		
			Molepo RWS		
		Waterberg	Lephalale	Lephalale Urban	

Table 3: Updated Prioritised Strategies in the North West Province

NORTH WEST PROVINCE			
Province	District Municipality	Local Municipality	Strategy
North West	Bojanala Platinum	Rustenburg	Vaalkop South Supply Area (Rustenburg)
		Kgetlengrivier	Borolelo/Swartruggens
			Koster & Reagile
	Ngaka Modiri Molema	Mafikeng	Mafikeng
		Ramotshere Moiloa	Dinokana
			Motswedi Gopane
			Supingstadt
		Tswaing	Ottosdal
	Dr. Ruth S. Mompoti	Naledi	Stella
		Greater Taung	Reivilo
	Dr. Kenneth Kaunda	Tlokwe	Potchefstroom Urban

Table 4: Updated Prioritised Strategies in the Mpumalanga Province

MPUMALANGA PROVINCE			
Province	District Municipality	Local Municipality	Strategy
Mpumalanga	Nkangala	Emalahleni	Emalahleni and Springvalley Cluster
		Steve Tshwete	Middelburg Cluster
		Dr JS Moroka	Ga-Ramantshane
		Thembisile Hani	KwaNdebele-Bronkhorstspruit Scheme and Langkloof Scheme
	Ehlanzeni	Thaba Chweu	Lydenburg
			Moremela
			Matibidi