

MINUTES

ITEM	DETAIL	ACTION	TIME
1	<p>Welcome and Introduction</p> <p>IT welcomed everybody and asked for a round of introduction. She then introduced the project by stating this is the 2nd contract of support to the Western Cape Water Supply Systems Steering Committee. The last contract ended in December 2011.</p> <p>The lead consultants for this appointment are Umvoto Africa with sub consultants WorleyParsons and others for specialist input. Umvoto has been involved in the preparation and maintenance support of the original Reconciliation Strategy as well as the Berg WAAS on groundwater aspects. DWA is trying to give groundwater the same weight as surface water.</p>		
2	<p>Attendance and Apologies</p> <p>The attendance at the meeting, as listed above, was noted in the attendance register. Apologies were noted (see above).</p>		
3	<p>Status of reconciliation strategy</p>		
3.1	<p>Recap of November 2011 Status Report</p> <p>KR gave a short overview of the findings from the last Status Report, submitted in November 2011. The Status Report highlighted high growth in water requirements and noted limited success in realising requirement reductions due to the implementation of water conservation and water demand management measures. Several studies recommended in the original Strategy for possible augmentation of the System are far behind schedule.</p> <p>Three reconciliation scenarios were considered; viz.</p> <ul style="list-style-type: none"> • Best-case scenario with 100% success of WC/WDM, • Medium scenario with 50% success of WC/WDM, and • Worst-case scenario taking climate change impacts into account. <p>The recommendation of the Status Report was that the next scheme must provide water into the system by 2019.</p> <p>IT stated that these scenarios need to be updated urgently to prepare and draft the Status Report for the next Steering Committee meeting, which should be scheduled for September. PR reported that provisional figures for the actual 2012/13 water use should be ready by early July.</p>	PR	July 2013
3.2	<p>Current state and use of dams</p> <p>BvZ reported about the current situation with respect to water availability in the System's dams, using the outcome of the real-time operation system. He noted that water users from municipalities and agriculture understand the curves produced for their planning. The decision date regarding possible restrictions is 1 November. Hence, the predictions of storage levels are forecasted based on the storage levels in the System's dams as on 1 Nov. IT noted that this is different for each system. Nationally, the hydrological year is from 1 October to 30 September. The modelling for the WCWSS is done from 1 November to 31 October. Other systems have 1 May or 1 July as their decision dates. This depends on how and for what purposes the systems are operated</p>		

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4.3	<p>existing marine pipeline from Koeberg, with the advantage of dilution when linking with return flows from Koeberg.</p> <p>PR concluded that they expected a report in April from ESKOM which has been delayed more than once. They now hope for a report by the end of June from ESKOM and the final report from WorleyParsons by December 2013.</p> <p>The design capacity of the plant will be 150 MI per day, with the possibility of upgrading it with a further two phases up to 450 MI per day, but they have to size the abstraction works for the final capacity. PF added that the use of the ESKOM site and marine infrastructure could result in possible savings of about a billion Rand for the City.</p> <p>PR and PF undertook to provide information and technical reports to the ATSG and PSP, once they become available.</p> <p>TMG Aquifer feasibility study</p> <p>PR stated that the TMG aquifer feasibility study comprises 4 phases. The exploratory phase has been concluded in 2012, but the City has encountered legal complications about how to proceed with the project and current appointment with conflicting legal opinion.</p> <p>The City intends to continue with the project and to proceed with the Pilot Phase. IT asked how long the Pilot Phase will take and how much water it will bring into the system. KR replied that the pilot well field is designed for 5 million m³/a and that he expects the pilot phase to run for 5 to 6 years.</p> <p>Depending on EIA requirements, it would take at least 2 to 3 years after approval before abstraction will start and one or two years of wellfield operation and abstraction to conclude the feasibility and yield assessments. He stated that the City would probably need an EIA for the bulk supply pipelines but not for drilling the pilot boreholes. It is not clear yet whether an EIA for the abstraction would be required. IT said a licence would be required for the abstraction, even if it is for test purposes.</p> <p>PR added that drilling will commence as soon as possible, as it is not seen as a listed activity. The EIA for the pipelines would start at the same time. The City is aware of the risk, as they might not get approval for the pipelines. PR confirmed that the City has allocated budget for this study.</p> <p>PR further reported that the City currently runs a baseline monitoring programme, which continues until the go ahead for the pilot phase is received, at which point the monitoring programme requirements will be updated and put out for tender again.</p> <p>KR suggested that MS and BZ should receive the latest monitoring report from PR and that they attend the next data workshop with the monitoring contractor and consultant.</p> <p>IT urged that the City must proceed with the study as soon as the legal aspects have been sorted out. PR undertook to report on this at the SSC meeting, also updating possible time lines to feed into the decision support system tool and the draft Status Report to the SSC.</p> <p>MS stated that horizontal drilling technology is now an option, which could avoid many problems. KR replied that this could be considered for a scheme implementation, but not for the pilot</p>	<p>PR / PF</p> <p>PR</p> <p>PR</p>	<p>Aug 2013</p> <p>Aug 2013</p>

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4.4	<p>project. The selected area is in the confined Peninsula Aquifer and close to the recharge area to be able to detect impacts and come up with operating rules. Secondly, none of the water drillers are currently equipped for horizontal drilling.</p> <p>CCT WC/WDM measures implemented and budget</p> <p>PR reported that the Water Demand Management Strategy has been updated by the WC/WDM section of the City, but he has only seen a draft version of report. PR revised his projection graphs, based on the preliminary savings indicated in the draft WDM Strategy report. The WDM Strategy, Programmes and Projects were revised up to 2020. The components of the draft WDM Strategy include the following:</p> <ul style="list-style-type: none"> • Align pressure management with pipe replacement programme. • Three (3) Year Education Awareness Programme. • Leak detection. • Increase current annual 7% use of treated effluent for irrigation purposes. • Invest in spring water use and possible re-use potential around Table Mountain. • Recycling wastewater of industries. <p>IT requested that PR to provide a copy of the draft WDM Strategy report to the PSP so that any changes can be brought into the decision support system and updated reconciliation.</p> <p>IT then asked how successful the City is at quantifying the savings, and whether they are measureable. She requested that this is addressed at the Steering Committee meeting, as the team needs to understand the efforts and resultant real effects. PF responded that the idea is to develop measurement systems, although it is not easy to measure direct savings, as external factors, such as weather and population growth also have an impact. IT emphasised the need to understand the measurements, as planning cannot be done without reliable figures. There is an enormous budget allocated (R100 million per year) to implement water conservation measures, and the successes or real savings need to be quantified to determine if the investment is justified.</p> <p>IT stated that there are only a few takers for non-potable water in Cape Town due to the type and size of industries. PE has users for all their treated effluent, mainly in the automotive industry. CoCT should make a real effort during the Re-use feasibility Study to identify potential new users of treated effluent.</p> <p>PR reported that the latest figures indicate a decrease in system input and consumption of potable water in 2011/2012. There was a growth in consumption in 2005 after restrictions were lifted. The current data for 2012/2013 (after 11 months) indicate a further decline in system input, but an increase in water sales data. If this is confirmed, the decline in consumption in the past two years could mean a possible delay for the need to implement a new scheme by at least two years. The latest data (2012/2013) will be put into the system planning tool to update the reconciliation scenarios, once available. IT stressed that the information up to end June be supplied to KR as soon as possible that drafting of the Status report and feeding into the DST can be done as soon as possible.</p>	<p>PR</p> <p>PF</p> <p>PR / KR</p>	<p>July 2013</p> <p>Aug 2013</p> <p>Aug 2013</p>

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	<p>IT asked to get the current graphs for internal discussions. PR undertook to send these to IT.</p> <p>PF clarified that, although the system input (treated water) decreases, sales are increasing. Hence, the proportion of unaccounted for water and losses is decreasing.</p> <p>FF asked about the possibility of using groundwater or treated wastewater for irrigation. IT stated that the maintenance of public parks in the CoCT is being shifted to using groundwater for irrigation. This kind of use could represent the drop in use or unaccounted for water. The water now being used in some places is effluent or groundwater and does not come from the system. There is a need to look at trends to clarify these issues. Water usage per Category Codes for the CoCT will be made available to Umvoto and WorleyParsons by PR for analysis. Differentiation between winter and summer water use should also be analysed.</p> <p>Anton Sparks of Aurecon also gave detailed analyses on the City water usage trends in the past, which can be used. KR will email Anton and cc IT.</p> <p>A full presentation is required at the SCC meeting on the water usage trends of the City by PR and KR to update the decision support tool accordingly.</p>	<p>PR</p> <p>PR, JH</p> <p>KR</p> <p>PR</p>	<p>Jun 2013</p> <p>Aug 2013</p> <p>Jul 2013</p> <p>Aug 2013</p>
4.5	<p>Cape Flats and Newlands aquifers feasibility study</p> <p>PR stated that the City is currently busy with a study on the springs around Table Mountain.</p> <p>PR stated that it is becoming more unlikely that the City will be able to use the Cape Flats or Newlands aquifers as part of the scheme. The feasibility for utilizing the Cape Flats Aquifer for storage of treated effluent is part of the water re-use feasibility study. However, the City does not plan to undertake a feasibility study to investigate the potential of the Cape Flats for augmenting the supply. It will only be investigated up to Pre-Feasibility level as part of the water re-use study.</p> <p>FF suggested that the scope of a Cape Flats feasibility study may need to change to look at the possibility to develop it and also to investigate the water quality. If quality is a real problem, different uses of the water may need to be looked at, e.g. non-potable use for industries or for irrigation if suitable.</p> <p>KR added that the water is already there, the aquifer is overflowing. But the effective use of the Cape Flats aquifer in summer could be a counter measure against flooding, making storage available for the winter rains, reducing the flood risks. There is a need to look at the Cape Flats aquifer in an integrated way, not just as a potential source for the City.</p>	<p>PR/FF/MS</p>	
4.6	<p>Lourens River Dam feasibility study</p> <p>PR stated that the Lourens River Dam should rather be called a 'diversion' than a dam. The proposed scheme is a weir with an earth off-channel dam. Water quality in the river has been a problem and is hard to control. The area for the earth dam that was identified previously has become part of a housing development. Hence, it is becoming more unlikely that the City will be able to develop the scheme as part of the System augmentation possibilities.</p>		

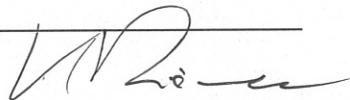
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5.5	<p>running constantly with the decision tool currently situated in the PE offices of NWRIM Southern Operations, with the operator Pieter Retief as the contact person. However, one person running the system is not sustainable in the long-term. The forecasting is the more important part, as it relates to restrictions and planning. The monthly reports will be automated.</p> <p>Others</p> <p>IT asked about any other current or recent projects that might be of interest for or impacting on the System and the reconciliation study.</p> <p>KR reported that a current WRC project is developing a framework and methodology for determining the economics of groundwater resources development and utilization, which may be of interest in the future and should be used in the TMG Aquifer study.</p> <p>PF reported that the WRC has commissioned two studies on water re-use:</p> <ol style="list-style-type: none"> 1) Monitoring and Management of Water Quality in Municipalities' WWTWs. 2) Social impacts of water re-use for potable standard, etc. <p>He still needs to find out what the defining differences are, as they will gather much of the same data and information. Will feed this back to KR.</p> <p>FF and MS will also provide feedback on WRC projects, so that the team can prepare a list of relevant projects of interest to the study and stakeholders.</p> <p>KR will also liaise with the WRC to identify possible relevant projects. IT requested that a short overview of relevant studies be given in future at the SCC meetings (2 minutes).</p> <p>PR reported that there is a big development planned close to Atlantis, called WESCAPE, for 800 000 people and many amenities. PF added that the service departments of the City are opposing this development. IT said that they would probably need water to be supplied from seawater desalination for this and that the Technical Support Team needs to understand where the future growth in the City will take place, to ensure we can do our water resources planning and development in time. The proponents of this development as well as the provincial IDP manager need to be invited to give a presentation at the next SSC meeting.</p> <p>JP reported that the study on operating rules for stand-alone dams in the Western Cape was completed. The final reports are available for 40 Dams in the Eastern Cape and Western Cape.</p> <p>KR stated that the All Towns Reconciliation Strategy Study includes towns that are either fully or partially supplied by WC WSS, or tap into the same resources for their water supply. The implications, forecasts and recommendations from one study will be taken into account in the other and vice versa.</p> <p>Other projects include the West Coast Desalination plant at Saldanha. The feasibility study is done under RBIG. The PSP team needs to ensure that the figures for the West Coast System and the WCWSS are aligned.</p>	<p>PF</p> <p>FF, MS</p> <p>KR</p> <p>PF</p> <p>KR</p> <p>KR</p>	<p>Jul 2013</p> <p>Jul 2013</p> <p>Jul/Aug 2013</p> <p>Aug 2013</p>

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6	Structure of Steering Committee		
6.1	Membership of organisations and institutions KR suggested that the representation on the Steering Committee in terms of organisations should not change from previous SSC meetings. However, it is important to ensure that the people listed are still the right contact people. This was agreed upon.		
6.2	KR undertook to send out the current list asking for confirmation or updating of contact details. This would include a request to add anyone else who needs to be involved. Date of next SSC The date for next SSC meeting was agreed as: <ul style="list-style-type: none"> • 28 August 2013 at 09am. Venue will be the DWA Boardroom, Spectrum building, 2 nd floor. About 25 people are expected.	KR	Jul 2013
7	Next meeting of ATSG and Closure		
	The date for the next ATSG meeting was agreed as: <ul style="list-style-type: none"> • 5 September 2013, 08:30 for 09:00. PR asked that the invitation is sent out as meeting invitation from Outlook, and that documents are sent as normal e-mail attachment, separate from meeting requests.	PSP	

SIGNATURE ORIGINATOR:

UMVOTO AFRICA

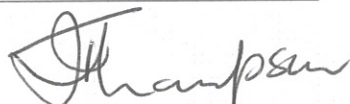
DATE SIGNED:


5/9/2013

SIGNATURE DEPARTMENT OF WATER AFFAIRS:

Directorate: National Water
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DATE SIGNED:


5/9/2013

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