



## water affairs

Department:  
Water Affairs  
REPUBLIC OF SOUTH AFRICA

# Support to the Implementation and Maintenance of the Reconciliation Strategy of the Crocodile West Water Supply System

## Minutes of the Study Management Team (SMT) Meeting, No. 9 at 08:00 on 26 July 2011, BKS Pretoria

### ACTION

#### 1. WELCOME AND CONSTITUTION OF THE MEETING

The Chairperson, Mr. Tendani Nditwani opened the meeting.

#### 2. ATTENDANCE AND APOLOGIES

##### 2.1 ATTENDANCE

An attendance register was circulated, as noted below:

|                       |             |               |
|-----------------------|-------------|---------------|
| Tendani Nditwani      | (TN)        | DWA: NWRP     |
| Witek Jezewski        | (WJ)        | DWA: NWRP     |
| Ockie van den Berg    | (OvdB)      | DWA: OA       |
| Lebo Mosoa            | (LM)        | DWA: WRPS WQ  |
| Koena Moabelo         | (KM)        | DWA: WUE      |
| Dennis Behrmann       | (DB)        | DWA: WS : P&I |
| Johan Rossouw         | (JDR)       | BKS           |
| Hermien Pieterse      | (HSP)       | BKS           |
| Pieter van Rooyen     | (PGvR)      | WRP           |
| <i>Trevor Coleman</i> | <i>(TC)</i> | <i>Golder</i> |

##### 2.2 APOLOGIES

|                   |      |                            |
|-------------------|------|----------------------------|
| Bernie Badenhorst | (BB) | DWA: Limpopo Region        |
| Lerato Bapela     | (LB) | DWA: WRPS                  |
| Rens Botha        | (RB) | DWA: North West Region     |
| Hannes Pretorius  | (HP) | DWA: Infrastructure Branch |
| Barbara Weston    | (BW) | DWA: RDM                   |
| Allestair Wensley | (AW) | DWA: Water Services        |
| Allosius Salagae  | (AS) | DWA: WRPS – E&ES           |

##### 2.3 ABSENT

|                 |      |                     |
|-----------------|------|---------------------|
| Steven Shibambu | (SS) | DWA: Limpopo        |
| Martha Komape   | (MK) | DWA: Limpopo Region |

Thokozani Ntuli (ThN) DWA: Water Ecosystems - groundwater  
Smangele Mgquba (SM) DWA: Climate Change

*\* Non-permanent members are indicated in italic & bold.*

### 3. APPROVAL OF THE AGENDA

The Agenda was approved, with the following additions:

- Item 7.2: MCWAP

### 4. MINUTES OF PREVIOUS MEETING

#### 4.1 APPROVAL

The minutes of the previous meeting was approved with the following correction:

- Replace "Alistair" with "Allestair".

#### 4.2 MATTERS ARISING (NOT DISCUSSED IN THE ITEMS BELOW)

*Item 6: Distribute updated progress report to all members. Done*

### 5. RECURRING TASKS

#### 5.1 TASK 2: PROJECT MANAGEMENT – WORK PROGRAMME

PGvR presented that short-term work programme, as shown in **Appendix A**. He highlighted the critical items, and requested a date to discuss the scenarios required. TN requested that a description of the scenarios should be distributed to himself, Johan van Rooyen and OvdB for comments.

PGvR

#### 5.2 TASK 3: LIAISON AND INFORMATION DISSEMINATION

- (a) HSP reported that work was done for Mr Johan van Rooyen on the cost to transfer water from the Congo River to South Africa.
- (b) TN referred to the news articles on the study that was published and distributed to all SMT members.
- (c) TN mentioned the upcoming Limpopo Water Summit (on 18 and 19 August 2011) and requested input, as and when required.

TN/HSP

#### 5.3 TASK 4: STAKEHOLDER ENGAGEMENT AND ADMINISTRATION

##### 5.3.1 Matters arising from previous meeting

- (a) *Item 5.3.1: Arrange a site visit to a Lephalale coalmine for the Botswana-South African JPTC and the Tuli- Block Farmers.* TN reported that the visit took place on 7 July 2011.

|  |        |
|--|--------|
| (b) <i>Item 5.3.2(b): Arrange venue with adequate parking in Pretoria for the next SSC.</i> It was suggested that next meeting be held at one of the mines in the project area. TC will liaise with Lonmin.  | TC/HSP |
| (c) <i>Item 5.3.2(c): Arrange dry run meeting for 19 September 2011.</i> Done – will be held at BKS Offices in Pretoria.   |        |
| <b>5.3.2 Progress</b>  |        |
| (a) TN requested a reminder of the coming SSC meeting of 29 September 2011 to be sent to all of the members. Also, include reference to the news articles on the project.  | HSP    |
| (b) Since water quality is such an important issue in the catchment and the related news articles about progress, it was suggested that LM and Petrus Venter (PV) should present the progress of the Harties Metsi Ame Remediation Project at the next SSC Meeting. LM to present on the WQ situation assessment and PV on the Hartbeespoort Clean-up project. | HSP    |
| <b>6. TECHNICAL TASKS</b>  |        |
| <b>6.1 TASK 5: WATER QUALITY MODEL</b>   |        |
| <b>6.1.1 Matters arising</b>   |        |
| (a) <i>Item 6.1.1(b): VO motivation for a 1st order water quality status assessment.</i> Done.   |        |
| (b) <i>Item 6.1.2(b) WQT inclusion in the WRPM.</i> In the process.  |        |
| <b>6.1.2 Progress</b>  |        |
| (a) TC reported that although work is progressing on the WQT, the latest software of the new WQT is not working correctly and the previous older version of the WQT is used.   |        |
| (b) LM reported that the Hartbeespoort Dam project, <i>Harties Metsi Ame Remediation Project</i> is still running well. She also indicated that she would do an “Assessment of the status of the water quality”. She will liaise with TC on this.  | LM     |
| (c) LM also reported that she is currently drafting the ToR for an Integrated Water Quality Management Plan that will also include a model with other parameters than only salinity.   | LM     |
| (d) TN reported that RSA and Botswana are undertaking separate water quality sample. It is noted that the water quality results differ and the respective departments are seeking a solution. A report on this is available from Martha Komape.  | HSP    |
| <b>6.2 TASK 6: WATER RESOURCES PLANNING MODEL</b>  |        |
| <b>6.2.1 Matters arising</b>   |        |
| (a) <i>Item 6.2(b): Analyse the 2005 scenario for the irrigation supply downstream of Makoppa – to be presented at the next SSC.</i> PGvR reported that this will be incorporated in the Scenario analysis, as was discussed <b>Item 5.1</b> , and will be presented at the next SSC Meeting.  | PGvR   |

### 6.2.2 Progress

The WRPM is running without the WQ data. Currently busy incorporating the WQT, with the focus on the Upper Crocodile sub-catchment.

## 6.3 TASK 7: DEVELOPING OF OPERATING RULES

### 6.3.1 Matters arising

- (a) *Item 6.3.1(b): Include motivation in the Reconciliation Strategy Report for a river management system through a real time mode.* Will be done during the update of the Reconciliation Strategy.
- (b) *Item 6.3.2(a): Obtain report on river losses in the system that was done by G Basson as part of MCWAP.* Outstanding.

JDR

### 6.3.2 Progress

- (a) This activity is running in parallel with Task 6 above. Integration with the Annual Operating Analysis study is taking place and coherent definitions of scenarios will be a priority.

## 6.4 TASK 9: RECONCILIATION STRATEGY REPORT UPDATE

### 6.4.1 Matters arising

- (a) *Item 6.4.1(a): Request for volumes associated with licence applications.* JDR will follow up with Rens Botha.
- (b) *Item 6.4.1(b): Summarized groundwater information from All Towns Study per catchment and compare with current assumptions.* HSP reported that the information was obtained from the All Towns Study, still needs to be compared with the current assumptions taken up in the Reconciliation Strategy.
- (c) *Item 6.4.1(c): Augmentation from Crocodile to Mokolo may be required to reduce the risk of two power stations relying on one water resource – this to be taken up in the operation of the system.* PGvR reported that this recommendation has been taken up in the Mokolo AOA study and will be made recommendations in both this study as well as the Crocodile AOA study.....
- (d) *Item 6.4.2(e): Allestair Wensley to confirm pipeline route from Roodeplaat Dam to the north for future augmentation.* HSP reported that the pipeline route is required to determine the point of abstraction (either Roodeplaat Dam or Klipvoor Dam). DB requested the PDNA feasibility study report.
- (e) *Item 6.4.2(b): Integration meeting with Magalies Water, Tshwane Metro to discuss the Apies/Piensaars River system.* PGvR presented the information that was received from Tshwane Metro regarding their re-use of effluent plan. Tshwane plans various re-use schemes. Since Tshwane Metro indicated their future water requirements to be much higher than was taken up in the WRPM, the PSP is assessing the detail.

JDR/BW

JDR

HSP

PGvR

- (f) *Item 6.4.2(c): Assess PDNA report regarding the proposed augmentation options from the Apies/Pienaars River system.* Refer to Item 6.4.1(c).
- (g) *Item 6.4.2(d): Break water requirements into smaller units in the Water Balance.* Done and included in WRPM.
- (h) *Item 6.4.2(e): Define base scenario for water balance, to assess the impact of additional water requirements of existing users or new requirements.* Will be done as part of scenarios analyses, as discuss above.

#### 6.4.2 Progress

- (a) JDR reported that Bigen Africa, the management agent of the Joint Water Forum for the mines in the Rustenburg area, had indicated that the latest mining water requirements would only be available in 6 months, he would follow up. JDR
- (b) DB would make available the JWF's 2009 scenarios report that was submitted to DWA. DB
- (c) PGvR said that he will discuss the scenarios that will be assessed with the Tshwane Metro before the next SSC. Also, to discuss the impact of build-up of salts in the system due to the re-use of effluent. Rens Botha should also be involved in this meeting. PGvR/RB

#### 6.5 TASK 10: SUPPORT GROUP (SG) SUPPORT

No discussion.

### 7. COORDINATION WITH OTHER STUDIES

#### 7.1 WCDM

##### 7.1.1 Matters arising

- (a) *Item 8.2.1b: Meet with Paul Herbst and Willem Wegelin to discuss WC/WDM status.* PGvR presented the information received from this report, refer to Appendix C for the Rustenburg scenario. PGvR reported that the graphs indicating the savings only represent the portion supplied by Rand Water and not the total water use for Rustenburg. He further said that the reconciliation strategy pointed out that additional growth in water needs should be supplied from resources in the Crocodile while the graphs indicate the growth to be supplied from Rand Water.
- (b) *Item 8.2.1c: invite municipalities in Crocodile River catchment to present their status and progress on WC/WDM at next SSC meeting.* AL will contact all municipalities and arrange for one of two to report back. HSP

#### 7.2 MCWAP FUNDING APPRAISAL

##### 7.2.1 Matters arising

- (a) *Item 8.1a, 1st bullet: MCWAP: Documentation of the allocation calculations that were carried out for the compilation of the Supply Agreement.* Done

- (b) *Item 8.1a, 2nd bullet: MCWAP: Description of the operating analysis relating to the release rules to supply the irrigation users and the ecology downstream of the Mokolo Dam. Done*
- (c) *Item 8.1a, 3rd bullet: MCWAP: Document the current preliminary results of the Crocodile West Reconciliation Strategy Study as it was presented at the previous Strategy Steering Committee Meeting. Done.*

#### 7.2.2 Progress

- (a) OvdB reported the water use authorizations have been finalised, although the duration of the licence must be confirmed.
- (b) He further noted that augmentation would be required soon, but there are no anchor users to motivate the augmentation scheme since Eskom cannot commit beyond Medupi and currently SASOL is not proceeding with their project. He also noted that although approximately 60 million m<sup>3</sup>/a would be required, the upper limit that area could be 110 million m<sup>3</sup>/a, and the scheme must be sized accordingly.

#### 8. GENERAL

No other matters were discussed.

#### 9. NEXT MEETING

- (a) The next SMT Meeting is scheduled for 30<sup>th</sup> of November 2011 at 08:00 at BKS. This will be preceded by the PMM.
- (b) All members were invited to the Dry Run meeting on 19 September 2010 at BKS.

#### 10. CLOSURE

The meeting was closed at 10:30

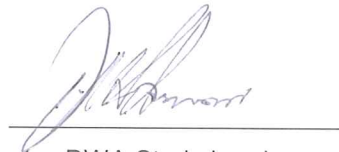
*Minutes certified as correct and final*



PSP Study Leader

2011-12-13

Date



DWA Study Leader

03/12/2011

Date

### Appendix A

