



Directorate: National Water Resource Planning

KWAZULU-NATAL COASTAL METROPOLITAN AREA WATER SUPPLY SYSTEM

Minutes of the Strategy Steering Committee (SSC) for the Implementation and Maintenance of the Reconciliation Strategy for the KwaZulu-Natal Coastal Metropolitan Area Water Supply System

First meeting of the SSC, Thursday, 2 September 2010 at the Durban Jewish Club

		Notes / Actions
1.	<p>WELCOME AND INTRODUCTION OF MEMBERS</p> <p>Mr Peter van Niekerk from the Department of Water Affairs (DWA) welcomed everyone at the inaugural meeting of the Strategy Steering Committee (SSC) for the KwaZulu-Natal Coastal Metropolitan Area Water Supply System.</p>	
2.	<p>ATTENDANCE AND APOLOGIES</p> <p>All attendants introduced themselves. Appendix 1 to the minutes is an attendance register of all who have attended.</p> <p><u>Apologies received:</u></p> <ul style="list-style-type: none"> • Mr Neil McLeod, eThekweni Metro • Ms Marilyn Govender, Sugar Association South Africa (SASA) 	Appendix 1 – Attendance register
3.	<p>ACCEPTANCE OF AGENDA</p> <p>The draft agenda, which was circulated to all invitees prior to the meeting, was accepted with one addition: 6.5.1 Rainwater Harvesting Network</p>	
4.	<p>BACKGROUND TO THE STUDY AND SUMMARY OF THE RECONCILIATION STRATEGY</p> <p>Mr Niel van Wyk, from DWA presented the background to the study and a summary of the Reconciliation Strategy for the KwaZulu-Natal (KZN) Coastal Metropolitan Areas. In his presentation he highlighted the following:</p> <ul style="list-style-type: none"> • Water resources and supply areas; • Importance of the KZN Metropolitan Area; • Background to the development of the Reconciliation Strategy; • The need for maintenance of the Reconciliation Strategy; • The strategic actions as recommended in the Reconciliation Strategy; • The planned activities for the maintenance of the Reconciliation Strategy. <p>In conclusion he said the KZN Metropolitan Coastal areas are facing serious water shortages and the water supply system is running at a very high risk. He cautioned all that water should be used very efficiently.</p>	Appendix 2 - Presentation

5.	DRAFT TERMS OF REFERENCE AND MEMBERSHIP	
5.1	Strategy Steering Committee (SSC)	Appendix 3 – TOR of the SSC
	<p>Mr Johan van Rooyen from DWA presented the draft Terms of Reference (TOR) of the SSC. (The document was emailed to all prior to the meeting and also handed out at the meeting.)</p>	
	<p>Mr Van Rooyen said the Reconciliation Strategy has to be updated, maintained and implemented and it is the purpose of the SSC to ensure that there is enough water. He added that the SSC does not have executive powers however it makes recommendations to the DWA, Umgeni Water and all involved municipalities. He said the implementation of the Strategy is everyone’s responsibility. The SSC has three main tasks:</p>	
	<ul style="list-style-type: none"> • Implementation of the Reconciliation Strategy; • Updating of the Strategy and keeping it relevant; • Communicating about the Strategy to decision-makers and the public so that they can understand why for example Water Conservation and Water Demand Management is so critically important. 	All members to provide comments on the TOR of the SSC
	<p>He requested that comments and inputs to finalise the TOR be sent to the project team so that the document can be approved at the next meeting.</p>	
	Discussion:	
	<p>i. Mr Bryan Ashe from Geosphere KZN asked how the members of the SSC were chosen. Mr Van Rooyen responded that roleplayers from the three government spheres and relevant sectors of society are presented. He added that the SSC has a similar composition as the Study Steering Committee which was established for the development of the Reconciliation Strategy.</p>	SSC
	<p>ii. Mr Van Rooyen recommended that the Trans Caledon Transfer Authority (TCTA) and a representative from the DWA Infrastructure Branch be added to the membership list.</p>	
	<p>iii. Ms Di Jones from the Dolphin Coast Conservation and WESSA asked whether any of the Catchment Management Forums are operational and if so, whether they should not become members of the SSC. Mr Thys Badenhorst from DWA KZN Regional Office will look into the status of the Catchment Management Forums and report to Mr Van Wyk.</p>	DWA KZN
	<p>iv. Ms Dudu Khumalo from Umzinyathi asked if two more members from her NGO may join the SSC. Mr Van Rooyen responded that membership to the SSC will be limited to one principal member per organisation; however members are welcome to bring along observers to the meeting.</p>	SSC
	<p>v. Mr Ashe suggested that the DWA should consider reporting back from the SSC to certain sectors, for example, after the SSC meeting, the DWA can meet specifically with civil society to provide feedback.</p>	
5.2	Technical Support Group (TSG)	
	<p>Mr Van Rooyen presented the Draft TOR of the TSG and said background work has to be done for the SSC to be supported. He said a team of consultants were appointed to assist with the implementation of the recommendations of the Reconciliation Strategy. Other members include the DWA, Umgeni Water, the University of KwaZulu-Natal and relevant municipalities.</p>	Appendix 3 – TOR of TSG
	<p>Comments on both TORs can be sent to Anelle Lötter for incorporation.</p>	ALL SSC members
6.	UPDATE ON PROGRESS ON THE IMPLEMENTATION OF THE MAIN RECOMMENDATIONS OF THE RECONCILIATION STRATEGY	
6.1	INFRASTRUCTURE DEVELOPMENT PROJECTS	
6.1.1	Spring Grove Dam	Appendix 2 - Presentation

Mr Kobus Bester from the DWA presented the background to and progress made with regards to the proposed construction of the Spring Grove Dam. His presentation highlighted the following:

- Need for the proposed project and the TCTA was appointed by the DWA to implement the scheme.
- Construction of the dam is proposed to start January 2011 with the projected water delivery in 2013.
- There is an appeal on the associated pipeline and the Minister of Justice is to decide on the appeal. One Environmental Impact Assessment (EIA) was done for the proposed dam and associated pipeline, thus proposed construction is on hold until the Minister of Justice responded to the appeal.
- The funding arrangement for the proposed project has to be secured.

Discussion:

- i. Ms Anne Bindoff from Sappi asked what was appealed? Mr Bester responded that stakeholders appealed against the pipeline to be constructed on their properties.
- ii. Ms Angela Masefield from the DWA KZN Regional Office asked why a delay is experienced in the securing of funds. Mr Bester responded that back-to-back agreements between the DWA, eThekweni and Umgeni Water have to be signed before funds can be sourced by the TCTA. Mr Steve Gillham from Umgeni Water said that progress was made with the agreements in such a way that the tender documents for the construction of the dam have been handed out. He said that the finalisation of the construction of the dam is planned for 2012 with water delivery in April 2013.
- iii. Mr Ashe said the DWA should learn from the report by the World Commission of Dams in terms of capacity building and consultation with communities. He added that it is not too late to consult with the appellants. Mr Van Niekerk responded that the EIA for the dam and pipeline was done so long ago that the environmental authorisation for the proposed project had to be re-issued.
- iv. Mr Badenhorst said the construction of the Spring Grove Dam and its associated pipeline is critically important. He said this project has to be implemented with the same urgency as was the building of soccer stadia for the World Cup Soccer 2010.
- v. Ms Anne Bindoff asked what the implication is if the pipeline not being constructed. Mr Van Rooyen said the project will still be able to deliver two-thirds of the proposed water; however participants all agreed that it was not good enough. Mr Van Rooyen responded to say that all has to be done to stick to the time frames. Mr Badenhorst asked if risk has been taken into the picture – he said risk must be balanced – has anyone done the calculations to determine what the risk will be if the dam is not constructed in time. It will pose a huge risk to the local economy, food security and growth of the area. Mr Gillham said political intervention is necessary, especially to the Minister of Justice who has to respond to the appeal that was lodged.
- vi. Mr Amar Sooklal from the Durban Business Chamber asked whether the Minister of Justice has been made aware of the importance of his expected response and the timeline associated with that. He also asked what level of lobbying has taken place. Mr Van Niekerk said the urgency has to be communicated to the Department of Water Affairs so that they can take it up with the Ministry of Justice.
- vii. Mr Badenhorst said DWA's core function is to make available water for growth and development. The DWA's representatives should take the message to their structures that the DWA has to deliver on its mandate. Mr Van Rooyen said we cannot just rely on the DWA, outside pressure is necessary and members of the SSC representing all sectors of society should work together to provide the necessary pressure.
- viii. Mr Bill Pfaff from eThekweni Metro said it is not true that we have feasible solutions (as mentioned in the back ground presentation provided by Mr Van Wyk) if we do not deliver on our mandate in time.

DWA

	<p>ix. On this point, several suggestions were made, however the following was decided as the follow-up actions: A progress report on this study will be compiled and distributed to all members. Members will have to feed this report into their representative organisations for responses (this may take any form, e.g. a letter from provincial department to the KZN Premier). A news release will be compiled to communicate the urgency of the situation and be released to the media. The Minister of Water Affairs will be approached to sign a letter that will be sent to all members communicating the urgency of the water situation in the KZN Metropolitan area.</p>	<p>Study Team and DWA</p>
<p>6.1.2</p>	<p>Hazelmere Dam</p> <p>Mr Bester presented the background to and progress made with regards to the proposed raising of the Hazelmere Dam. His presentation highlighted the following:</p> <ul style="list-style-type: none"> • The storage capacity of the dam has been reduced by sedimentation with the corresponding reduction of the yield. • The raising of the dam will be done by the installing radial gates. • According to the programme the gates should be installed by 2012. <p>Discussion:</p> <p>i. Mr Van Rooyen asked in terms of the original planning, when was the raising of the dam to be completed? Mr Bester responded that it should have been completed in 2010, however a reduction in water use was experienced in the Mgeni system, and the critical need for water will be in 2012 when the raising of dam wall is proposed to be completed. Mr Gillham added that the need for water was supplied from the Mdloti system, therefore the reduction of water in the Mgeni system. He said that the amount is approximately 9 megalitres per day – not a lot of water in the Mgeni context.</p> <p>ii. Ms Jones asked why the dam cannot be desilted. Mr Bester responded that sediments can be seen as toxic and the question is where to dump such toxic waste. He added that the matter was addressed in the Final Environmental Impact Report and that desilting is very expensive. Mr Van Wyk added that desilting of the dam will remain an option for the future; however the question is whether desilting is viable right now. Mr Ashe said that money can be made from the silt and the option should not be dispelled, but kept as a future strategic plan.</p>	<p>Appendix 2 - Presentation</p>
<p>6.1.3</p>	<p>North Coast bi-directional pipeline II</p> <p>Mr Gillham presented the background and progress made with regards to the construction of the North Coast pipeline from Honolulu to Mvoti. His presentation highlighted the following:</p> <ul style="list-style-type: none"> • Background to and nature of the pipeline and the area it will service. • The pipeline is under construction and progress is at 70%. • The target completion date is December 2010. 	<p>Appendix 2 - Presentation</p>
<p>6.2</p>	<p>WATER CONSERVATION AND WATER DEMAND MANAGEMENT</p>	
<p>6.2.1</p>	<p>eThekwini Metro</p> <p>Mr Simon Scruton from eThekwini Metro presented an overview of the 2010/2011 initiatives from their Non-Revenue Water Branch. His presentation highlighted the following:</p> <ul style="list-style-type: none"> • Statistics from the Metro. • Background to the directive issued to the Metro from National Government that water losses should be no more than 18%. • The Metro's ten-year predictions of implementing water conservation and water demand management versus not implementing. • Objectives of the eThekwini Metro plan to reduce water losses and targeted figures. • Description of the interventions implemented by the Metro and expected trends. • Lessons learnt and the way forward. 	<p>Appendix 2 - Presentation</p>

Discussion:

- i. Mr Ashe said the Metro has an amnesty programme for residential use and asked whether it will be introduced for commercial users as well. Mr Scruton responded that commercial use is monitored and the Metro has found that people do at their businesses what they do at their homes. He said the Metro experience very high water losses under communities in poor areas that could be ascribed to, amongst other, a culture of non-payment.
- ii. Mr Van Rooyen asked whether eThekweni's water figures have been captured in the projected 2010 water demands that were discussed earlier. Mr Gillham responded positively.
- iii. Mr Scruton said the social side of water conservation and water demand management is challenging as it is an unknown factor. He added that the Metro does not allow disconnections. Mr Van Niekerk responded that non-payment and illegal water use is a country-wide problem. Mr Paul Herbst of DWA mentioned that his directorate has tried to make the Minister of Water Affairs aware of the serious problem of illegal connections; however she has not yet mentioned the challenge thus far.
- iv. Mr Speedy Moodliar from eThekwini said the water demand in the presented graphic is based on a year to year prediction, however he said large proposed developments such as the Dube Tradeport, etc is not being calculated for. Mr Van Rooyen responded that the demand was calculated with all involved at the time when the Reconciliation Strategy was developed. Part of the updating and maintenance of the Strategy is to ensure that the future water requirements are also updated. He added that the team of consultants will do that and report on that at the next SSC meeting in March 2011.
- v. Mr Ashe stressed the importance of social interventions with communities when water conservation and water demand management are rolled out.
- vi. Mr Badenhorst said the initiative by the Metro and all other municipalities implementing water conservation and demand management is to be applauded. He cautioned participants to look at the volumes of water saved and not just at the percentages.
- vii. Mr Sooklal said eThekwini should look at all their operational systems and save money where possible. It said the optimal functioning of their systems will save them the money they now spend on water conservation and demand management.
- viii. The social risk factor in water conservation and water demand management was further debated and it was added that standard maintenance work on water pipelines and systems are not being done due to the lack of capacity. Mr Scruton said a line has to be drawn somewhere with regards to being lenient towards illegal water use and non-payment.

Study Team

6.2.1 Ilembe municipality

Mr Garth Dobie presented a report to the meeting that contains Ilembe's five year plan to address water conservation and water demand management. The plan is that in its first year of implementation. Ilembe municipality will implement many of the same measures as was mentioned by eThekwini, such a leak detection, pressure management and repairs. They have a specific drive to check that all meters are on the database to reduce levels of non-revenue for services rendered. An improvement from 31% to 19% has been made through the implementation of pressure management and levels of non-revenue water have reduced from 49% to 26% since the database has been updated.

He added that the implementation plan is monitored and measured each month. The municipality is also replacing some of its main water pipelines such as the line from Kwadukuza to Mandini and Zinkwazi.

Monitoring of reservoir outlets to monitor night flows are underway as well as the detection of valves. He mentioned that leakages on private properties pose challenges as it is a legal matter

that the council faces.

Discussion:

- i. Mr Ashe asked whether a social intervention programme has commenced. Mr Dobie responded that the municipality does have a social programme but that the matter should receive more attention in the next four years of implementing the Strategy.

6.3 FEASIBILITY STUDIES

6.3.1 Lower Thukela Bulk Water supply Scheme

Mr Gillham presented an overview on the progress made thus far with the feasibility study on the Lower Thukela Bulk Water Supply Scheme. His presentation highlighted the following:

- A consultant was appointed in June 2009 to undertake a detailed feasibility study of and a preliminary design for the proposed scheme.
- A description of the proposed scheme and possible sites and points for abstraction.
- The development of a river model and an abstraction works model.
- Different water treatment options and infrastructure.
- Progress made with the Environmental Authorisation.
- Actions required towards further progress and the proposed way forward in order to commence with construction of the proposed scheme by late 2011.

Discussion:

- i. Ms Jones asked if an on-stream or off-stream dam is being planned. Mr Gillham responded that the dam will be equal to the size of a small farm dam to retain a day's storage.
- ii. Mr Ashe asked whether Umgeni Water is looking into renewable energy options as part of the design. Mr Gillham responded that large pressure differences are required for such options to be considered and the project does not pose potential for that.

6.3.2 Mgeni System: Large Scale Desalination Plant

Mr Gillham presented an overview on the progress made with the pre-feasibility investigation into a possible seawater desalination plant on the East coast. His presentation highlighted the following:

- At a pre-feasibility level of detail the proposed desalination option is technically and environmentally feasible and the study can be extended to a feasibility study to investigate further details towards the implementation of the most acceptable option.
- Several workshops were held with, amongst other, experts from Australia and local roleplayers towards the selection of possible sites,
- Information on the criteria of site identification process.
- Proposed steps on the way forward which includes completing of the site selection process, appointment of consultants for the feasibility study and environmental assessments and conducting of a detailed costing and economic analysis.

Discussion:

- i. Mr Van Rooyen asked when the desalination scheme will be in place. Mr Gillham responded that after the feasibility study is completed, another 3 to 5 years will be needed until it will deliver its first fresh water.
- ii. Mr Ashe asked whether the current study allows for the identification of sites for future development of desalination plants. Mr Gillham responded that 9ha of land is required for a plant and that the purchasing of the land will be required to secure potential sites for the future.
- iii. Mr Van Rooyen asked that the programme for the desalination plant be moved forward. Mr Gillham added that messages should be communicated that costs of water will

Appendix 2 -
Presentation

Appendix 2 -
Presentation

increase dramatically. Mr Bester added that one should keep in mind that the cost of water restrictions is also very high.

6.3.3 Mkomazi River Transfer Scheme and Mvoti River Development Projects

Appendix 2 -
Presentation

Mr Bester presented an overview of the progress with the Mkomazi and Mvoti Water Projects. His presentation highlighted the following:

- Previous studies indicated that the iSithundu Dam site is the preferred site for development of the Mvoti project to augment water supply to the KZN North Coast.
- The TOR is being prepared and it is anticipated that the feasibility studies for the Mvoti River project will start by August 2011.
- The TOR for the feasibility studies to address the technical aspects of the raw and potable water supply aspects of the Mkomazi scheme and the EIA has to be compiled by the DWA and Umgeni Water (potable water).
- The feasibility studies have to commence by early 2011.

6.3.4 Utilisation of Treated Effluent

Appendix 2 -
Presentation

Mr Rob Hounscome from Golder Associates Africa presented an overview of the study on the utilisation of re-using treated sewage effluent that is undertaken by eThekweni Metro. His presentation highlighted the following points:

- The study has progressed to phase four which is the development of the implementation plan for the go forward option which is direct re-use.
- The treated sewage effluent from the KwaMashu, Phoenix and Northern waste water treatment works will be collected and treated to a potable standard before pumping into the northern aqueduct.
- The EIA for the project will start early in 2011.
- Public perception of direct re-use remains a challenge.

Discussion:

- i. Mr Jan Potgieter from the Department of Agriculture, Forestry and Fisheries (DAFF) asked if the same technology can be applied for a desalination plant and a re-use treating plant. Mr Hounscome responded that the volumes to be treated, social challenges and electricity demands are different.
- ii. Mr Ashe cautioned that proper social consultation should take place and cannot happen after the matter. Ms Jones added that social interventions have commenced and said options to augment water supply is urgent.

6.4 INSTITUTIONAL ARRANGEMENTS

6.4.1 System Operation Management Forum

Appendix 2 –
presentation

Mr Van Rooyen said there is a need for a committee to function on an operational level to manage risks. He referred to a slide showing the possible risks of curtailments which shows there is a 75% risk that the area will have level one water restrictions by May 2011.

The DWA wants to call a meeting with all water service authorities and providers to discuss water restrictions. Such a committee has worked very well in other parts of the country, allowing different sector representatives to voice their concerns.

Discussion:

- i. Mr Potgieter supported such a meeting and added that the agricultural sector has to have at least a warning of possible restrictions a season before it is implemented. Ms Bindoff added that such a committee should also work on a strategy as to how to best inform the public of possible water restrictions.
- ii. Mr Gillham said that the establishment of such a committee has been in the pipeline for a while and that a date should be decided on for such a meeting.

	<p>iii. Mr Badenhorst will contact all roleplayers to set up a meeting before the end of September 2010.</p>	DWA Regional Office
<p>6.4.2 Water Savings Forum</p>	<p>Mr Van Wyk noted that in the development of the Reconciliation Strategy it was discussed and noted as a recommendation that a Water Savings Forum be established.</p> <p>Mr Herbst reported on a meeting that took place between KZN municipal officials and water conservation and water demand management officials. Municipalities have asked that another forum should not be established.</p> <p>The discussion was concluded that the KZN Regional Office will take the responsibility to establish which are all the existing relevant forums that could include water conservation and water demand management on their agenda. This matter has to be concluded before the next meeting of the SSC.</p> <p>Mr Ashe mentioned that civil society and business should be involved in such a forum and mentioned that renewable energy forum exists and could potentially be used.</p> <p>Mr Ashe mentioned that environmental sustainability should be kept in mind as environmental protection is important for future generations.</p>	DWA Regional Office
<p>6.5 OTHER ELEMENTS OF THE STRATEGY</p>		
<p>6.5.1 Rain Water Harvesting</p>	<p>Mr Ashe reported that a South African Rainwater Harvesting Forum was recently established and that a report on the topic is being compiled that will share lesson learnt and best practices.</p>	
<p>6.5.2 Climate Change</p>	<p>Mr Gillham reported that Umgeni Water has done a study on climate change and the predictions show that some increased yield in the Umgeni Water operational area may be expected. He offered to present more details on the report at the next SSC meeting.</p>	
<p>6.5.3 Committee on Illegal Connections</p>	<p>Mr Herbst reported that the DWA has a committee that investigates illegal water connections. The committee is driven by the Water Services Branch in the DWA. He offered to ensure that the committee present a report on their investigations at the next SSC meeting.</p>	DWA:WC/WDM
<p>7. ACTION TO SUPPORT THE IMPLEMENTATION OF THE STRATEGY</p>	<p>Mr Van Rooyen said a progress report will be compiled and send to members of the SSC within a week of the meeting. All members will be asked for their comments. Comments will be incorporated from where the report will again be distributed to all members to communicate within their organisations. Mr Van Rooyen reiterated the importance of communicating on the progress made and said the work of the SSC will be null and void if SSC members do not take the information shared at meetings to the decision makers in their organisations.</p> <p>Members suggested that the report should state that the water situation in the area is critical and that water restrictions will be effected.</p> <p>Mr Van Niekerk said in other water management areas, the DWA had to put pressure on municipal councils to accept the Reconciliation Strategy and asked whether it is required in this case. Ms Masefield said in her opinion it is necessary as the attendance of municipalities at the SSC meeting is not satisfactory. It was concluded that the Minister of DWA will compile a letter to be sent out with the progress report urging all roleplayers to become actively involved in the management of water in the area.</p>	<p>Study Team, DWA, All SSC members</p> <p>Study Team, DWA, All SSC members</p>
<p>8. COMMUNICATION</p>	<p>A press release will be finalised and distributed with the progress report to all members of the</p>	

SSC for their inputs and comments. After comments have been incorporated the press release will be issued on behalf of the SSC. Members reiterated that the press release should communicate clearly about the critical water situation and that restrictions are likely to be implemented.

9. GENERAL

Mr Ashe said the World Commission on Dams celebrated their tenth year and that in all developments cognisance should be taken of the guidelines prepared by the commission. Mr Ashe offered to present a report on the guidelines at the next SSC meeting.

10. WAY FORWARD

Mr Van Rooyen said the SSC will meet twice a year – one meeting will be dedicated to receive progress on the implementation of the Reconciliation Strategy and the second meeting will be used for the updating of the Strategy.

The Study Team will update the Strategy within the next six months. A meeting will be held with the Technical Support Group early in 2011 to review the draft update of the Reconciliation Strategy before the information is presented to the SSC.

11. DATE OF NEXT MEETING AND CLOSURE

All members were thanked for their participation.
The next meeting is scheduled for 10 March 2011.