

# Support to the Continuation of the Reconciliation Strategy of the KwaZulu-Natal Coast Metropolitan Area: Phase 2

### Minutes of the Strategy Steering Committee Meeting No. 6

Wednesday, 24 July 2014, 10h00 – 15h00 Durban Jewish Centre, Durban North

ITEM ACTION

#### 1. WELCOME

#### 1.1 Introductory Remarks from the Study Leader

Mr Niel van Wyk, Project Manager for the Reconciliation Strategy of the KwaZulu-Natal Coast Metropolitan Area: Phase 2 welcomed everyone to the Strategy Steering Committee (SSC) Meeting 6.

He stated that the Strategy had been inactive for more than a year and that the Department of Water and Sanitation (DWS) has appointed a new team, AECOM to continue with Phase 2 of the Support to the Continuation of the Reconciliation Strategy of the KwaZulu-Natal Coast Metropolitan Area. He requested Mr Ashley Starkey, KZN Regional Office Operational Head, to welcome SSC members.

### 1.2 Welcoming Remarks from the KZN Regional Office

Mr Ashley Starkey, Chief Director, DWS (KZN Region) welcomed all members meeting and added the following key remarks:

- (a) He emphasised the importance of regional stakeholders and indicated that he was encouraged by seeing so many representatives at the SSC Meeting.
- (b) He made reference to the importance of dealing with issues that are pertinent to the KZN region. One of these relates to water quality issues. The Marathon World Canoeing Championships will be hosted at Camps Drift on the Msunduzi River in 2017; this event requires close collaboration with Msunduzi and the Umgungundlovu District Municipalities (DMs) to ensure that water quality issues are addressed well in time for this major international event.
- (c) He indicated that everyone should have a copy of the National Water Resources Strategy 2 (NWRS2). If not, he suggested that his office, through Ms Angela Masefield, should make arrangements to make copies available to all SSC members. It is a blueprint for our country and it encompasses everything that the Department does and will do in the coming years.

Angela Masefield

#### 1.3 Introduction of Chairperson and Commencement of SSC Meeting 6 Proceedings

Mr van Wyk introduced the Chairperson of the SSC, Mr Livhuwani Mabuda, Chief Director, Integrated Water Resources Planning (IWRP), DWS, and requested that he lead the proceedings.

Mr Mabuda welcomed representatives from various sectors and organisations. He again mentioned the time lapse since the previous phase of the study and said that he hoped this would not negatively impact of the Strategy. He also noted the recent Departmental name change to Water and Sanitation, which is important in terms of understanding its mandate. He then requested that everyone introduce themselves.

# 2. ATTENDANCE & APOLOGIES

### 2.1 Attendance

The following SSC members were in attendance (listed alphabetically according to surname):

No.	Name	Organisation
1	Mr Bryan Ashe	GeoSphere
2	Mr Kobus Bester	Department of Water & Sanitation
3	Prof Chris Buckley	University of KwaZulu-Natal
4	Ms Lungile Cele	Ugu District Municipality
5	Mr Gerald de Jager	AECOM
6	Mrs Nicolette Forbes	Marine and Estuarine Research
7	Mr Steve Gillham	Umgeni Water
8	Dr Marilyn Govender	South African Sugar Association
9	Mr Mike Greatwood	Msunduzi Local Municipality
10	Mr Paul Herbst	Department of Water & Sanitation
11	Ms Hope Joseph	eThekwini Metropolitan Municipality
12	Mr Neo Leburu	Department of Water & Sanitation
13	Mr Livhuwani Mabuda	Department of Water & Sanitation
14	Ms Noluthando Magewu	KZN Dept of Cooperative Governance and Traditional Affairs
15	Mrs Manisha Maharaj	Department of Water & Sanitation
16	Ms Khuthalile Mahlaba	KZN Dept of Cooperative Governance and Traditional Affairs
17	Mr Notha Maphumulo	iLembe District Municipality
18	Ms Angela Masefield	Department of Water & Sanitation
19	Mr Kevin Meier	Umgeni Water
20	Ms Salona Moodley	Department of Water & Sanitation
21	Ms Khumbuzile Moyo	Department of Water & Sanitation
22	Mr Ednick Msweli	eThekwini Metropolitan Municipality
23	Dr Beason Mwaka	Department of Water & Sanitation
24	Ms Shane Naidoo	Department of Water & Sanitation
25	Mr Bright Nkontwana	South African Local Government Association
26	Ms Celiwe Ntuli	Department of Water & Sanitation
27	Ms Sphephile Nzimande	South African Sugar Association
28	Mr Bill Pfaff	eThekwini Metropolitan Municipality
29	Ms Hermien Pieterse	AECOM
30	Ms Renelle Karen Pillay	Department of Water & Sanitation
31	Mr Jonathan Schroder	AECOM
32	Mr Simon Scruton	eThekwini Metropolitan Municipality
33	Ms Bongi Shinga	AECOM Team

34	Mr Ashley Starkey	Department of Water & Sanitation
35	Ms Bhavna Soni	eThekwini Metropolitan Municipality
36	Dr Johan van der Walt	Ugu District Municipality
37	Mr Niel van Wyk	Department of Water & Sanitation
38	Mr Norman Ward	Department of Water & Sanitation

### 2.2 Apologies

The following apologies were received:

No.	Name	Organisation
1	Mr Yakeen Atwaru	Department of Water & Sanitation
2	Ms Zimkitha Peteni-Kave	Department of Water & Sanitation
3	Mr Tendani Nditwani	Department of Water & Sanitation
4	Mr Speedy Moodliar	eThekwini Metropolitan Municipality
5	Mr R Bartholomew	Msunduzi Local Municipality
6	Mrs Anne Bindoff	SAPPI
7	Mr Trevor Cowie	Msunduzi Local Municipality
8	Mr Kurt Fortuin	Department of Water & Sanitation
9	Mr Johan Fourie	Department of Water & Sanitation
10	Ms Mary Jean-Gabriel	Dept of Agriculture, Forestry and Fisheries
11	Mr Geert Grobler	Department of Water & Sanitation
12	Mr Haroon Karodia	Dept of Agriculture and Environmental Affairs, KZN
13	Ms Sandy La Marque	KwaZulu-Natal Agricultural Union
14	Mr Mahlodi Tau	South African National Biodiversity Institute
15	Mr Jaap Kroon	Department of Water & Sanitation
16	Mr Rod Bulman	CoastWatch - KZN

#### 3. Purpose of the Strategy Steering Committee

The Chairperson outlined the purpose of the SSC as follows:

- To **monitor and facilitate** implementation of the recommendations of the *KwaZulu-Natal Coast Metropolitan Area Reconciliation Strategy*.
- To **update** the Strategy so that it remains relevant.
- To **make recommendations** to the responsible authorities on interventions to be studied or implemented.
- To ensure the Strategy, its recommendations and progress with implementation are appropriately communicated to major stakeholders and to interested and/or affected parties.

#### **Questions:**

Mr Nkontwana asked about the frequency of the SSC meetings.

**Response**: Mr Mabuda stated that the SSC typically meets biannually to allow for meaningful progress on the Strategy between meetings and for the various role players to reflect on implementation. This enables meaningful discussions at the meetings.

Mr van Wyk added that the SSC is not the only form of communication for the Strategy. There is also a Technical Support Group (TSG) which meets as and when required. The TSG ensures that technical issues related to the implementation and update of the Strategy are discussed and taken forward.

#### 4. APPROVAL OF THE AGENDA

Chair

Mr Ashe suggested points that need to be dealt with in the next SSC meeting, namely:

- Interim feedback from the KZN Regional Office.
- A presentation on the NWRS2.
- A presentation and discussion on fracking.

Chair

Mr van Wyk suggested that Ms Shinga and Mr Ashe communicate regarding items that need to be included on the agenda for the next meeting.

BSh & BA

#### 5. MINUTES OF PREVIOUS MEETING

#### 5.1 Minutes of Previous Meeting

Mr van Wyk indicated that minutes had been distributed to all SSC members and are regarded as read. He then requested that the minutes be accepted, and that if there are any matters outstanding or issues that need to be addressed, the Secretariat should be notified.

#### 5.2 Actions arising from previous Meeting Minutes

Mr De Jager identified two key items for Umgeni Water to report on, which relate to the Lower Thukela Bulk Water Supply Scheme (LTBWSS).

#### (a) EIA authorisation to be provided to Mr Ashe

Mr Ashe had requested a copy of the EA authorisation for the scheme.

Response: This information will be provided to Mr Ashe by Umgeni Water.

#### (b) Usage of renewable energy

Steve Gillham

Mr Ashe had requested that Umgeni Water investigates the use of renewable energy to provide power for the scheme.

**Response**: Mr Meier explained that Umgeni Water has considered renewable energy but the site is not suitable and production not substantive. Umgeni Water is looking at the Mooi-Mgeni Transfer Scheme (MMTS) to generate renewable energy that will offset against other energy uses.

#### 6. STATUS AND REVIEW OF STRATEGY

Mr van Wyk gave a presentation on the Status and Review of the Strategy. His presentation covered the following information:

- Background to the study.
- Characteristics of the study area.
- Overview of the reconciliation process.
- Aims of the study.
- Current and future interventions identified.

#### Comments:

No comments were received.

#### 7. **UPDATE ON RECONCILIATION SCENARIOS**

Mr Schroder presented an update on the reconciliation scenarios. He covered the following:

- Water requirement projections.
- Intervention options.
  - Updated interventions list and target dates from Phase 1 of the study.
  - Other actions and impacts identified under Phase 2 of the study.
- Updated water balances for the (i) combined Mvoti-Mdloti; (ii) South Coast; and (iii) Mgeni Water Supply Systems (WSSs).

The following comments were raised:

- Mr Ward noted that the water balance shows a deficit. He suggested that the deficit be a) expressed as a percentage of total water balance as this provides a better feel for the magnitude of the risk. He also warned that if one talks of a major risk in could impact negatively on investor confidence. He suggested that, for future presentations, the assurance of supply is also shown.
- b) Mr Ward also asked about the assumptions that have been taken into account in terms of arriving at the risk.

Response: Mr Schroder explained that assumptions are based on high water assurance for users. Therefore, the assumptions are based on the user assurance criteria profile.

Mr van Wyk suggested that the study team unpacks the assurance of supply criteria table and undertakes a sensitivity analyses on the impact of the selected criteria. He also indicated that there is no mention of Water Conservation and Water Demand Management (WC/WDM) because, to an extent, this is already included in the water requirement projection used.

The Chairperson requested that an overview of the assumptions be presented at the next Jonathan SSC meeting.

Schroder

Mr Meier also commented on the South Coast water requirements for 2019. He mentioned c) that the South Coast is not restricted in terms of water resources but rather by water infrastructure. Within this context he requested that the South Coast is included in the Strategy and potential sources of water investigated in detail.

Study Team

Mr Ashe suggested that rainfall harvesting be factored into the system and be shown in the future water balance graphs. He referred to a research study by the Water Research Commission (WRC) and also that Umkhanyakude DM is promoting efficient use of water by providing tanks at a household level.

Study Team

- d) Mr Pfaff stated that if Phase 1 of the uMkhomazi Water Project (uMWP1) can be commissioned by 2023 as shown, other options such as desalination and re-use may not be feasible. However if the target date is not realistic than these options may have to be considered as short-term measures, despite the potentially high costs.
- Mr Pfaff also mentioned that Spring Grove Dam resulted in a tariff increase of 40 c/kl. The Livhuwani impact of uMWP1 is expected to be even higher and that, therefore, the possibility should Mabuda be considered of phasing in the new tariff as soon as possible to address this.

Response: These comments were noted for further consideration and investigation, Study Team where applicable.

- f) Mr Greatwood indicated that the balances do not account for the impact of possible future increased levels of pollution. He is concerned about the pollution upstream of Inanda Dam will ultimately also result in tariff increases, so it is important to address this issue before it becomes a serious problem.
- Ms Masefield commented by saying it is important to contextualise the different g) components of the tariff so that one can establish where one should be trying to save costs. It is also important to understand the assumptions that have been taken into account for the reduction in South Coast water supply (refer Water Balance slide 2 of 3).
- h) Dr van der Walt stated that if one considers the figures for the South Coast area, there is a much greater need for the Ugu DM to have discussions with Umgeni Water.
- Dr Mwaka indicated that information on WC/WDM initiatives should be included in the i) balances explicitly so the impacts can be assessed. He also indicated that it is important to factor in climate change impacts.

Response: Mr van Wyk agreed but also pointed out that climate change would be presented under Item 9 "Coordination with other studies". Furthermore, Catchment Care Initiatives, which highlight work that is being done in partnership with South African Biodiversity Institute (SANBI) will be presented.

#### 8. STATUS OF OTHER ACTIONS AND INTERVENTIONS

#### **Department of Water and Sanitation** 8.1

#### 8.1.1 Mooi Mgeni Transfer Scheme Phase 2A and 2B

Mr Bester gave a brief presentation on the Mooi-Mgeni Transfer Scheme (MMTS). He indicated that Phase 2A is complete and Spring Grove Dam is currently about 83% full. Phase 2B, which is the construction of the transfer pipeline and pump station, is due to be completed towards the middle of next year (August 2015).

a) Mr Starkey pointed out that if Phase 2B of MMTS is delayed, it will have an impact on the Mgeni water balance.

Response: Mr Meier responded by saying that this is more of a short-term risk issue that can be managed. The Chairperson indicated that Umgeni Water will provide feedback will be dealt with under Section 8.2.2 of the Agenda (North Coast Pipeline and Hazelmere Dam Infrastructure).

b) Mr Ashe asked about resettlement issues at Spring Grove Dam. He asked if the residents of the affected households are still being rented accommodation or have permanently relocated. He mentioned that resettlement is one of the cornerstones of the World Commission on Dams. He made an appeal to DWS that, in the case of uMWP1 (Smithfield Dam) or any other future schemes, resettlement should be a priority and the resettlement issues experienced at Spring Grove Dam should be avoided.

**Response**: Mr Bester explained that the residents of the affected households are still renting accommodation. There were issues associated with the municipality, which have now been resolved and construction of houses will commence. He reaffirmed that it is extremely important that affected communities are resettled in time and in line with the standards specified by the World Commission on Dams. He also acknowledged that it has been a challenging process but TCTA is documenting the process to ensure that the situation is not repeated on future DWS projects.

c) Mr Starkey requested that the team notes that there is illegal sand mining in the Mooi River as it will have an impact on water resources and results in the destruction of aquatic and riparian habitats through large changes in the water channel. He indicated that the KZN Regional Office has attended to one of the issues and they picked up that it is one of the local farmers who is responsible.

### 8.1.2 <u>Hazelmere Dam raising</u>

Mr Bester gave a brief presentation on the planned raising of Hazelmere Dam.

#### Comments:

No comments were received.

#### **8.1.3** <u>uMkhomazi Water Project (uMWP)</u>

Ms Pieterse presented an overview of the uMWP.

The following is a summary of the comments raised and discussed following the presentation:

(a) Mr Ashe noted that there is no reference to social issues.

**Response**: Ms Pieterse indicated that an Environmental Impact Assessment (EIA) is in progress and the social issues are being dealt with in that process. She encouraged Mr Ashe to register as an Interested and Affected Party to ensure that he is updated on the progress of the study.

Mr Bester said that he will pass on Mr Ashe's details to the EIA team, Nemai Consulting.

Kobus Bester

Ms Forbes raised her concerns on the environmental and social impacts of the uMkhomazi River and the proposed Smithfield Dam in view of the fact that the uMkhomazi Estuary offers significant ecological and environmental services. She added that she is aware that Ms Shane Naidoo is busy with the Classification Study for the Mvoti to Umzimkulu WMA, which includes the uMkhomazi.

One of these concerns is that sediments are not being investigated as part of the Classification study and that Smithfield Dam may have a significant impact on the environment. She requested more clarity on the scope of the EIA and added that her team at Marine and Estuarine Research could provide data for the estuarine system.

**Response**: Ms Bester suggested that when the specialist studies commence, issues such as the deposition of sediment into the estuary will be investigated. He added that the Draft Scoping Report is available for public review and that SSC members are welcome to attend public meetings planned for the period 5 to 7 August 2014.

Classification Study team to include sediments for the uMkhomazi (b) Mr Gillham pointed out that Smithfield Dam is at least seven times the size in terms of capital cost of the recently completed Spring Grove Dam. Therefore, given the scale of the project, the activities that are required for the Decision Support Phase need to be initiated much earlier with consideration of lessons learnt at Spring Grove Dam, to avoid missing the specified timeframes. The key role players need to address this as a matter of urgency.

Response: The Chairperson supported Mr Gillham's suggestion and indicated that it is clear that the uMWP is going to be one of the biggest projects in the country; as such, it is important to start engaging from a point of acknowledging that the uMWP is going to happen. Mr Bester agreed and stressed the fact that the uMWP will be a fast-tracked Livhuwani project.

Mabuda

Mr Ashe informed the SSC that he will be circulating electronic copies of the document (c) World Commission on Dams - The South African Initiative. The document has been signed by Minister Bulelwa Sonjica as a set of South African guidelines and should be considered in all such processes.

Bryan Ashe

(d) Ms Mahlaba alerted the team to the social aspects of the dam, specifically the households that will be affected and the opportunities for job creation. She mentioned these as they are key issues that politicians will focus on.

Response: Ms Pieterse explained that there are 11 households that have been identified thus far which will be relocated as they are within the dam basin. Social aspects relating to impacts on households are also being handled as part of the EIA and a Resettlement Action Plan will be developed. Job creation has been raised at all the EIA meetings and is also being dealt with as part of the EIA investigations as part of the socio-economic study. All information and EIA technical reports is available on the DWS website.

#### 8.2 **Umgeni Water**

Mr Kevin Meier briefly discussed the Master Plan and the Umgeni Water Operations. These included the following:

- Umgeni Water Master Planning.
- Lower Thukela Bulk Water Supply Scheme (LTBWSS).
- North Coast pipeline and Hazelmere Dam infrastructure upgrades.
- Lower uMkhomazi Feasibility Study.
- Desalination.

#### Comments:

(a) Mr Bester asked if the desalination plant could be designed to handle a greater capacity. He also pointed out that questions were raised at the EIA public meetings regarding the greater cost of desalination compare to uMWP.

Response: Mr Meier explained that the main concern with increasing the capacity of the desalination plant is getting the water to where it is needed. The majority of the water targeted users are in the centre of Durban centre and surrounding areas. While it is possible to build a 400Ml/d plant, the infrastructure required for transferring the water does not exist and its construction through Durban would be extremely difficult as a tunnel would be required. Furthermore, desalination involves treating water at sea level, so it would result in exorbitant pumping costs.

Mr Maphumulo raised concerns about government planning in general and pointed out that, concurrently with the planning of uMWP, which will cost roughly R12 billion, a number of other schemes are also being considered such as desalination plants, the Lower Thukela Scheme, at a cost of R2.3 billion and the raising of Hazelmere Dam, at R1.3 billion. He suggested that it would be preferable to focus on uMWP, rather than a multitude of schemes that will have financial implications for the various municipalities and ultimately result in tariff increases.

He added that government has many plans that cannot be implemented due to the unavailability of water. He stressed the importance that planned developments are aligned with the National Development Plan (NDP) and with consideration of the anticipated growth in water requirements as a basis for evaluating their feasibility. He is convinced that desalination plants are not an option for South Africa.

Response: Mr Meier explained that the feasibility study for the desalination plant showed a cost of about R 9/kl, including capital and operational costs, while current indications are that the uMWP will result in a tariff increase of R2.40 across the entire Umgeni Water area of supply. However, the cost of desalination should rather be compared to that of the proposed Lower uMkhomazi Scheme (Ngwadini Dam) and the most favourable option selected from these. Umgeni Water is currently in the process of undertaking a feasibility study for the Lower uMkhomazi which will provide estimates of associated base costs. He added, however, that desalination can also be implemented quicker than, say the uMWP, and that this may also influence the decision on the implementation the next scheme.

(b) The Chairperson requested that Mr van Wyk comment on the requests to discard all other smaller options and focus on the bigger uMWP.

Mr van Wyk explained that comparing options is the main reason for undertaking a Reconciliation Strategy. The Strategy considers options in a structured way so they may be compare decisions can be made in an informed way. To date, the Strategy has identified, prioritised and confirmed the essential interventions to meet growing water requirements in the area for the next 25 years. The Strategy therefore represents a master plan in which the iLembe DM is participating.

He said that to the uninitiated it may sound confusing at first, but a lot of background/technical work is being done to support decision making. It is important for DWS to be transparent about planning; hence, communicating with the SSC. The issues raised are more related to communication and it will be necessary to find a way of communicating with stakeholders and decision makers. He added that the technical team must be thorough in undertaking studies with consideration of financial, social and environmental impacts.

- (c) The Chairperson stated that based on the discussions, the following can be concluded:
  - The uMWP is required.
  - The Lower Thukela Bulk Water Supply Scheme is required.
  - If the uMWP is constructed, the desalination would not be required on the North Coast.
  - In the South Coast supply area, it is likely that either desalination or the Lower uMkhomazi scheme will be developed, depending on the outcome of the Umgeni Water feasibility study.
- (d) Mr Herbst agreed but added that the Strategy should emphasise the WC/WDM is a key ongoing intervention.

(e) The Chairperson requested that iLembe DM are invited to participate in the next TSG meetings to enhance their understanding of the development process and objectives of the Strategy.

**Response:** Mr van Wyk agreed and added that the SSC meeting will lead to various interactions.

Niel van Wyk

(f) Ms Cele enquired about the extent of the South Coast Pipeline (SCP) and the volume of water that it could potentially supply to Ugu DM, particularly if the Umtwalume system becomes over-allocated.

**Response:** Mr Meier explained that as part of Umgeni Water's 5-year Capex roll out, they have allowed for the construction of a pipeline to the Umtwalume area. Ultimately, the system will be extended to Hibberdene, but as part of further phases of the project. Mr Gillham added, however, that this will only be possible after the development of either the Lower uMkhomazi scheme or desalination on the South Coast.

(g) Ms Cele added that South Coast system is currently under tremendous completely strain.

**Response:** Mr Meier confirmed that Umgeni Water is aware of the problem and that the South Coast Phase 2B pipeline is currently under design. They expect construction to commence shortly and that the pipeline will be commissioned by the end of 2015.

(h) Ms Cele also asked about the Mhlabashana project. She understands that there is a 2 Ml/day plant running and there are further phases which include a 6 Ml/day plant.

**Response:** Mr Meier explained the Mhlabashana project is now complete. However, the scheme has a limited yield and Umgeni Water has now commissioned a feasibility study to investigate the possibility of abstracting water from the Umzimkulu River and pumping it to the Umzimkulu Water Treatment Plant.

He added that Umgeni Water is investigating another project with COGTA for universal access to water throughout the KwaZulu-Natal province. They are looking at investigating the status, where people still do not have access to water and where people do not have sufficient water. Thereafter, a water supply plan will be developed for each municipality. He pointed out, however, that this is will be a large undertaking at extremely high cost.

(i) Ms Masefield confirmed that, as a province, KZN is currently in a water deficit situation. The All Towns Study reports on 165 systems and 60% are in a negative balance. The Reconciliation Strategy discussed at this SSC meeting is concerned with only approximately five of these systems.

#### 8.3 Relevant Water Service Authorities

#### 8.3.1 eThekwini Metro

(a) Direct Reuse of Sewage Effluent to Potable Water

Mr Bill Pfaff made a presentation on the direct reuse of sewage effluent to potable water.

#### Comments:

Mr Nkontwana indicated that it is important for DWS to educate the public about direct reuse, especially in view of the shortage of water resources in the province. Education will promote a common understanding as to why options such as reuse have to be considered.

#### (b) Water Conservation and Water Demand Management (WC/WDM)

Mr Simon Scruton provided an update on WC/WDM initiatives that are implemented by the eThekwini Metro.

#### Comments:

No comments were raised after Mr Scruton's presentation.

#### 8.3.2 Other WSAs

The Chairperson requested that the PSP liaises with all the DMs to ensure that they provide an update of their initiatives, etc. at the next SSC meeting. It was noted that all WSAs will be expected to present at future SSC meetings, including:

- Umgungundlovu District Municipality.
- Umzinyathi District Municipality.
- · iLembe District Municipality.
- Harry Gwala District Municipality.
- Ugu District Municipality.

#### Comments:

Mr Greatwood pointed out that Msunduzi Local Municipality is a WSA in its own right (it is not incorporated into the Umgungundlovu DM) and requested that they are included on the list of WSAs and be given an opportunity to present at future SSC meetings.

Response: The Chairperson requested that the PSP takes note of this and makes the necessary contact with the appropriate WSAs.

Bongi Shinga

#### 9. INSTITUTIONAL ARRANGEMENTS

#### 9.1 System Operation Management Forum

Ms Celiwe Ntuli provided feedback on the meeting they held with the Umngeni System Operation's Forum which looks at the current situation of the water resources, particularly dealing with the water supply system.

#### Comments:

No comments were raised after Ms Ntuli's presentation.

### 9.2 Water Committee/Savings Forum

Mr Michael Singh provided feedback on the Water Committees/Savings Forum in the KZN Region, particularly in the Mgeni System.

#### Comments:

No comments were raised after Mr Singh's presentation.

#### 10. COORDINATION WITH OTHER STUDIES

#### 10.1 Previous and Current Studies

#### 10.1.1 Classification of Water Resources in the Mvoti to Umzimkulu WMA

Ms Shane Naidoo presented an update on the Classification of Water Resources and Determination of the Comprehensive Reserve and Resource Quality Objectives in the Mvoti to Umzimkulu Water Management Area.

#### Comments:

No comments were raised after Ms Naidoo's presentation.

#### 10.1.2 uMngeni Ecological Infrastructure Partnership (UEIP)

Ms Angela Masefield provided feedback on the uMngeni Ecological Infrastructure Partnership (UEIP). Copies of this presentation were also provided in the meeting packs of all SSC members for reference.

#### Comments:

Mr Ashe stated that the SSC needs to start looking at these initiatives more carefully. The biodiversity, conservation and rehabilitation issues are important as part of water resource management. He then suggested that an item be included in the agenda of all upcoming SSC meetings to update members on any case studies that are being undertaken.

**Response:** The Chairperson suggested that the PSP takes note of this suggestion for future SSC meetings.

Gerald de Jager

#### 10.1.3 Climate change

Mr Gerald de Jager provided feedback on factoring Climate Change impacts on planning.

#### Comments:

(a) Mr Singh commented that climate change is one of the most important aspects to consider in the Strategy. He further noted that historical hydro-meteorological data sets are generally used as a basis for stochastic modelling, but do not account for possible future changes in the magnitude, variability and seasonality.

**Response:** Mr de Jager agreed but indicated that the results shown in the presentation were based on research aimed specifically at capturing these changes in the stochastic analyses undertaken. He added that, for the purpose of accounting for climate change in the Strategy, the team will make use of existing information from previous studies which will be intelligently assessed and interpreted before it is applied.

(b) Mr Ashe asked if local research on climate change undertaken by the University of KwaZulu-Natal (UKZN) had been taken into account.

**Response:** Mr de Jager confirmed that this was the case and indicated that the results presented were based on research undertaken in partnership with Prof Roland Schulze of the UKZN and Mark Summerton of Umgeni Water.

Mr van Wyk stated that the last two presentations on the UEIP and climate change covered issues not considered previously in the Strategy. However, there are many studies and initiatives related to these issues, which will be monitored, regularly reported on and used to enhance the various scenarios depicted in the Strategy.

#### 10.2 Possible Future Studies

### 10.2.1 Upper Thukela Catchment

Mr van Wyk reported that the Thukela River catchment is currently fully-allocated, but due to the full allocation not being utilised yet the assurance of supply is high. Further allocations in the Thukela will lead to over-allocation. It is therefore important to (i) ensure that the Lower Thukela Bulk Water Supply Scheme is able to supply target water volumes as planned; and (ii) assess the available mechanisms for operating Spring Grove Dam, which is located on a tributary of the Thukela River, after the implementation of the uMWP. He indicated that the possibility could be considered of releasing water from Spring Grove Dam to the lower Thukela for supply into the northern parts of the targeted water supply area. However, whether this is a viable option, how it compares to other options and how much it will cost are issues that have yet to be investigated in this Strategy.

#### 10.2.2 Mvoti Catchment

Future developments as part of options analysis have already been covered as part of the discussions.

#### 11. COMMUNICATION

#### 11.1 Confirmation of SSC Members

Ms Shinga indicated that an SSC list has been circulated to all SSC members. Members were requested to review the list and provide feedback on the representatives who should be participating in the SSC.

Bongi Shinga

#### 11.2 Status Report

Mr van Wyk explained that a Status Report (referred to in the previous phase as a "Progress Report") will be compiled based on this SSC meeting and will be circulated to all members for comment. He added that the Status Report is a short, concise document that summarises the project and *status quo* of the Strategy. Once comments have been received and incorporated the document will be submitted to DWS for final approval.

#### 11.3 Media Release

Mr van Wyk explained that after every SSC meeting, a Press Release is drafted, circulated to SSC member for comment and then, following the Department's procedures, made available to mainstream media for publication.

#### 12. IMPLEMENTATION OF STRATEGY AND WAY FORWARD

Mr van Wyk summarised the way forward and highlighted the following key points:

- Water requirement projections for the upper Mgeni and Mvoti/Mdloti systems must be updated.
- The impact of WC/WDM measures must be revised with consideration of initiatives by WSAs.
- A decision must be taken on whether to pursue either the Lower uMkhomazi scheme or desalination for the South Coast, based on unit water cost.
- The uMWP1 appears to be the most favourable option for meeting expected water needs in the long-term.
- The implications of a short-term deficit must be assessed from a risk perspective.
- The list of interventions and implementation dates must be updated and maintained.
- Responsible parties must continue planning and implementation according to the list of

interventions.

- DWS must consider proceeding with studies into the possible development of the Upper Thukela and Mvoti catchments.
- The gathering of information on possible climate change and catchment care impacts must be continued and considered in the Strategy.
- Interaction and support between the Strategy and the UEIP must be maintained.
- Collaboration between studies and cooperative governance must be maintained.

#### Comments:

- (a) Mr Ashe requested the following items to be added to the above:
  - Rain water harvesting.
  - Some form of public consultation feedback session, since the Strategy had been inactive for a considerable period of time

Response: These items were noted for inclusion.

Bongi Shinga

(b) Mr Pfaff reemphasised the importance of the 2023 target date for the implementation of the uMWP1 (Smithfield Dam) and suggested that it is listed as a separate item for discussion to ensure full understanding of how this goal can be achieved.

**Response:** Mr van Wyk agreed and added that specific discussions in this regard must be initiated with DWS Options Analysis. He noted that the Chairperson Mr Mabuda, in his capacity as the IWRP Chief Director, is well placed to prioritise these discussions to ensure that the 2023 deadline is met and all necessary support required for the Decision Phase is in place.

Livhuwani Mabuda

#### 13. DATE FOR NEXT SSC MEETING

Mr van Wyk indicated that Bongi Shinga will liaise and communicate with the SSC members regarding dates of upcoming meetings.

- The next TSG Meeting will be in 3 months time.
- The next SSC Meeting will be in 6 months time.

Bongi Shinga

#### 14. CLOSING COMMENTS FROM SSC MEMBERS

The Chairperson gave an opportunity to SSC members to share any further comments they would like to make before closing SSC Meeting 6. The following are the remarks received:

- (a) Mr Gillham stated that he is pleased that the study is continuing. It is an important study and it carries a lot of weight. He also complimented the presence of many representatives at the SSC meeting and was encouraged by the levels of participation. He indicated that he is comparing Phase 2 with the levels of participation from Phase 1. In terms of what is being done, he feels that the study is still moving in the right direction, introducing a lot of exciting developments. He added that the presentations were balanced and, although many complex technical aspects were covered, it did provide a good overview of the situation in KZN. He then thanked DWS for the progress to date and for its continued support of the Strategy.
- (b) Mr Pfaff emphasised the importance of public consultation. He supported Mr Ashe's request for public feedback. He also suggested that the study team needs to encourage more representatives from conservation bodies, such as WESSA, to participate.

Bongi Shinga

(c) Dr Mwaka commented on the structuring of the Agenda. He requested that perhaps for future meetings the study team should consider to first present all interventions and thereafter provide an update on the Strategy.

Gerald de Jager

#### 15. CLOSURE

Mr Mabuda mentioned that earlier on there was a comment about aligning the Reconciliation Strategy to the NDP. He reminded all SSC members to note that all these strategies are interlinked, including the NWRS, National Government Priorities, National Spatial Development Framework, etc. If necessary, these linkages can be clarified at future SSC meetings so that it is more widely understood.

Mr Mabuda then thanked all SSC members and closed the meeting.

# **Annexure A: Attendance Register**

Section 2.1 of the minutes provides a list of attendees. A copy of the signed attendance register can be provided upon request.

# **Annexure B: Presentations**

Due to the file size of presentations, they will be provided upon request.