



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Directorate: National Water Resource Planning

CROCODILE WEST WATER SUPPLY SYSTEM

Minutes of the Strategy Steering Committee (SSC) for the Implementation and Maintenance of the Reconciliation Strategy for the Crocodile West Water Supply System

First meeting of the SSC, Thursday, 29 July 2010 at Mount Amanzi, Hartbeespoort

		Notes / Actions
1.	<p>WELCOME AND INTRODUCTION OF MEMBERS</p> <p>Mr Johan van Rooyen, Department of Water Affairs (DWA) welcomed everyone at the First Strategy Steering Committee Meeting. He tendered an apology for Mr Solly Mabuda, Chief Director: Integrated Water Resource Planning for being unable to attend the meeting.</p> <p>In his introductory remarks, Mr Van Rooyen mentioned that Reconciliation Strategies for most of the large water supply systems and metropolitan areas in the country have been completed. The main objective of the Reconciliation Strategies being done in the country is to ensure well in advance thorough planning and eventually implement the most appropriate solutions to ensure the availability of adequate water supplies of the right quality.</p> <p>The Reconciliation Strategy for the Crocodile West Water Supply System was completed in the 2008/09 financial year. This meeting marks the establishment of the Strategy Steering Committee (SSC) for the Maintenance and Implementation of the Reconciliation Strategy.</p> <p>He further explained that information used for the compilation of a reconciliation strategy, such as water availability and water requirements, changes over time. In this study it is important to monitor the information that was used in the Reconciliation Strategy and update it to ensure the Strategy remains relevant. This is an ongoing planning process that will ensure there is sufficient water available in future.</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">• Ms Marie Brisley, Mr Rens Botha, Mr Petrus Venter, all DWA officials from the North West province apologised due to a Portfolio Committee visit to the province.• Andries Meyer from Sasol.• Solly Mabuda: Department Water Affairs Planning.	Appendix 1 – attendance register

3. OBJECTIVES OF THE MEETING AND ACCEPTANCE OF AGENDA

Mr Johan van Rooyen presented the objectives of the meeting as follows:

- To establish a SSC for the Maintenance and Implementation of the Reconciliation Strategy for the Crocodile West Water Supply System.
- To review the draft Terms of Reference for the SSC and receive inputs from members to finalise the document.
- To review a summary of the Reconciliation Strategy to remind all members of the recommendations for implementation.
- To receive updates on progress made from the team on work done thus far in terms of the implementation of the Reconciliation Strategy.
- To receive inputs from members of the SSC in guiding the proposed next steps.

The draft agenda, which was circulated to all invitees prior to the meeting, was accepted.

4. BACKGROUND TO THE RECONCILIATION STRATEGY

Mr Tendani Nditwani the study manager from the DWA presented a background to the development of the Reconciliation Strategy for the Crocodile West Water Supply System. In his presentation he highlighted the following:

- Key characteristics of the study area.
- Objectives of the study.
- Water requirements, resources and quality in the study area.
- Water balance of the Crocodile West River Water supply system including the Mokolo Dam.
- Key factors influencing the strategy.
- Recommendations of the Reconciliation Strategy.

Discussion:

- Ms Lerato Bapela from the DWA asked if any provision is made to update stakeholders and ordinary citizens on the information presented and on the proposed updates of the Strategy. Mr van Rooyen responded that one of the tasks of the SSC members is to report back to their constituents and the people they represent. He added that existing structures should be used to communicate information to all in the study area. He added that the DWA will publish relevant information on the DWA web site and that an annual newsletter will be compiled and distributed to stakeholders in the study area to keep them updated on progress made.
- Mr Fred van Zyl from the DWA mentioned that the study area is already dependent on return flows to meet the demands of the users. The proposed new developments at Lephalale (Eskom and Sasol developments) have been taken into consideration. He cautioned that workable monitoring systems on Local and District Municipal level should be in place to ensure updated and continuous information to make the right management decisions. Mr Nditwani added that a Systems Operation Forum will be established between representatives of water users to meet regularly to monitor available water versus demand, water quality as well as the operating rules of the systems.

5. DRAFT TERMS OF REFERENCE AND MEMBERSHIP OF THE SSC

Mr Johan Van Rooyen 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.

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. (See Appendix 3)

Appendix 2 -
presentation

All members to
provide
comments on
the TOR of the
SSC

	<p>The following were identified to be the organisations to constitute the SSC:</p> <ul style="list-style-type: none"> • All Water Services Authorities in the study area. • Traditional Leaders or the Department of Cooperative Government and Traditional Affairs. • The Department of Human Settlements. • The Department of Energy. • Recreation as a sector, such as the Department of Tourism. • Transvaal Landbou Unie - Mr Jan Viljoen. • Agrisa - Mr Francois van der Berg. <p>Mr Johan van Rooyen emphasised the need to keep the SSC at a manageable size, even though it is recognised that the study area spans over three provinces.</p>	<p>DWA to consider additional suggested members for the SSC</p>
6.	<p>FEEDBACK ON THE IMPLEMENTATION OF THE MAIN RECOMMENDATIONS OF THE STRATEGY</p> <p>Some of the elements to implement the recommendations of the Reconciliation Strategy have commenced and a number of presentations were made to provide feedback thereof.</p>	
6.1	<p>PROGRESS ON THE PLANNING OF THE MOKOLO-CROCODILE WATER AUGMENTATION PROJECT</p> <p>Mr Ockie van den Berg from the DWA presented the background to the Mokolo-Crocodile Water Augmentation Project (MCWAP) as well as progress made thus far. His presentation highlighted the following:</p> <ul style="list-style-type: none"> • Objective of the project which is to plan and implement feasible options to transfer water from the Mokolo River and Crocodile West River to Lephale and Steenbokpan without impacting on the water entitlements of existing users. • Water requirements of existing users and anticipated future users. • Main recommendations of the MCWAP feasibility studies that was undertaken. • Proposed management system of the Crocodile West River. • Proposed augmentation from the Vaal River. • Milestone dates of the project. <p>Discussion:</p> <ul style="list-style-type: none"> • Mr Roelf le Roux from Magalies Water said that a power station is also being planned in Botswana and enquired whether South Africa will supply water to the power station. Mr Van Rooyen responded that an International Liaison Committee [<i>Joint Permanent Technical Committee (JPTC)</i>] dealing with water matters between South Africa and Botswana is the mechanism where any international water requirements are discussed. Currently it is understood that Botswana will supply water for developments in their country. • Mr Roland van Tonder from the Crocodile West Irrigation Board asked whether it will not be possible to investigate the possibilities of more shared storage with Botswana on the Limpopo. Mr Van Rooyen responded that a study was done some time ago to determine possible dam sites in Limpopo and results indicated that there are no potential sites. 	<p>Appendix 2 - presentation</p>
6.2	<p>PROGRESS OF PLANNING INVESTIGATIONS FOR AUGMENTATION FROM THE VAAL RIVER SYSTEM</p> <p>Mr Seef Rademeyer from the DWA gave a presentation on the re-use of treated effluent which is being studied under the Maintenance of the Vaal River Reconciliation Strategy on the Vaal River System. His presentation focused on the planning being carried out and how it links with the water augmentation of the Crocodile West River System.</p> <p>In his presentation he highlighted the following:</p> <ul style="list-style-type: none"> • Background to the Vaal River Reconciliation Strategy <ul style="list-style-type: none"> He stated that the Strategy consists of five pillars which are: <ol style="list-style-type: none"> (a) Eradicate unlawful water use. (b) Reduction of water use by 15% through water conservation and water 	<p>Appendix 2 - presentation</p>

- demand management.
 - (c) Re-use of treated effluent.
 - (d) Augmentation from Phase 2 of the Lesotho Highlands Water Project.
 - (e) Establishment of a SSC for the Vaal River System.
- Reconciliation scenarios.
- Progress with re-use activities.

Discussion:

- Mr Van Rooyen informed the meeting that the current planning for the proposed Phase 2 Lesotho Highlands Water Project is to deliver water by the year 2020. Other options, such as augmentation from the Tugela River and Orange River, can also be reviewed to supply water requirements from 2030 to 2040.

6.3 **PROGRESS ON DETERMINATION OF THE ECOLOGICAL WATER REQUIREMENTS**

Appendix 2 - presentation

Ms Barbara Weston from the DWA gave a presentation on the Intermediate Reserve Determination Study for Selected Water Resources in the Crocodile West and Marico Management Area. In her presentation she highlighted the following:

- Aims of the study and the procedure that was followed.
- Summary of the eco-classification.
- Recommendations of the study.

Discussion:

- Mr Pieter de Witt from Limpopo Department of Agriculture iterated that from the presentation it seems as though once the Ecological Reserve has been implemented the allocation to agricultural purposes would reduce. He raised concern in that the determination of the Ecological Reserve is making provision for water used by invasive vegetation and that those should rather be controlled to ensure increased yield. In response Mr Van Rooyen explained the determination of the Ecological Reserve is a requirement from the National Water Act of 1998 and it may appear as such, but the National Water Act and the Biodiversity Act require certain water allocations for the Ecological Reserve and therefore the DWA is planning towards that. Furthermore, Mr Van Rooyen added that invasive alien plants are being controlled where it has been identified as a major problem.
- Mr Ian Midgley from Eskom asked whether water quality will have an impact on the requirements for the Ecological Reserve. Mr Van Rooyen responded that in general the Ecological Reserve requirements are not affected by the water quality. He said were the solutions to the water quality problems are not dilution or blending, there is no influence on the water balance. Source control of pollution will be the main measure to improve the water quality in the system.
- Mr George Fritz from Makoppa Irrigation Board asked what will happen to agricultural needs in periods of drought if the DWA commits to supply Eskom with water in terms of their proposed new power stations at Steenbokpan. Mr Van Rooyen responded by saying that existing lawful use will be honoured. Operating rules will be developed with the Water Resource Planning Model where all water users are included. The basis of the operating rules will be that the agricultural sector will not be negatively influenced by the water supply to Eskom's proposed new power stations at Steenbokpan. The DWA will apply risk analysis methods (which are used in all systems in the country) to determine drought restriction rules. The agricultural sector will be consulted when the operating rules are determined. The risk analysis methods entails that a System Operation Management Forum will be established where water service authorities, suppliers and representatives of all sectors will meet to discuss operating rules and the implementation thereof.
- Mr Roland van Tonder commented that the DWA supplies water at 99.5% assurance to Medupi power station – where does that leave the control of water sources? Mr Van Rooyen responded that the operating rules for the Crocodile West Water Supply System will be developed together with stakeholders from all water user sectors. This approach is being successfully applied for operating the Vaal River System. This ensures the optimal operation of water in the system.

- Mr Fred van Zyl commented that there will always be risks, droughts come and go and planning for such occurrences has to be a collective effort.

6.4 STATUS OF WATER RESOURCE QUALITY

Appendix 2 - presentation

Ms Lebo Mosoa from the DWA presented the resource water quality status of the Crocodile West catchment. In her presentation she highlighted the following:

- Background to the determination of Water Quality Compliance and Status.
- Water quality compliance and Resource Water Quality Objectives and the status thereof in the study area.
- Current water quality initiatives in the DWA with focus on the Metsi a Me project.

Discussion:

- Mr Van Rooyen suggested that the DWA North West Regional Office be requested to make a specific presentation on the Harties Metsi A Me project at the next meeting.
- Mr Pieter de Witt asked what can practically be done to improve the water quality of the Hartbeespoort Dam and other downstream sources, Mr Van Rooyen said SSC members can make recommendations (as was indicated by the presentation by Ms Mosoa), however they can also influence decisions to be made and act as a pressure group for municipalities, industries and other sectors to get their houses in order with regards to treatment of water and releases in the system.
- Mr Roland van Tonder mentioned that the Brits/Madibeng municipal water treatment works has not been operating for several years and that raw effluent is released in the Crocodile West River. He said this is a huge transgression and the DWA is doing nothing about it. Mr Van Rooyen responded that several plans are in place to curb such practises. The green drop system, that rates the effectiveness of water treatments works, was briefly explained. The DWA also applies a blue drop accreditation system to evaluate the quality of drinking water. The DWA is cooperating with the Department of Cooperative Governance and Traditional Affairs to ensure better management of such works on municipal level and the DWA is in the process of establishing a Regulation Branch to regulate illegal actions.
- Mr De Witt said farmers manage fertiliser very well as they pay high prices for that, however domestic use of fertiliser on lawns should be monitored as many gardeners use fertiliser in their gardens.

Study Team and DWA: North West

6.5 STUDY PROCEDURE FOR RECONCILIATION STRATEGY REVISION

Mr Pieter van Rooyen from WRP Consulting presented the procedure that will be followed to review and update the Reconciliation Strategy. In his presentation the study tasks were highlighted. These are:

- Inceptions Phase.
- Support to the SSC.
- Technical Tasks:
 - (a) Review of water requirements and return flows.
 - (b) Calibrate water salinity model.
 - (c) Yield and planning analysis of integrated systems including development of operating rules, risk curtailments and transfer needs.
 - (d) Update of the Reconciliation Strategy.
- Project Management.

Discussion:

- Ms Phuleng Mofokeng from Department of Agriculture, Forestry and Fisheries (DAFF) said in most of the scenarios presented, the focus was on what to do to meet the demands. She asked why there is no scenario where demands are reduced. Mr Johan van Rooyen explained that water conservation and water demand management

Municipalities

(WC/WDM) have indeed been taken into account as a scenario in the strategy. Furthermore, municipalities will be invited to the next meetings to present their WC/WDM plans for saving and conserving water.

7. DISCUSSION AND COMMENTS

The following comments were raised and questions asked in the general discussion session:

- Mr Van Zyl said the responsibility of each SSC member should start at this meeting. Each member should take the information presented seriously and ask how it is impacting on their organisation/sector. Members should also ask what their sector/organisation can do in the implementation and maintenance of the Strategy. How is his municipality's Integrated Development Plan (IDP) or his organisation's strategic plan taking cognisance of the Reconciliation Strategy, water demands and balances. He urged every member to take responsibility and action.
- Ms Mgquba said climate change was not mentioned in any of the scenarios and she asked for integration thereof. Mr Johan van Rooyen responded that it has been looked at; however, current information indicated that there is no consensus on the implications on water availability in the central regions of the country. The hydrological data of the systems are also updated with the latest information and therefore ensure the estimates of water availability take recent observations into account. He said that in her role as Director of Climate Change it will be important to formulate scenarios of climate change for inclusion in the Strategy in future. .
- Mr Van Tonder asked whether return flows will just be released in the Crocodile West River System or whether it will be treated first. Mr Van Rooyen responded that all return flows will be treated first.
- Mr Van Tonder asked what will happen if water shortages are experienced – will all water users be restricted or just certain water users, such as the Irrigation Boards? Mr Van Rooyen responded that restrictions are imposed proportionally to users based on a priority basis. Water restrictions are introduced on low priority users as a first measure which typically includes gardening. These rules will be developed in consultation with all sectors.
- Mr Ockie van den Berg from the DWA said the scenarios presented by Mr Nditwani and Mr Rademeyer take high demand scenarios into account (e.g. more than two new power stations and more than just one plant for Sasol), however; both Eskom and Sasol indicated that for the next 20 years their anticipated demand may not be as high.

All SSC members

Study team

8. WAY FORWARD

Mr Johan van Rooyen presented the following as the next steps:

- The DWA and the study team will aim to have an update of the water balance and review of the Reconciliation Strategy ready by February 2011.
- Improved estimates of water demands and by when the water will be required will be obtained from all sector groups.
- The minutes of the meeting, together with a progress report, will be distributed soon after the meeting to all members.
- At the next meeting a communication strategy will be presented on how best to keep all stakeholders involved and informed of the study, its findings and outcomes.
- Any member of the SSC may ask the DWA (national or any of the involved three Regional Offices) to work with them to maintain and implement the Strategy, but also to understand what they can contribute towards the successful management of the Crocodile West Water Supply System.

Study Team

Study Team

Study Team

Study Team

All members of the SSC

- A site for this project will soon be established on the DWA website (www.dwa.gov.za). All presentations made, documents compiled, minutes of meetings, etc. will be published on the site and anyone will be able to download information. The specific web site address and path will be distributed to SSC members after the meeting.

DWA

9. **DATE OF NEXT MEETING AND CLOSURE**

All members were thanked for their participation.

The next meeting is scheduled for 24 February 2011.