



**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. 3
DATE	16 MAY 2012
TIME	10:00 HRS
VENUE	MERCURE HOTEL, NELSPRUIT

## Draft Minutes

1	<b>OPENING AND WELCOME</b> Mr Niel van Wyk (NvW) welcomed all to the meeting, specifically 1 <sup>st</sup> time attendees of a Technical Support Group meeting, and summarized the objectives of this project: <ul style="list-style-type: none"><li>- To develop future water requirement scenarios in the Mbombela Local Municipal area in consultation with users</li><li>- To investigate all possible water resources and other interventions available to Mbombela LM</li><li>- To investigate all possible methods for reconciling the requirements with the available resources</li><li>- Make recommendations for development and implementation of interventions</li></ul>																		
2	<b>INTRODUCTION OF ATTENDEES</b>																		
2.1	<table><tr><td><b>Present</b></td><td></td><td></td></tr><tr><td><b>Name</b></td><td><b>Telephone No.</b></td><td><b>Email</b></td></tr><tr><td>Khumbu Moyo (DWA: WUE)</td><td>012 336 8293</td><td><a href="mailto:MoyoK@dwa.gov.za">MoyoK@dwa.gov.za</a></td></tr><tr><td>Dawie Koekemoer (Aurecon)</td><td>012 427 3125</td><td><a href="mailto:dawie.koekemoer@af.aurecongroup.com">dawie.koekemoer@af.aurecongroup.com</a></td></tr><tr><td>Johnny Beumer (Aurecon)</td><td>012 427 3101</td><td><a href="mailto:johnny.beumer@aurecongroup.com">johnny.beumer@aurecongroup.com</a></td></tr><tr><td>Marius Kolesky (ICMA)</td><td>083 677 1806</td><td><a href="mailto:koleskym@inkomaticma.co.za">koleskym@inkomaticma.co.za</a></td></tr></table>	<b>Present</b>			<b>Name</b>	<b>Telephone No.</b>	<b>Email</b>	Khumbu Moyo (DWA: WUE)	012 336 8293	<a href="mailto:MoyoK@dwa.gov.za">MoyoK@dwa.gov.za</a>	Dawie Koekemoer (Aurecon)	012 427 3125	<a href="mailto:dawie.koekemoer@af.aurecongroup.com">dawie.koekemoer@af.aurecongroup.com</a>	Johnny Beumer (Aurecon)	012 427 3101	<a href="mailto:johnny.beumer@aurecongroup.com">johnny.beumer@aurecongroup.com</a>	Marius Kolesky (ICMA)	083 677 1806	<a href="mailto:koleskym@inkomaticma.co.za">koleskym@inkomaticma.co.za</a>
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Marius Kolesky (ICMA)	083 677 1806	<a href="mailto:koleskym@inkomaticma.co.za">koleskym@inkomaticma.co.za</a>																	

	Tendai Sawunyama (IWR)	076 628 0240	<a href="mailto:tendai@waterresources.co.za">tendai@waterresources.co.za</a>
	Kennedy Mandaza (DWA:NWRP)	082 600 5964	<a href="mailto:MandazaK@dwa.gov.za">MandazaK@dwa.gov.za</a>
	Niel van Wyk (DWA: NWRP)	012 336 8327	<a href="mailto:vanWykN@dwa.gov.za">vanWykN@dwa.gov.za</a>
	Geert Grobler (DWA:WRPS)	012 336 8691	<a href="mailto:groblerg@dwa.gov.za">groblerg@dwa.gov.za</a>
	Mamogala Musekene (DWA: MPU)	013 759 7313	<a href="mailto:musekeneM@dwa.gov.za">musekeneM@dwa.gov.za</a>
	Brian Jackson (ICMA:WRP&P)	078 457 7639	<a href="mailto:jacksonb@inkomaticma.co.za">jacksonb@inkomaticma.co.za</a>
	Willem Wegelin (WRP)	083 447 7999	<a href="mailto:willemw@wrp.co.za">willemw@wrp.co.za</a>
	Stephen Mallory (IWR)	083 415 7223	<a href="mailto:stephen@waterresources.co.za">stephen@waterresources.co.za</a>
	Frans Greyling (MLM)	082 781 1048	<a href="mailto:fransg@mbombela.gov.za">fransg@mbombela.gov.za</a>
	Lindani Ngcobo (MLM)	071 374 2386	<a href="mailto:lindani.ngcobo@mbombela.gov.za">lindani.ngcobo@mbombela.gov.za</a>
	Arthur Douglass (Silulumanzi)	083 269 1435	<a href="mailto:arthur.douglass@sembcorp.com">arthur.douglass@sembcorp.com</a>
	Coetzee Barnard (Silulumanzi)	083 269 0934	<a href="mailto:coetzee.barnard@sembcorp.com">coetzee.barnard@sembcorp.com</a>
	Paul Odendaal (IWR)	073 163 4074	<a href="mailto:paul@waterresources.co.za">paul@waterresources.co.za</a>
<b>2.2</b>	<b>Apologies</b>		
	Johann van Aswegen (DWA: MPU)	082 807 4198	<a href="mailto:vanaswegenJ@dwa.gov.za">vanaswegenJ@dwa.gov.za</a>
	Pinkie Hermanus (Mbombela LM)	013 759 2304	
<b>3</b>	<b>ADOPTION OF AGENDA</b>	<b>ACTION</b>	
<b>3.1</b>	<b>Approval of Agenda</b> The Agenda was accepted without amendments.		

<p><b>4</b></p> <p><b>4.1</b></p>	<p><b>ACCEPTANCE OF PREVIOUS MINUTES</b></p> <p>The following corrections were entered into the Minutes for the 2<sup>nd</sup> TSG Meeting of 1 March 2012</p> <p>P2. (Apologies)</p> <p>Paul Herbst (WRP) changed to Paul Herbst (DWA: NWRP).</p> <p>P3. (Paragraph 4)</p> <p>Pieter van Niekerk changed to Peter van Niekerk.</p> <p>P6. (Paragraph 2)</p> <p>Water Quality and Water Quality changed to Water Quality changed to Water Quality and Water Quantity</p> <p>P11. (Paragraph 4)</p> <p>Boschkopje Dam changed to Boschjeskop Dam</p> <p>p.12 (Item 8.2)</p> <p>DWA changed to specify DWA:MPUMALANGA</p>	<p><b>ACTION</b></p>
<p><b>5</b></p> <p><b>5.1</b></p> <p><b>5.2</b></p> <p><b>5.3</b></p>	<p><b>MATTERS ARISING FROM THE PREVIOUS MINUTES</b></p> <p>Eddie Riddell was invited and had indicated that he will attend future TSG meetings.</p> <p>Kennedy Mandaza (KM) confirmed that both Johan van Rooyen and Peter van Niekerk confirmed their availability for the Study Steering Committee</p> <p>Frans Greyling (FG) proposed that Mbombela be invited to the SSC not by conventional channels but be formally invited by personal letter of invitation from DWA to Mbombela top management.</p> <ul style="list-style-type: none"> <li>A letter of invitation is to be drafted to Zayd Boroka as Municipal Manager: Technical Services and/or the Mayor and delivered in person.</li> <li>Brian Jackson (BJ) proposed that the letter be not only from DWA but</li> </ul>	<p><b>ACTION</b></p> <p><b>SM/BJ</b></p>

	also from the ICMA.	
<b>5.4</b>	(P.13 Item 9) NvW noted that everybody attending the TSG meetings should have access to the inception report at all times and that any TSG member should feel free to provide comment or inputs at any time, without following formal channels or wait for TSG meetings.	
<b>5.5</b>	<b>SM to facilitate access of Inception Report to attendees.</b>	<b>SM</b>
<b>6</b>	<p><b>PRESENTATIONS FOR THE STUDY STEERING COMMITTEE</b></p> <p>SM proposed the following format in which to present preliminary findings to the Study Steering Committee at the first SSC meeting on 31 May:</p> <ul style="list-style-type: none"> <li>• <b>Water requirements</b> <ul style="list-style-type: none"> <li>– Grouping of urban centres for analysis and reporting purposes</li> <li>– Demographics</li> </ul> </li> <li>• <b>Water Resources</b> <ul style="list-style-type: none"> <li>– Surface</li> <li>– Groundwater</li> </ul> </li> <li>• <b>Water conservation and demand management</b> <ul style="list-style-type: none"> <li>– Domestic</li> <li>– Irrigation</li> </ul> </li> </ul> <p>Specific presentations by study leaders and discussions by the TSG arising from the above are minuted in full under Item 7 of these minutes (<i>Progress Report: Preliminary Assessment of the Study Area</i>) and are not duplicated here.</p>	
<b>7</b>	<p><b>PROGRESS REPORT: PRELIMINARY ASSESSMENT OF THE STUDY AREA</b></p> <p><b>7.1 Water Requirements:</b></p> <p><b>Grouping of urban centers</b></p> <p>SM proposed not to compile a blanket Water Balance and WC&amp;DM strategy for Mbombela as a whole, but to create independent and separate water balances for each of a number of demand centres. This will allow identification of areas of concern, and permit accurate targeting of intervention, if and when necessary.</p> <p>The proposed urban grouping was presented to the meeting, and is appended to these minutes in graphic form.</p>	

	<p>Matsulu is proposed to be treated as a separate urban grouping because, should Mountain View Dam be recommended as a future reconciliation option, it could be used to gravitate water to Matsulu.</p> <p>FG enquired why White River and Rocky Drift were placed in different urban groupings.</p> <p>SM responded that, because Rocky's Drift is supplied from the Crocodile River, it made sense to group it with Nelspruit instead of with White River which has its own water sources.</p> <p>FG argued that water provision from the Crocodile River goes beyond Rocky's Drift so that this distinction does not apply. He proposed that, since Rocky's Drift and White River are supplied by the Municipality and SembCorp Silulumanzi is the WSP South of this, it would make intuitive sense to include Rocky Drift with White River.</p> <p><b>SM agreed to this amendment to the urban grouping.</b></p> <p>Arthur Douglass (AD) asked whether changing this grouping would have any impact on the validity of Mbombela's license to for 5 million m<sup>3</sup>/a from the Crocodile River (since the license has been placed under the WARMS Register for Nelspruit and not White River's).</p> <p>SM said that, since the proposed urban grouping is for analysis and reporting purposes only, it would not impact on any existing licenses, although the study might make future licensing recommendations.</p>	<p><b>SM</b></p>
<p><b>7.2</b></p>	<p><b>Water Requirements: (contd)</b></p> <p><b>Demographics</b></p> <ul style="list-style-type: none"> <li>• SM presentation a preliminary socio-economic perspective of Mbombela, giving a background of the current and proposed state of residential, commercial and industrial development of the Municipal area of jurisdiction.</li> <li>• SM presented various estimates of projected future population growth, based on demographic investigations by Russell Aird as well as, for comparative purposes, those of previous studies. Several studies have found very similar values for projected growth up to 2030 - just under 1% or just over 1% for low and high growth scenarios, respectively. Estimates from DWA's 2008 infrastructure data were found to be much higher, as high as 4-</li> </ul>	

7.2	<p>5%.</p> <p>Willem Wegelin (WW) enquired whether current population figures were obtained by extrapolations from house counts.</p> <p>SM confirmed that it was, but acknowledged that such extrapolations might be misleading, since they assume up to 6 people per house which Dawie Koekemoer (DK) has found, from earlier work unrelated to this study, to be an overestimation. This is, in part, because households often have more than one house; one house in the rural areas for weekend use, another in the city during the week.</p> <p>This implies a local migration and extrapolating households from house numbers may introduce a certain level of duplication.</p> <p>FG agreed that projections of total municipal population growth might be misleading, since they show a cumulative trend for the whole area but do not account for local trends in migration. Thanks to local migrations, some areas may appear to be growing, others declining and this justifies investigation of demographic trends at a fairly high resolution.</p> <p>NvW urged that it is extremely important to get a good feel for such local demographic dynamics, not only because of their impact on total population growth, but also because of the impact of local migration between urban groupings on patterns of water use.</p> <p>It was proposed that Russell Aird's demographic findings be presented in more details at the Study Steering Committee meeting.</p> <p><b>Water Requirements (contd.)</b>  <b>Future Water Requirements</b></p> <p>SM proposed, for future Water Requirements, to introduce variable targets/ranges for per capita supply depending on the specific urban centre; i.e. to distinguish, for each urban grouping, what is reasonable and what is sustainable. As a result, for each urban grouping, a high and low figure per urban grouping might be estimated.</p> <p>FG cautioned that nothing less than Free Basic Water may be provided.</p> <p>Arthur Douglass agreed that local differences in supply justify such spatial variation in estimates, and mentioned the variability in water use between</p>	SM
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	<p>different areas.</p> <p>Tekwane, with 24 hrs connectivity, with water meters present, water use is around 650l per household per day, but the water is delivered at low pressure. In Kanyamazane, where water is delivered at high pressure, the figure is around 1,000l/d, while it is 500-600l/p/d in Matsulu.</p> <p>In areas with low levels of service, water use is around 250-300l per household, including high losses. Each area has to be treated separately, depending on various parameters related to local demographic, especially average income.</p> <p><b>DK to meet with Arthur Douglass and Willem Wegelin to get the water use information and distribute it as appropriate.</b></p> <p>FG agreed that levels of service must be linked to level of supply. People want water-borne sanitation and it must be assumed, for long-term planning purposes that, in future, there will be wider distribution of water-borne sewage systems. While it is not expected that there will be significant expansion in the levels of service in this respect in the next 5 years, its long-term inevitability must be realized.</p> <p>SM confirmed that the study's Terms of Reference requires looking forward 30 years so that such water use scenarios should, at the very least, be considered.</p> <p>NvW made the point not to confuse Free Basic Water with Free water. It is impossible for the available water resources to indefinitely absorb increasing demand but yes, one must assume that, eventually, all areas would be receiving 24hrs service and water-borne sewage, even though this will not happen in the immediate future.</p> <p>BJ cautioned that full water-borne sewage will cause water use to skyrocket and this will require licensing and, given huge losses in the system, DWA should be very cautious about merely permitting higher abstraction without taking cognisance of the strain under which local water resources are at present.</p> <p>Arthur Douglass stated that an opposing complication is that 2,000-4000 VIP toilets are being added to Mbombela's area of jurisdiction per year. This has the potential to impact significantly on groundwater quality, as suggested in another study conducted 2-3 years ago. To date, 18 municipal boreholes</p>	<p><b>DK/WW</b></p>
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7.3	<p>have already had to be closed because of unacceptable water quality. This has to be weighed against the impacts which expansion of water-borne sewage would have on the water resource.</p> <p><b>DK asked AD for a copy of the groundwater report. A copy is to be made available to DK and SM.</b></p> <p><b>Water Resources</b></p> <p>SM reported that the overwhelming conclusion made by several studies is that the water resource, at its current level of development, is fully allocated at best, but likely over-allocated.</p> <p>He pointed out that the only major outstanding issue is how the classification of the water resource could possibly affect the availability of the resource.</p> <p>One of the assumptions made in the study is that of maintaining the current reserve.</p> <p>BJ confirmed that the water resource Classification Process will go out on tender in the 1<sup>st</sup> quarter of 2013 and, since this is expected to be a two year project, the information from this will not be available for this Mbombela Study.</p> <p>Current project planning with regards to this matter is therefore to be kept as is.</p> <p>One possible means of augmenting the available water resource, which has not been considered before, is the raising of existing dams.</p> <p>SM reported that the possibility of raising dams is currently being investigated for several storage works in the catchment:</p> <ul style="list-style-type: none"> <li>– Kwena Dam</li> <li>– Witklip Dam</li> <li>– Ngwodwana Dam</li> <li>– Da Gama Dam</li> <li>– Klipkoppies Dam</li> <li>– Longmere Dam</li> </ul> <p>The raising of Ngodwana Dam, especially, was proposed, with several advantages making it an intuitively attractive proposition and a possible alternative to, say, construction of a new dam at Boschjeskop.</p>	AD/DK
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	<ul style="list-style-type: none"> <li>• It's a 20% MAR dam and hence presents a good opportunity for raising.</li> <li>• Preliminary results indicate a possible increase in yield of up to 20 million m<sup>3</sup>/a.</li> <li>• Due to its location this dam is unlikely to have large ecological Reserve requirements.</li> </ul> <p>Possible disadvantages, on the other hand, could be that the dam is privately owned, and would require a mutually acceptable agreement being reached with SAPPI. The raising of the dam would also result in inundation of private land which could result in compensation having to be paid.</p> <p>SM cautioned, however, that initial conclusions with regards to this dam are speculative and based purely on initial hydrological- and catchment considerations.</p> <p><b>An initial assessment at basic reconnaissance level of logistical practicality will be conducted by DK and should be presented at the SSC meeting.</b></p>	DK
7.4	<p><b>Possible reconciliation options</b></p> <p>Task leaders presented progress on several possible reconciliation options.</p> <ul style="list-style-type: none"> <li>• <b>Water Conservation and Demand Management</b></li> </ul> <p>WW presented preliminary results on WC&amp;DM measures, following meetings with both SembCorp Silulumanzi and the Municipality, comprehensively summarized in the Powerpoint presentation entitled <a href="#">Mbombela progress 2012-5-16.pptx</a> and is not discussed further in these minutes.</p> <p>Of importance is the preliminary finding that there is considerable scope for WD&amp;DM as a means of reducing water requirements.</p> <p>Several challenges were identified. These include, but are not limited to:</p> <ul style="list-style-type: none"> <li>– Intermittent supply to poorer areas, which damages water infrastructure;</li> <li>– Poor capacity exists in municipal technical divisions, with vacant posts not being filled;</li> <li>– Large water losses take place, which have been found not to be limited to the poorer areas. Unacceptably high water use has been found in formal areas as well;</li> <li>– There is a lack of community awareness which needs to be addressed. WC&amp;DM will work most effectively if there is a communal awareness of challenges and a mutual willingness to resolve them;</li> <li>– Reducing block tariffs apply in White River and Hazyview, contrary to</li> </ul>	

	<p>Departmental guidelines which require the opposite.</p> <p>Khumbu Moyo recommended that the formal guideline document on the matter <i>Retail Water and Sanitation Tariff Guidelines (May 2011)</i> be inspected by the WC&amp;DM study team;</p> <ul style="list-style-type: none"> <li> <b>Groundwater development</b> <p>DK gave a presentation on the options existing for groundwater as a reconciliation option. Large Dolomite areas exist in the upper reaches of the Crocodile River Catchment, suggesting some possibilities do exist for pursuing this. However, conventional wisdom suggests that there is strong correspondence between groundwater and baseflow when abstracting from Dolomites. The strong likelihood of ground water abstraction impacting on surface water resources urges caution.</p> <p>Johnny Beumer (JB) proposed that a dam could be constructed over the dolomite and used for groundwater recharge as an option. The effectiveness of such an option would depend on the connectivity of the dolomite.</p> <p>BJ noted the Stads River as an example of a river flowing strongly in the Winter, demonstrating the extent to which surface water in this area can be fed from groundwater.</p> <p>DK also noted large Dolomite areas to the South of Mbombela which, even though outside the direct study area, could also be investigated further. Satellite imagery and aerial photography allows faults to be identified, allowing targeting of areas of areas of possible local high yield.</p> <p>FG and BJ discussed boreholes in the White River Region. SM speculated that the ratio between surface water and groundwater in the White River area could be about half, meaning that half of groundwater abstracted, in effect, derives from surface water.</p> <p>FG voiced a concern that water intended for White River could be intercepted by small developments with private water provision from boreholes.</p> <p>BJ proposed that one could draw up a conceptual document for this, outside the auspices of the reconciliation study, to look at SW/GW interaction, for future use. This will assist also in DWA licensing in future.</p> <ul style="list-style-type: none"> <li> <b>Development of new schemes</b> <p>New schemes being considered for water augmentation include the construction of Montrose and/or Mountain View Dams.</p> </li> </ul> </li> </ul>	
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	<p>FG asked whether there are concrete plans to actually build Montrose or Mountain View Dams.</p> <p>NvW responded that the main hindrance to the construction is possibly a lack of capacity in DWA. However, if the Mbombela Recon Study were to recommend the construction of either or both of the dams, this would speed the process up.</p> <p>Mamogala Musekene (MM) asked whether DWA: NWRP has finalized issues surrounding Montrose/Mountain View, especially since the issue has been in the pipeline since the 1980s.</p> <p>NvW responded that one issue to be resolved before the matter can be finalised, is who the beneficiaries will be. Once this has been established, one can start thinking ahead about who will pay for the project. Treasury is increasingly unwilling to automatically fund large projects unless motivated well enough.</p> <p>For this reason, smaller projects like the single-purpose Boschjeskop Dam might be easier to push through the process. But strong political pressure will still need to be applied from the top.</p> <p>Furthermore, motivation for large projects should follow the right steps. Large, expensive dams can't be pushed through while other, potentially more feasible and less expensive options have not yet been exhausted. But, on the other hand, once a strategy is in place, and it proposes the construction of the dam, and other options have been exhausted, then it becomes an option.</p> <p>DK mentioned a report on the economic viability of Mountain View / Montrose Dam, commissioned by Crocodile River Major Irrigation Board not many years ago. He was hoping to obtain a copy but had not managed to.</p> <p>BJ suggested Dawie van Rooy, in his capacity as Chairman of the Board. He should have a copy. The study was commissioned by the IB and they are therefore the owners of the study.</p> <ul style="list-style-type: none"> <li>• <b>Changing of Operating Rules in the White River</b></li> </ul> <p>BJ added another reconciliation option. He proposed amending the operating rules of the White River system. This is an option in the White River where operation and management of the water resource appear to be less than rigorous.</p> <p>There is not enough information at present to improve on Ops &amp;</p>	
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	<p>Maintenance, but the thing that holds this option back is lack of information.</p> <p>The first priority would be to obtain the cadastral information before the water use in the White River Catchment can be validated.</p> <p>This reconciliation option is unlikely to save a large amount of water, but it will improve efficiency in a poorly managed tributary in the otherwise well-managed Crocodile River.</p> <ul style="list-style-type: none"> <li>• <b>Water trading</b></li> </ul> <p>JB suggested an alternative form of trading of irrigation water. Water could be saved in the agricultural sector by increasing irrigation efficiency. The water thus saved could be, and at present likely is, used to expand horizontally. The water that is saved could, on the other hand, be made available in a pool / on the market for trading.</p> <p>NvW suggested that this form of trading could be considered further as an alternative to compulsory licensing in the final report. He noted that there has already been thought to create an organisation of this nature in DWA, but without any entity to drive it, this has not, to date, been taken further.</p> <p>FG added that, with regards to water trading that Mbombela, as a standard condition when approving residential development/township establishment, requires existing water rights on the property(-ies) in question be surrendered to the Municipality. However, DWA is not issuing the licenses. It's not that they are declining the licenses. The licences are merely not being finalised.</p> <ul style="list-style-type: none"> <li>• <b>Recycling of water</b></li> </ul> <p>SM raised the option of interception of return flows for the sake of completeness, but noted that the option can not realistically be investigated further since return flows contribute to downstream flows and changing this would have downstream impacts.</p>	
<b>8</b>	<p><b>SSC MEMBERSHIP</b></p> <p>SM presented a draft list of Study Steering Committee membership to the meeting for discussion.</p> <p>Slight amendments were proposed, and the final list is appended to these minutes.</p> <p>FG mentioned the MEGA (Mpumalanga Economic Growth Agency), a new</p>	

	<p>government agency that will drive bulk water supply in the province.</p> <p><b>The meeting was unaware of the Agency’s role, but NvW agreed that, should they be politically significant, they should most certainly be invited to become involved. Tendai Sawunyama was requested to follow up on inviting them.</b></p>	TS
9	<p><b>STUDY PROGRAMME</b></p> <p>The study progress timeline is appended to these minutes.</p> <p>Certain tasks have been completed – Study Initiation (Task 2), Basic Information Gathering (Task 3) and the Inception Report (Task 4).</p> <p>Tasks 5 (Current and Future Water Requirements) and 6 (Water Resources) are well advanced.</p> <p>Other tasks are in progress.</p> <p>SM reported that Jon Rutherford did a site visit of various Irrigation Boards and consulted with Isak Fick (Sabie River IB), Andrew Rossaak (Sand River IB), Eric van Dyk (White Waters IB), Ronel Putter (Crocodile River MIB), Debbie Turner (White River Valley Conservation Board).</p> <p>FG asked whether emerging farmers were also going to be consulted.</p> <p>SM agreed that they would certainly be, since all irrigation in the Municipal footprint area is to be included and there is a scope for substantial increases in efficiency in emerging farmers’ water use. SM mentioned an example of sugar cane irrigation towards Malelane where emerging farmers use less efficient sprinklers. However, they don’t have the capital to change irrigation infrastructure, suggesting that outside intervention might be required to effect increases in efficiency.</p> <p>KM asked what the deliverable would be for such an irrigation efficiency investigation?</p> <p>SM cautioned that one should not expect anything like detailed volumes of potential savings, especially since a lot of the study’s large-scale irrigation</p>	

	<p>investigation will be done using older information. However, there will be a broader conceptual recommendation on the sort of options that could be considered in pursuing increased efficiency.</p> <p>BJ noted that Verification and Validation information might become available in time for this study. The electronic land cover has been finished by Mark Thompson and could be made available to the study.</p> <p>SM confirmed that such information could be useful for integration into the reconciliation study, if the information were to become available in a timely fashion and in a format compatible for integration into existing databases.</p>	
<b>10</b>	<p><b>FUTURE MEETINGS AND DATE OF NEXT MEETING</b></p> <p>The first SSC meeting was scheduled for Friday 31 May 2012.05.27 A practice-run to prepare for the meeting was scheduled on 25 May at 9AM.</p> <p>The 4<sup>th</sup> TSG Meeting was scheduled for 29 August, time and date to be confirmed.</p>	
<b>11</b>	<p><b>COMMUNICATION AND DISTRIBUTION OF INFORMATION</b></p> <p>NvW noted that the project has become listed on the DWA website and can be accessed at <a href="http://www.dwa.gov.za/Projects/WRAR/">http://www.dwa.gov.za/Projects/WRAR/</a></p> <p>No discussions added under this item.</p>	
<b>12</b>	<p><b>GENERAL</b></p> <p>No discussions added under this item</p>	
<b>13</b>	<p><b>DATE OF NEXT MEETING</b></p> <p>The 4<sup>th</sup> TSG Meeting was scheduled for 29 August, time and date to be confirmed.</p> <p>NvW thanked attendees for attending and closed the meeting as 13:20</p>	

**AGENDA FOR 16 MAY 2012****WATER REQUIREMENTS AND AVAILABILITY RECONCILIATION STRATEGY FOR  
THE MBOMBELA MUNICIPAL AREA****TECHNICAL SUPPORT GROUP**

Date: 16 May, 2012

Chair : Mr N Van Wyk

Time: 10:00

Venue: Aurecon, Nelspruit

*Meeting Objectives*

1. To review and discuss the presentations for the first Steering Committee Meeting scheduled for 31 May.
2. To present progress with the study

<b>Item</b>	<b>Agenda Point</b>	<b>Discussion Leader/Presenter</b>
1.	Opening and Welcome	N van Wyk
2.	Introduction of Attendees	
3.	Adoption of Agenda	
4.	Acceptance of the previous minutes	N van Wyk
5.	Matters arising from the previous minutes	N van Wyk
6.	Presentations for the Study Steering Committee	S Mallory and task leaders
7.	Progress report Preliminary assessment of the study area <ul style="list-style-type: none"> <li>- Grouping of urban centers</li> <li>- Water requirements</li> <li>- Water resources</li> <li>- Water balance</li> <li>- Possible reconciliation options</li> </ul>	S Mallory and task leaders
8.	SSC Membership	N van Wyk
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	



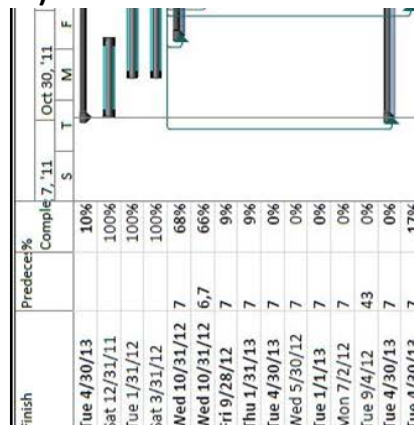
# ATTENDANCE REGISTER FOR 16 MAY 2012

Wed 16 May

NAME	INSTITUTION	TELEPHONE	G-MAIL	Notes
Khumbi Mayo	DWA: WUE	012 3368873	moyok@dwa.gov.za	
Dawie Kolesen	Aurecon	012 4273125	Dawie.Kolesen@aurcon.co.za	
Johnny Beumer	Aurecon	012 4273101	johnny.beumer@aurcon.co.za	
Marius Kolesen	ICMA	085 677 1806	kolesenm@inkomatiwa.co.za	
Tendai Scrwungama	IWR Water Resources	0766 280 240	tendai@waterresources.co.za	
Kennedy Mandlazi	DWA-NWRP	082 600 5644	mandlazi@dwg.gov.za	
Niel van Wyk	DWA NWRP		vanwyknl@dwa.gov.za	
Greer Graber	DWA: WRP	012 336 8691	graberg@dwa.gov.za	
Mangole Musoke	DWA: Mpumanga	013 759 7313	musokem@dwa.gov.za	
Brian Jackson	ICMA: WPP&P	0784577639	jacksonb@inkomatiwa.co.za	
Willem Wapelin	WRP Consulting	0834477999	willlemw@wrp.co.za	
Stephen Mallory	IWR Water Resources	083 4157223	stephen@waterresources.co.za	
FRANS GREYLING	MLM	082 7811048	fransg@mbombela.gov.za	
Lindani Nguobo	MLM	071 314 2386	lindani.nguobo@mbombela.gov.za	
Arthur Darglass	Sembcorp	083 2691435	arthur.darglass@sembcorp.com	
Coetzee Barnard	Sembcorp S. Illumin	083 2690934	coetzee.barnard@sembcorp.com	
Paul Oelendael	IWR	073 163 4074	paul@waterresources.co.za	

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## PROGRESS TIMELINE FOR THE STUDY (16 MAY 2012)



## FINAL SSC MEMBERSHIP

NAME	ORGANISATION
Solly Mabuda	DWA
Shane Naidoo	DWA
Peter Van Niekerk	DWA
Kobus Bester	DWA
Johan Van Rooyen	DWA
Kennedy Mandaza	DWA
Niel Van Wyk	DWA
Paul Herbst	DWA
Kkumbu Moyo	DWA:WUE
Geert Grobler	DWA
Moses Mahunonyane	DWA: Mpumalanga
David Maphothoma	DWA: Mpumalanga
Mamogala Musekene	DWA: Mpumalanga

NAME	ORGANISATION
Dumisani Nxumalo	ICMA
Marius Kolesky	ICMA
Pinkie Hermanus	Mbombela LM
Leon Hallat	Mbombela LM
Bertha Seloane	Mbombela LM
Zayd Boroko	Mbombela LM
Nhlanhla Khoza	Mbombela LM
Cathy Dlamini	Mbombela LM
Siboza Sigananda	Mbombela LM
Differ Mogale	MEGA
Dolphin Ntsose Malokela	Mbombela LM
Ester Radingwana	Bushbuckridge Water Board
Arthur Douglass	SembCorp:Silulumanzi

Johann van Aswegen	DWA: Mpumalanga
Amali Rashke	Provincial; Office of the Premier, Mpumalanga
Precious N Mpangane	Dept. of Agric. Rural Dev. & Land Admin
M Kgaphola	Dept. of Agric. Rural Dev. & Land Admin
Marius van Rooyen	Dept. of Agric. Rural Dev. & Land Admin
David Mahlobo	Representative nominated by Premier: Mpumalanga
Sam Nkosi	Land Affairs
Clement Maseko	Land Claims Commission
Frank Khumalo	Cooperative Governance and traditional affairs
Garth Batchelor	Enivronmental Affairs(MDALA: Environment)
Sandra Khumalo	Minerals and Energy
Sipho Singwane	CGTA
Derrick Ndlovu	SALGA
K.K Hlebeya	House of Traditional Leaders
V Dhlamini	Mpumalanga Provincial Government
Piet Du Toit	Ehlanzeni District Municipality
Frans Greyling	Mbombela LM
Brian Jackson	ICMA
Jabulani Maluleke	ICMA
Marcus Selepe	ICMA

Dawie van Rooy	Inkomati Irrigation Forum
Debbie Turner	WRVCB
Eric van Dyk	White Waters Irrigation Board
Isak Fick	Sabie Irrigation Board
Andrew Rossaak	Sand River Irrigation Board
Ronell Putter	Crocodile Major Irrigation Board
Thomas Gyedu-Ababio	SANPARKS - KNP
Andre Van Tonder	SAPPI
Mike Trebble	Forestry SA
Andre Beetge	SANBI/Working for Wetlands
Gavin Cowden	Mpumalanga Wetlands Forum
Francois Roux	MTPA (Mpumalanga Tourism)
Mervin Lotter	MTPA (Mpumalanga Tourism)
Johnny Beumer	Aurecon
Stephen Mallory	IWR Water Resources
Dawie Koekemoer	Aurecon
Werner Comrie	Aurecon
Tendai Sawunyama	IWR Water Resources
Eddie Riddell	UKZN
Kevin Rogers	Wits

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