



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

PROJECT INFORMATION	
CLIENT	DEPARTMENT OF WATER AFFAIRS
PROJECT	WATER REQUIREMENTS AND AVAILABILITY RECONCILIATION STRATEGY FOR THE MBOMBELA MUNICIPAL AREA
MEETING	TECHNICAL SUPPORT GROUP MEETING NO. 2
DATE	1 MARCH 2012
TIME	10:00 HRS
VENUE	AURECON OFFICES, 25 ROOD STREET, NELSPRUIT

Draft Minutes

1	OPENING AND WELCOME Mr Niel van Wyk (NvW) welcomed all to the meeting and summarized the objectives of this project: <ul style="list-style-type: none">- To develop future water requirement scenarios in the Mbombela Local Municipal area in consultation with users- To investigate all possible water resources and other interventions available to Mbombela LM- To investigate all possible methods for reconciling the requirements with the available resources- Make recommendations for development and implementation of interventions																		
2	INTRODUCTION OF ATTENDEES																		
2.1	Present <table><tr><th>Name</th><th>Telephone No.</th><th>Email</th></tr><tr><td>Zama Siqalaba (WRP)</td><td>079 490 6995</td><td>zamas@wrp.co.za</td></tr><tr><td>Nsika Zondo (WRP)</td><td>082 378 7291</td><td>nsikaz@wrp.co.za</td></tr><tr><td>Barbara Weston (DWA:RDM)</td><td>083 631 0801</td><td>westonb@dwa.gov.za</td></tr><tr><td>Marius Kolesky (ICMA)</td><td>013 753 9000</td><td>koleskym@inkomaticma.co.za</td></tr><tr><td>Kennedy Mandaza (DWA:NWRP)</td><td>012 336 7670</td><td>MandazaK@dwa.gov.za</td></tr></table>	Name	Telephone No.	Email	Zama Siqalaba (WRP)	079 490 6995	zamas@wrp.co.za	Nsika Zondo (WRP)	082 378 7291	nsikaz@wrp.co.za	Barbara Weston (DWA:RDM)	083 631 0801	westonb@dwa.gov.za	Marius Kolesky (ICMA)	013 753 9000	koleskym@inkomaticma.co.za	Kennedy Mandaza (DWA:NWRP)	012 336 7670	MandazaK@dwa.gov.za
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	<p>Dawie Koekemoer (Aurecon) 082 940 4490 dawie.koekemoer@af.aurecongroup.com</p> <p>Werner Comrie (Aurecon) 082 808 0435 Werner.Comrie@af.aurecongroup.com</p> <p>Khumbu Moyo (DWA: National) 082 803 0892 MoyoK@dwa.gov.za</p> <p>Frans Greyling (Mbombela LM) 013 759 2178 fransg@mbombela.gov.za</p> <p>Geert Grobler (DWA:NWRP) 012 336 8691 groblerg@dwa.gov.za</p> <p>Niel van Wyk (DWA: NWRP) 012 336 8327 vanWykN@dwa.gov.za</p> <p>Stephen Mallory (IWR) 083 415 7223 stephen@waterresources.co.za</p> <p>Paul Odendaal 073 163 4074 paul@waterresources.co.za</p>	
2.2	<p>Apologies</p> <p>Johann van Aswegen (DWA:MPU) 082 807 4198 vanaswegenJ@dwa.gov.za</p> <p>Patrick Ntabeni (DWA:MPU) 079 510 7283 NtabeniP@dwa.gov.za</p> <p>Pinkie Hermanus (Mbombela LM) 013 759 2304 Pinkie.Hermanus@mbombela.gov.za</p> <p>Amali Rashke (Provincial Gvt.) amali@mpg.gov.za</p> <p>Brian Jackson (ICMA) 078 457 7636 jacksonb@inkomaticma.co.za</p> <p>Arthur Douglas (SembCorp Silulumanzi)</p> <p>Paul Herbst (WRP)</p>	
2.3	<p>Noted</p> <p>Frans Greyling (FG) stated that he is no longer involved in Water and Sanitation at Mbombela LM, but availed himself to remain associated with the project, should the Technical Support Group (TSG) members agree, until such time as Pinkie Hermanus or a duly designated representative becomes available to take his place on the TSG.</p> <p>Niel van Wyk (NvW) thanked him, and proposed that he remain involved with the TSG for the sake of continuity.</p>	
3	ADOPTION OF AGENDA	ACTION
3.1	<p>Approval of Agenda</p> <p>The Agenda was accepted without amendments.</p>	
3.2	Action Plans arising from 1st TSG Meeting	

	<ul style="list-style-type: none"> Comments to be provided on the Draft TSG Terms of Reference. 	ALL
	<ul style="list-style-type: none"> Finalisation of the membership list of the Study Steering Committee; the ICMA CMS Stakeholder list to be examined for significant omissions from the draft list. 	ALL
	<ul style="list-style-type: none"> Eddie Riddell was invited and has indicated that he would be prepared to become involved in future but could not attend the 2nd TSG meeting. He should be invited to the 3rd Meeting. 	SM
	<ul style="list-style-type: none"> Kennedy Mandaza (KM) should ask Johan van Rooyen and Pieter van Niekerk whether they are available for the SSC 	KM
	<ul style="list-style-type: none"> NvW raised a concern that the DWA Regional Office was not represented at the TSG meetings since DWA: Mpumalanga is one of the beneficiaries of the project. The purpose of the TSG includes providing technical support not only to Mbomela LM but also to the local Water Authority, DWA's Regional Office. 	
	<ul style="list-style-type: none"> Frans Greyling (FG) requested that, when the Study Steering Committee (SSC) would have its first meeting, that a formal letter be written to Mbombela Top Management to involve them in, and invite them, the process. <p>NvW thanked FG for raising the matter, and responded that involvement on the SSC is by invitation only, and that the matter of invitations to the SSC would be addressed as soon as it becomes necessary.</p>	
	<ul style="list-style-type: none"> Documentation used during the 1 TSG meeting on 29 November 2011 had been provided directly to attendees prior to the second TSG meeting where possible, and was provided electronically to all attendees of the second TSG meeting. Documentation include: <p>An introductory Powerpoint Presentation by NvW entitled <i>Niel recon present Mbombela.ppt</i></p> <p>A detailed presentation on procedure by Stephen Mallory (SM) and Dawie Koekemoer (DK) entitled <i>Presentation 29 November 2011 v0.1.pptx</i></p> <p><i>The National Planning Commission's National Development Plan: A Vision for 2030 (dated 11 November 2011)</i></p> <p>A report on the development of a water conservation and water demand management strategy for Mbombela municipality (<i>The Development of Comprehensive Water Conservation and Water Demand Management Strategy and Business Plans - Domestic Sector: Mbombela Local Municipality (November 2008)</i>).</p>	

<p>4</p> <p>4.1</p>	<p>INTRODUCTORY PRESENTATION</p> <p>Background to the Reconciliation Study.</p> <p>NvW provided a brief background to the aims and goals of the Reconciliation study, and the role of the TSG in devising, guiding and implementing the final reconciliation strategy.</p> <p>NvW reminded the meeting that the footprint area of the project is the area of jurisdiction of Mbombela Local Municipality and therefore includes well developed urban areas, as well as large semi-urban areas and areas of intensive agriculture, all of them falling in an area where water resources are stressed and generally over-allocated. This places unique challenges before the Mbombela Reconciliation study team which reconciliation teams in other areas did not have to contend with to the same extent, if at all.</p> <p>NvW cautioned that, because water resources are over-allocated, it is not expected that the mere legal allocation of additional water to Mbombela LM for domestic consumption will be a realistic possibility. Reconciliation options would have to include increasing the available resource, making more efficient use of what is currently available, or transferring allocations between water use sectors.</p>	<p>ACTION</p>
<p>5</p>	<p>PRESENTATION OF INCEPTION REPORT</p> <p>Stephen Mallory (SM) presented the Inception Report, firstly explaining that the inception report is intended to:</p> <ul style="list-style-type: none"> • define the basic approach to the study, • to specify the work that is planned • refine the budget and work programme <p>The Inception Report compartmentalized the overall study into a sequence of major tasks, which were presented and aspects of which were briefly discussed in sequence</p> <ul style="list-style-type: none"> • Task 1: Study Management • Task 2: Study initiation • Task 3: Information Gathering <p>SM reported that most of the information is already available, and processes are in place to obtain the outstanding information (specifically Water Quality Information).</p> <p>Irrigation information was obtained from the 2005/2006 validation</p>	

process and is therefore somewhat dated, but SM stated that is not a crisis since irrigation information is not crucial to the study; however, if new information were to become available during the course of the project, e.g. from the Verification and Validation Project, it will be incorporated.

Newer information has recently become available for the Sabie River Catchment, and is soon expected for the White River Catchment. However, validation of water allocations under the White River Valley Conservation Board (WRVCB) has been delayed, since cadastral updates from the Inkomati Verification and Validation Project are still being awaited and White River water use can only be validated thereafter.

- **Task 4: Inception Report**
- **Task 5: Current and Future Water Requirements**

Discussed in more detail in Section 6 of these Minutes

- **Task 6: Current Water Resources and possible augmentation options**

SM reported that the water resources of the Crocodile and Sabie catchments are already well understood, and that several augmentation options have already been identified as part of the Mbombela study.

These are discussed in more detail in Section 6 of these Minutes.

- **Task 7: Water Quality**

SM reported that the task entailed assessing the water quality requirements of various categories of water users, and determining the impact on the quality of the water resource of discharges of waste, and water containing waste.

Information is in process of being collected. However, one question raised by him as requiring attention is the extent to which the water quality situation affects the water quantity, both at present and in future?

The conclusions reached in the recently completed Olifants Recon Strategy is that there is not enough water available in the system to allow water quality problems to be solved through dilution. Water quality problems must be solved at source or through treatment before use.

Geert Grobler (GG) added the importance of looking at future developments. It is a reality, for example, that much of the Olifants River

	<p>catchment (WMA 4) and parts of the Komati River Catchment (X1) is riddled with coal prospecting and mining and something similar should not be allowed to happen in the Crocodile. Already it's not getting better and, as one goes down the Crocodile, it's already getting worse. Things that may not even yet be a problem, but may become so in future. This has to be pre-empted.</p> <p>GG stated that Water Quality and Water Quality can not be treated in isolation since the two are linked. There is a tendency, for example, to issue licenses for abstraction and not consider the parallel adequacy of waste discharge capacity. Upgrade abstraction works in agreement with sewerage treatment works, and not each in isolation.</p> <p>FG agreed, saying that Mbombela has some very good treatment works, but also poor works, where wastewater treatment is inadequate, e.g. Rocky's Drift.</p> <ul style="list-style-type: none"> • Task 8: Reconciliation Options Reported on in Item 6 of the Minutes • Task 9: Stakeholder Participation and Public Awareness SM proposed having 2 stakeholders meeting – a Preliminary strategy and a Final strategy meeting – as well as one 1 public meeting. In addition, 2 Newsletters should be published. <p>SM also presented the expected schedule of reports / deliverables that will arise from the meeting. This information is appended to these minutes.</p> <p>Kennedy Mandaza (KM) asked whether reports will be made available to each of the urban centres proposed by DK for purposes of public awareness and comment?</p> <p>NvW stated that this would depend on factors not currently known, e.g. how bulky the reports would eventually become. There would be practical aspects to consider but a decision on public distribution of reports would be made later during the study.</p> <p>A decision was made to finalise the invitation list / schedule for stakeholder meeting before next TSG meeting.</p> <ul style="list-style-type: none"> • Task 10: Institutional Aspects 	<p>SM</p>
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	<p>A concern was raised on the ability of the local water services provider – Mbombela LM - and the local water authority – DWA: Mpumalanga – to eventually implement the final strategy due to human resources shortages and/or capacity limitations.</p> <p>FG raised the need for an implementation plan and not a plan that will merely lie in a cabinet as a report. Accountability and capacity building should form part of the strategy. DWA:Mpumalanga has a problem with this, while the Mbombela Local Municipality's capacity to implement and enforce WC&DM is also limited. Without structures in place, a recon strategy will gather dust in a cabinet.</p> <p>NvW pointed out that WRP are involved on the project team and that, as WC&DM specialists, the point will be made.</p> <p>FG raised the point that proper master planning, especially a real policy with regards to, say, semi-urban areas and illegal connections. A proper policy so that such matters are not addressed in an ad-hoc manner as is being done at present.</p> <p>SM stated that, to date, all Reconciliation Strategy development studies have been followed by implementation phases. The same approach is planned for Mbombela.</p> <ul style="list-style-type: none"> • Task 11: Environmental Screening • Task 12: Climate Change • Task 13: Economics • Task 14: Skills Transfer • Task 15: Ecological Water Requirements • Task 16: Reporting 	
<p>6</p> <p>6.1</p>	<p>PRELIMINARY ASSESSMENT OF THE STUDY AREA</p> <p>Grouping of urban centers</p> <p>Dawie Koekemoer (DW) gave a short review of the Mbombela study area, and the way in which urbanized areas are to be grouped into functional clusters. Included are:</p> <ul style="list-style-type: none"> • Plaston / Karino corridor, including the new Lekweti development, Emoyeni developments and the Plaston Park developments which have their own water package treatment plants from local sources, converted 	

	<p>from agricultural to domestic water use sectors.</p> <ul style="list-style-type: none"> • Matsulu A, Matsulu B, Matsulu C, with a separate abstraction point on the Crocodile River • Elandshoek to be treated separately and Kaapsche Hoop to be treated briefly only. <p>Amongst various things that will be investigated, especially important is the splitting domestic consumption between Urban and Semi-urban/Rural users. Complications with semi-Urban areas is that of varying, but generally low levels of service, absence or rare provision of water borne sewerage, and the distribution of stand pipes and yard connections.</p> <p>FG pointed out that three things are crucial to realise when looking at levels of service.</p> <ul style="list-style-type: none"> • Firstly, standpipes are no longer accepted by the community, they want yard connections. • Secondly, Nsikazi North only has disinfected water. Water use will change when fully treated water becomes available. • Thirdly, only a few small areas – Tekwane, Emoyeni, Kabokweni, Kanyamanzane and Matsulu has waterborne sewerage. The rest of Nsikazi does not, but there is political pressure to get this in the entire Mbombela. This will cause water use to skyrocket; not only because of higher direct use, but also potentially through increased losses through leaking toilets. <p>Barbara Weston (BW) Pointed out that, from a reserve point of view, she will need to know of developments like this to feed into the classification process. She needs to distinguish between formal supply (pumped from the river) vs. walking to the river with a bucket.</p> <p>DK said that he will distinguish between these two, including areas provided by tanker trucks.</p> <p>FG raised a concern that, when politicians make decisions on service delivery, or when funding from treatment plants are made through MIG, the technical matters, such as water availability, become neglected, partly because of the difficulty of balancing conflicting requirements, but also likely because decision-makers are unaware of the technical issues. Decision makers need to be informed of the wider ramifications of such developments and FG proposed that senior political decision makers could be directly involved in the TSG and/or SSC.</p> <p>SM suggested that, rather than that, a person like Amali Rashke should become involved in forcing MIG to obtain technical advice and water information before</p>	
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	<p>approving funding. NvW said that DWA had a similar problem with regards to funding developments without taking the resource or licensing into consideration.</p> <p>Zama Sigalaba (ZS) asked whether there's an MEC for water that could be inducted into the TSG or the SSC. This could introduce high-level political involvement into the meetings. Alternatively, because politicians could feel intimidated in meetings of a technical nature, discussing matters with them on a one-on-one basis might be a better way to drive the matter politically.</p> <p>NvW agreed, and stated that there is a general movement in this direction with projects of this nature, but that Amali Rashke might be the best person to drive this sort of political influence for the current study.</p> <p>DK highlighted the role of political decisions by pointing to the semi-urban town of Pienaar other parts of Nsikazi-North as well, being in the news over service delivery protests.</p> <p>FG added that service delivery protests are caused by frustration when promised service delivery programs can not be implemented because underlying technical/water resources challenges were not taken into consideration.</p> <p>NvW acknowledged the conflicting demands of water resource management vs. upliftment of impoverished communities through improved service delivery but urged that it is very important that the TSG remain completely impartial and neutral on this matter.</p>	
6.2	<p>Water Requirements</p> <p>SM gave a brief explanatory discussion on the water balance in the catchment, for the benefit of the non-hydrologist members of the TSG but also to explain the hydrological necessity in the catchment of a reconciliation strategy.</p> <p>This covers Sections 6.2, 6.3 and 6.4 of these Minutes.</p>	
6.3	<p>Water Resources</p>	
6.4	<p>Water Balance</p> <p>The quantification of the water resources of the Crocodile and (to a lesser extent) Sabie River catchments is complicated by the complex operating rules applies within the catchment.</p> <p>Based on current operating rules, the system is currently in balance, but increased water use by any user sector will result in an imbalance. Current operating rules could then either be adjusted in response, resulting in unacceptably low assurances to users in the system, or operating rules could be</p>	

	<p>retained as they are, increasing the risk of failure in the system.</p> <p>A reconciliation strategy aims to pre-empt such a situation.</p> <p>The presentation with graphics is available in full in the accompanying Powerpoint presentation entitled <i>Presentation 1 March 2011 v0.1.pptx</i> and is not repeated in these minutes.</p> <p>6.5 Possible reconciliation options</p> <p>SM and ZS presented a series of possible intervention options, WC&DM being discussed in detail by ZS because of its importance, the others ranging from plausible to implausible.</p> <ul style="list-style-type: none"> • WCDM <p>The inception report highlights WCDM as a key strategy and more emphasis has been placed on this task than in the proposal. ZS presented a detailed provisional action plan to accomplish this, based on previous investigations of a similar nature.</p> <p>A number of points were raised by ZS for attention during the course of WRP's investigation:</p> <ul style="list-style-type: none"> • Not do compile a blanket Water Balance and WC&DM strategy for Mbombela as a whole, but to create independent and separate water balances for each of the demand centres. This will allow identification of areas of concern, and permit accurate targeting of intervention; e.g. in areas with a low per capita input volume, it would not make sense to try and reduce the system input volume but rather to look at transmission efficiency. Likewise, in an area with very high per capita use, different problems might be found, e.g. plumbing leakages? • In this way, non-revenue water can be turned into revenue water. • Other things to look at include: Is there actually water available? If not, improvements in system efficiency might not be adequate to solve water shortages. Is there enough staff? Do technical people talk to the financial people? Cost recovery: turn non-revenue water into revenue water and reduce system input. • Comments by FG in response to ZS's presentation highlighting challenges she will likely encounter: No metering is taking place in Northern Nsikazi. In southern Nsikazi, while accurate information is not available, losses as high as 60% have been estimated, but it is not known how much of this is actual loss, and how much is merely uncontrolled use through illegal connections. In parts of Kanyamazane, Matsulu, formal parts of Nsikazi, there is metering, but low or zero cost recovery. 	
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	<ul style="list-style-type: none"> • Nelspruit and White River are within limits. <ul style="list-style-type: none"> • Groundwater development <p>Much of Mbombela lies on granite, which means that there is probably little scope for bulk development of groundwater resources.</p> <p>There is some dolomite in the upper reaches of the catchment, so options for augmentation do exist from this source which could be investigated further. However, caution is urged in considering this option, since conventional wisdom states that abstraction of groundwater from dolomite amounts, in effect, to abstracting from baseflow which would have surface water impacts.</p> <ul style="list-style-type: none"> • Development of new schemes <p>Several options are currently under investigation, including the construction of a new dam for local (Municipal) use, e.g. Boschkopje Dam, or for wider/regional use, e.g. Montrose Dam and/or Mountain View Dam. Construction of Mountain View Dam would allow trading with irrigators on the lower Crocodile, and would also allow gravitational supply directly to Matsulu from the dam.</p> <ul style="list-style-type: none"> • Expansion of existing schemes <p>These include full utilisation of existing dams which are currently perceived to be under-utilised (e.g. Da Gama, Ngodwana). A concern was raised that underutilised dams may imply a local surplus, but the apparent surplus may be spurious, and be mitigating a local deficit elsewhere; increasing the demands on such dams may have negative ripple effect elsewhere in the system.</p> <p>Another option which could be investigated could be the raising of Kwena Dam.</p> <ul style="list-style-type: none"> • Water trading <p>Options exist for trading with the irrigation sector as well as with the forestry sector. The objection raised with respect to forestry trading is that tremendous areas of forestry would have to be surrendered before meaningful quantities of water, sufficient for bulk supply, can be realised. This would have significant impacts on the forestry sectors and associated industries and would reasonably be opposed by them on economic grounds.</p> <p>A group discussion on the logistical aspects surrounding trading of irrigation water followed. A concern raised by FG is that there is no database available where potentially available water is advertised, or where structures are set in place to contact owners of such water. A public forum for water trading might be considered in future where potentially available water can be “advertised”. This</p>	
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	<p>could be considered later in the study or be implemented independently outside the current study.</p> <ul style="list-style-type: none"> • Transfers from other catchments <p>This option could be investigated for the sake of completeness, but neighbouring catchments are not known to have meaningful quantities of unallocated water available for transfer and it is not confidently expected that this will form part of an eventual reconciliation strategy.</p>	
7	<p>SSC MEMBERSHIP AND TERMS OF REFERENCE</p> <p>NvW proposed that members go through the previous meeting's list of proposed SSC Members and the TOR and propose amendments and additions.</p>	ALL
8	<p>INPUT FROM REPRESENTATIVES (PERSPECTIVE, RELATED WORK, CHALLENGES, TIMEFRAMES ETC.)</p> <p>8.1 MBOMBELA MUNICIPALITY No new comments, other than already voiced during the course of the meeting.</p> <p>8.2 DWA Not represented at the meeting and did not provide additional inputs</p> <p>8.3 ICMA No new comments at present.</p> <p>8.4 MPUMALANGA PROVINCIAL GOVERNMENT Not represented at the meeting and did not provide additional inputs</p>	
9	<p>STUDY PROGRAMME</p> <p>The study programme as suggested during the previous meeting remains unchanged (copy attached to these minutes) with the following progress reported on:</p> <ul style="list-style-type: none"> • Item 2 on the proposed Timeline: The Inception report has been submitted 	

	<ul style="list-style-type: none"> Item 3: Water requirements: Far advanced Item 5: Water Quality: Collection of information is in process. Item 6: Reconciliation options: Not far advanced, although the study did start later than originally envisaged. Item 9: NvW proposed that SM distribute the TOR and Inception Report and request comments if anybody has comments. 	SM
10	<p>FUTURE MEETINGS</p> <p>It was proposed that the next meeting should be soon enough to ensure continuity but not so soon as to meet merely for the sake of meeting. The next deliverable is: initial reports by demographic people, WC&DM by WRP and SM on Water Availability. The next date should give enough time to these groups to collect information.</p> <p>A date for the next meeting was provisionally set as 16 May 2012 at the Aurecon offices in Nelspruit. A time was not set for the meeting.</p> <p>It was proposed to have a SSC meeting soon after this, to confirm that the requirements and expectations of these two groups are coordinated. A provisional date was set as 30 May 2012.</p>	SM
11	<p>COMMUNICATION AND DISTRIBUTION OF INFORMATION</p> <p>No discussions added under this item</p>	
12	<p>GENERAL</p> <p>No discussions added under this item</p>	
13	<p>DATE OF NEXT MEETING</p> <p>A date for the next meeting was provisionally set as 16 May 2012 at the Aurecon offices in Nelspruit. A time was not set for the meeting.</p>	

AGENDA FOR 1 MARCH 2012

WATER REQUIREMENTS AND AVAILABILITY RECONCILIATION STRATEGY FOR THE MBOMBELA MUNICIPAL AREA		
TECHNICAL SUPPORT GROUP		
Date: 1 March, 2012 Time: 10:00 Venue: Aurecon, Nelspruit		
<p style="text-align: center;"><i>Meeting Objectives</i></p> <ol style="list-style-type: none"> <i>To explain what this study is about.</i> <i>To explain what is expected from the Technical support Group.</i> <i>To give the group an understanding of the water related problems in the Mbombela Municipal Area and the proposed way forward with this study</i> <i>To outline the programme for the study and decide on future meetings.</i> <i>To establish communication channels</i> 		
Item	Agenda Point	Discussion Leader/Presenter
1.	Opening and Welcome	N van Wyk
2.	Introduction of Attendees	
3.	Adoption of Agenda	
4.	Introductory presentation	N van Wyk
5.	Presentation of Inception Report	S Mallory and task leaders
6.	Preliminary assessment of the study area <ul style="list-style-type: none"> - Grouping of urban centers - Water requirements - Water resources - Water balance - Possible reconciliation options 	S Mallory and task leaders
7.	SSC Membership and terms of reference	N van Wyk
8.	Input from Representatives (perspective, related work, challenges, timeframes, etc.): <ul style="list-style-type: none"> • Mbombela Municipality • DWA • ICMA • Mpumalanga Provincial Government 	

9.	Study Programme	S Mallory
10.	Future Meetings and Date of Next Meeting	N Van Wyk
11.	Communication and Distribution of Information	N Van Wyk
12.	General	
13.	Date of next meeting	

ATTENDANCE REGISTER 1 MARCH 2012

ATTENDANCE REGISTER



DATE: 1 Mch 2012
PROJECT: Mbombela Reconciliation

NAME	SIGNATURE	EMAIL ADDRESS	CONTACT NUMBER	ORGANISATION
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Stephen Mallory	<i>[Signature]</i>	stephen@waterresources.co.za	012 336 8327	IWR Water Res

PROPOSED TIMELINE FOR THE STUDY

Programme																			
Task		2011				2012												2013	
		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
1	Project management																		
2	Inception																		
3	Water requirements																		
4	Water Resources																		
5	Water Quality																		
6	Reconciliation Options																		
7	Stakeholder participation																		
8	Institutional capacity																		
9	Environmental screening																		
10	Economics																		
11	Skills Transfer																		
12	Reporting																		

SCHEDULED REPORTS / DELIVERABLES

Report	Draft Report submitted	Comments Received	Final Report submitted
Inception	January 2012	February 2012	March 2012
Water Requirements/resources water	August 2012	September 2012	October 2012
Water Quality	July 2012	August 2012	September 2012
WCDM	August 2012	September 2012	October 2012
Environmental screening	August 2012	September 2012	October 2012
Preliminary Strategy	September 2012	October 2012	November 2012
Final Strategy	February 2013	March 2013	April 2013
Main Report	February 2013	March 2013	April 2013

DRAFT MEMBERSHIP LIST OF THE TECHNICAL SUPPORT GROUP

DEPARTMENT OF WATER AFFAIRS

Water Requirements and Availability Strategy for the Mbombela Municipal Area

PROPOSED TECHNICAL SUPPORT GROUP (TSG)

SECTOR	NAME	ORGANISATION
National Government	Niel van Wyk Kennedy Mandaza Paul Herbst/Moyo Khumbo	National
	Johan van Aswegen David Mapthothoma	Department Water Affairs (Mpumalanga Region)
Local Government	Frans Greyling	Mbombela Municipality
	Amali Rashke	Mpumalanga Provincial Government
	Brian Jackson	Inkomati Catchment Management Agency
Research		
PSP team	Stephen Mallory Dawie Koekemoer Werner Comrie	IWR Water Resources Aurecon

DRAFT TERMS OF REFERENCE FOR THE TECHNICAL SUPPORT GROUP

Technical Support Group (TSG)

DRAFT Terms of Reference

Water Requirements and Availability Strategy for the Mbombela Municipal Area

1. Introduction/Preamble

The water requirements of the Mbombela Municipal Area are growing rapidly due to population and economic growth. Strategies need to be developed to ensure continued supply of water for domestic and industrial use at an appropriate level of assurance into the future. To this end a study has been initiated by DWA referred to as the 'Water Requirements and Availability Strategy for the Mbombela Municipal Area.'

The primary objectives of this study are:

- To address the growing water demands as well as the water quality problems experienced in the catchment;
- To assess the current water availability and water deficit/surplus;
- To identify resource management and development options, and
- To recommend and sequence reconciliation interventions, both management and structural.

2. Management Structure and Arrangements

The direction and outcomes of this study will be monitored and controlled by a Study Steering Committee (SCC). The SCC will meet at approximately 6 monthly intervals. The SCC will be advised by a more focused Technical Support Group (TSG) to which this Terms of Reference pertains. The TSG will meet approximately every third month.

3. Functions

The functions of the Technical Support Group are:

- To discuss any technical aspects relating to the development of a Reconciliation Strategy

- To provide technical advice.
- To prepare technical communication material
- To prepare technical support information for the SSC
- To undertake specific technical studies identified by the SSC.

4. Representation

The TSG will have the following representation:

- DWA: National and Regional
- Mbombela Municipality
- Mpumalanga Provincial Government
- Inkomati Catchment Management Agency

The TSG will be supported by the Professional Service Provider who will be responsible for arranging all meetings and compiling the Reconciliation Strategy as it develops. Representation from other water users may be required on an ad hoc basis to give input on any issues pertaining to the Strategy.

5. Reporting

The TSG will report firstly to the SSC and relevant structures for which their members were co-opted to be of service. This reporting will be firstly through the minutes of TSG meetings which will be compiled by the PSP and secondly through presentations made to the SSC.

6. Meetings

It is envisaged that the TSG will meet every three months. Meetings will be held in Nelspruit.