

eMkhomazi Water Project Phase 1: Module 1: Technical Feasibility Study: Raw Water

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Minutes of the 1st Project Steering Committee (PSC) meeting

Date and time: 7 June 2012 @ 9:00

Venue: BKS, Durban

1. WELCOME AND CONSTITUTION OF THE MEETING

Mr Kobus Bester, the study leader, welcomed all attendees to the first PSC meeting.

2. ATTENDANCE AND INTRODUCTIONS

2.1 ATTENDANCE

The following people attended the meeting (attendance list attached as **Annexure A**):

Kobus Bester	(KB)	DWA: Options Analysis (East)
Salona Moodley	(SM)	DWA: Options Analysis (East)
Niel van Wyk	(NvW)	DWA: National Water Resources Planning (East)
Frank Stevens	(FS)	eThekwini Metropolitan Municipality
Kevin Meier	(KM)	Umgeni Water
Vello Govender	(VG)	Local Government (KZN COGTA)
Maxwell Pawandiwa	(MP)	Ugu District Municipality
Talia Feigenbaum	(TF)	Urban-Econ (Part of BKS team)
Kevin James	(KJ)	BKS
Hermien Pieterse	(HSP)	BKS
Andriëtte Combrinck	(AC)	BKS
Bongi Shinga	(BS)	Acer Africa (Part of BKS team)

DWA: KZN Regional Office

2.2 APOLOGIES

Norman Ward

Gavin Subramanian	(GS)	Umgeni Water
Bheki Makwakwa	(BM)	Sisonke District Municipality
Brenden Sivparsad	(BS)	Msunduzi Local Municipality
Bheki Mbambo	(BM)	Umgungungdlovu District Municipality
Speedy Moodliar	(SM)	eThekwini Metropolitan Municipality

3. APPROVAL OF THE AGENDA

The agenda was approved without any additions or changes.

(NW)

4. BACKGROUND TO THE eMKHOMAZI WATER PROJECT

(a) KB gave a brief overview of the background on the eMkhomazi Water Project. Detail is shown in the attached presentation, slides 2 to 11 attached in **Annexure B**. The following points were noted / questions asked / requests made:

Comments / remarks / questions / requests:

(b) On VG's request the governance of the project was discussed. NvW also explained the importance of the Maintenance of the Water Reconciliation Strategy Study for the KwaZulu-Natal Coastal Metropolitan Areas Study and mentioned that it will definitely add value if VG (or another representative from Local Government – KZN COGTA/Premier's Office) serve on the Strategy Steering Committee of this study.

NvW

5. PURPOSE OF THE PSC

- (a) KB highlighted that the Project Steering Committee's (PSC) main function is to assist the DWA with strategic matters and to coordinate the contributions of other authorities. He added that this committee would oversee the total eMkhomazi Water Project (eMWP), including the Raw Water (*Module 1*), Treated Water (*Module 3*) and Environmental Impact Assessment (*Module 2*) project components.
- (b) The draft Terms of Reference of the PSC was distributed for comments.

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6. OBJECTIVE OF THE MEETING

The objective of the first PSC meeting was to kick-off the eMWP project PSC by informing the members on the background of the eMWP and explaining the project/module set-up. In addition, BKS was also to report on the first findings from the *Module 1: Technical Feasibility Study: Raw Water*.

- 7. PRESENTATION AND DISCUSSION ON STUDY OVERVIEW, PROGRESS AND FIRST FINDINGS OF THE eMHOMAZI WATER PROJECT PHASE 1: MODULE 1: TECHNICAL FEASIBLITY STUDY: RAW WATER
- 7.1 OVERVIEW OF MODULE 1: TECHNICAL FEASIBILITY STUDY: RAW WATER
- (a) KJ gave a brief overview of *Module 1: Technical Feasibility Study: Raw Water*, as captured in slides 12 to 15 attached in **Annexure B**.
- 7.2 PROGRESS AND FIRST FINDINGS

7.2.1 Environmental screening

(a) KJ presented the outcome of the environmental screening assessment, shown in **Annexure B**, slides 16 to 18. The following points were noted / questions asked / requests made:

Comments / remarks / questions / requests:

(b) Slide 17: NvW noted that careful consideration should be given to the debate about the eMkhomazi River being one of the last undammed rivers, also advocated by the National Freshwater Environmental Protection Areas (NFEPA). This broader impact of non-development of the eMWP on an undammed river vs other undammed rivers should be considered and taken up in the EIA.

Module 2 PSP

7.2.2 Water resources

(a) KJ gave background on the hydrology and water requirements of the eMkhomazi River catchment (refer to slides 19 to 31 in **Annexure B**). The following points were noted / questions asked / requests made:

Comments / remarks / questions / requests:

(b) Slide 25: The fast-tracked hydrology would be available by end-August 2012 for use by Umgeni Water in the Lower South-Coast Feasibility Study (a detailed feasibility study of the lower southern area). KM reminded the PSC that the Study Team should keep in mind that provision should be made for releases at Smithfield Dam to support abstraction in the lower part of the eMkhomazi River catchment.

BKS

- (c) Slide 27: The assumed service levels for the different settlement classifications were discussed and the following noted:
 - ☐ A conservative estimate of the water requirements for the eMkhomazi River catchment would take into account the improvement of services levels.
 - ☐ The huge influx of people into rural areas after they have been serviced was noted. FS invited BKS to discuss this issue.

BKS

- ☐ The principle that the users of the donor catchment should not be worse off after the transfer of water to another catchment was recognised.
- MP mentioned a recent assessment that was carried out by the Ugu DM on their current water situation that might be of value to the study team.

MΡ

- (d) **Slide 31:** The assumed water requirement projections for the Mgeni System and the eThekwini Metropolitan Municipality downstream of Umlaas Road Reservoir were discussed and the following noted:
 - ☐ The deficit as shown on this graph have not been that evident as the KZN area has had a few good years of rain and higher than normal assurances could therefore be stored.
 - A peak factor of 1.5 was used for the design of the tunnel, as requested by eThekwini Metropolitan Municipality, discussed at a meeting between DWA, Umgeni Water, eThekwini Municipality and BKS in March 2012. Although the peak factor of 1.5 is not in line with Umgeni Water's policy this is the best assumption that can be made at this stage to ensure that the tunnel will not, in the end, be the restricting factor in the transfer of water.

BKS/ UW/ DWA

(e) Slide 31: KB reported that the Reserve PSP will be appointed within the next week, and it was requested that the eMkhomazi River catchment be prioritised in this study.

7.2.3 Engineering investigation

(a) KJ presented the engineering investigation, with the focus on the optimisation of the conveyance infrastructure and the selection of the optimum dam position, shown in slides 31 to 42, **Annexure B**. The following points were noted / questions asked / requests made:

Comments / remarks / questions / requests:

(b) **Slide 36:** The optimisation of the conveyance infrastructure and dam position would be discussed in detail at a technical working group meeting proposed for 22 June 2012. BKS to arrange.

BKS

(c) Slide 41: The balancing dam was sized to allow for a 3-week maintenance (inspection and rehabilitation) period of the tunnel. However, given the cost of the balancing dam, an assessment will need to be done to validate the necessity of this large balancing dam and determine the optimum balancing dam size. A balancing dam might not even be necessary since this system will be part of the greater integrated Mgeni System and as such, one of the other dams in the system, i.e. Spring Grove Dam, can be used for this purpose. This should be taken up with Walther van der Westhuizen from DWA.

BKS/DWA

- (d) Slide 43: KB noted that the socio-economic impact assessment task has started to compare the alternative options for augmentation of the integrated Mgeni system i.e. desalination and re-use of water.
- (e) Slide 44: The costs shown on this slide were discussed and the following noted:
 - □ KB: The costs excludes the cost of borrowing money etc. and people must be made aware of the extreme costs of this project from the beginning onwards.
 - □ VG: It must be brought under the attention of National Treasury that this is a priority project at a very early stage so that money can be allocated towards it.
 - NvW: Although this project should be prioritised one must not forget about the importance of sustainably maintaining current DWA infrastructure (whole-life asset management) and management options such as WC/WDM and re-use of water.
 - FS: A decision will have to be made on whether to continue with re-use of water by the August/September 2012 (within a decision-making framework), therefore they would like to have an indication of the costs of the eMWP by this time for comparison purposes. BKS indicated that Peter Ramsden has been involved from the beginning of the study and therefore some costs will be available by this time, although it will not be final and could still change significantly. All agreed that the decision in August/September 2012 should be made on either costs from the Pre-feasibility Study or what is available at the time.
- 8. PRESENTATION AND DISCUSSION ON STUDY OVERVIEW, PROGRESS AND FIRST FINDINGS OF THE eMHOMAZI WATER PROJECT PHASE 1: MODULE 2: ENVIRONMENTAL IMPCACT ASSESSMENT

KB reported that a PSP on *Module 2: Environmental Impact Assessment* will be appointed soon (indications are that they will be able to start working in August 2012).

9. PRESENTATION AND DISCUSSION ON STUDY OVERVIEW, PROGRESS AND FIRST FINDINGS OF THE eMHOMAZI WATER PROJECT PHASE 1: MODULE 3: TECHNICAL FEASIBLITY STUDY: POTABLE WATER

Future module, no discussion.

10. KEY ISSUES TO DATE

No key issues yet to be recorded, although critical decisions will be recorded in future for all modules.

11. EMWP PROJECT INFORMATION MANAGEMENT SYSTEM (PIMS)

(a) KJ presented the project information system, slides 47 to 50 included in **Annexure B**. The following points were noted / questions asked / requests made:

Comments / remarks / questions / requests:

(b) Project information will be managed internally through the PIMS system, and externally information will be made available on the DWA website.

BKS

12. WORK PROGRAMME

(a) KJ presented the fast-tracked programme with the aim to start deliver water in 2023 (slide 43 in **Annexure B**). The following points were noted / questions asked / requests made:

Comments / remarks / questions / requests:

(b) KM warned that the Decision Support Phase always takes longer than anticipated. KB replied that he is aware of this fact and therefore the eMWP is trying to minimise this risk by being proactive in this regard i.e. by covering the institutional, financial and operational aspects as part of this project. He added that a lot of thought has been given to the ToR of this project and that a dynamic risk assessment are carried out throughout the project that may assist in mitigating risks and probably reduce delays.

13. GENERAL

13.1 DIRECT AND INDIRECT IMPACT ON COMMUNITIES

- (a) VG raised his disappointment about the non-attendance of local municipalities.
- (b) VG requested the meeting that the interest, regarding water supply, employment opportunities, etc. of local communities must be considered. KB noted that most of these issues will be addressed in the EIA and socio-economic study. Related aspects will also be addressed in the Institutional and Financial and Operational Aspects task.

Module 2 PSP

13.2 COMMUNICATION

- (a) KB stressed that all stakeholders must be involved from the start to avoid delays later due to the lack of understanding.
- (b) NvW emphasised the importance of continual communication with the public on the progress of this project. It very often happens that excellent work is done but nobody is aware of that. The following was proposed to promote communication regarding the eMWP:
 - A glossy information pamphlet (also to be published in relevant industry magazines);

BKS

☐ An article in the monthly IMESA Magazine (FS mentioned that he is a member of IMESA's KZN Branch and will facilitate such a process);

BKS

□ NvW requested KJ to present the eMWP at the next Strategy Steering Committee meeting of the Maintenance of the Water Reconciliation Strategy Study for the KwaZulu-Natal Coastal Metropolitan Areas Study.

ΚJ

14. DATE FOR NEXT MEETING

The next meeting is scheduled for 8 November 2012, 13:30.

15. CLOSURE

The meeting adjourned at 12h00.

Notes prepared by HS Pieterse & A Combrinck

Annexure A: Attendance register

Annexure B: Progress report presentation