

Lusikisiki Regional Water Supply Scheme

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Stakeholder Committee, No. 1 Minutes

Date and time: 26 May 2011 @ 11:00 Venue: College Hall, Lusikisiki

ACTION

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1. WELCOME, OBJECTIVE AND CONSTITUTION OF THE MEETING

Menard Mugumo (MM) welcomed all people present and outlined the objectives of the Stakeholder Meeting. The objectives were presented as the following:

- engaging the stakeholders;
- promoting communication and liaison;
- □ sharing information and progress of study; and
- initiating the public participation process of the EIA process that will commence later on.

2. ATTENDANCE AND INTRODUCTIONS

An attendance register was circulated and members were requested to indicate apologies on the register. Subsequently, members were requested to introduce themselves and the organizations they represented in order to consider whether all potential stakeholders that have been invited were in attendance. They were also requested to effect changes if the details as reflected in the register were incorrect or incomplete. The completed attendance register is attached as Appendix A.

2.1 PRESENT

Menard Mugumo	(MM)	DWA: Options Analysis South
Ashley Starkey	(AS)	DWA
Galelo Mbambis a	(GM)	DWA
Themba Mtshaulana	(TM)	Eskom
Nolwazi Mdoda	(NM)	Eskom
Mthokozisi Nyawose	(MN)	Amatola Water
Dumisa Sipunzi	(DS)	Amatola Water
Dinga Sandisile	(DiS)	Amatola Water
Mkuseli Nomandindi	(MkN)	
Stephen Mullineux	(SM) SHM	DWA
Lucky Zuma	(LZ)	Cogta
Charles Kumbula	(CK)	OR Tambo
Tando Mbangoni	(TM)	ECDC
Sebitso Thoka	(ST)	Land Claims Commission Office
Lonwabo Mini	(LM)	DWA
Siyabulela B Mtonjeni	(SBM)	DEDEA



J A Myburgh	(JAM)	AGES-EC
K Z Fatman	(KZF)	AGES-EC
Andrew Lucas	(AL)	DWA
Chuma Ndzungu	(CN)	DWA-EC
Theo Geldenhuys	(TG)	DWA ECRO
Mxolisi Ntleki	(MxN)	NDHS EC
Cyril Samuels	(CS)	DWA
Onke Sopela	(OS)	Port St Johns LM
David Stephen	(DS)	Umgeni Water
Johan Rossouw	(JDR)	BKS
Hermien Pieterse	(HSP)	BKS
Eddie Mashau	(EM)	BKS
Jan Myburgh	(Mt)	AGES
Ben van der Merwe	(BvdM)	Urban-Econ
Apologies		

2.2

Peter van Niekerk	(PvN)	DWA
Sitembele Mase (SM)	CEO: ECDC	
Sifiso Khoza	(SK)	OR Tambo
Ntsiki Baai	(NB)	Umgeni Water
Esther Mampane	(EM)	DAFF
Zama Memela	(ZM)	Land Claims Commission
Mwaka Beason	(MB)	DWA

3. **CONFIRMATION OF THE AGENDA**

The following item was added to the Agenda:

Item 7.1 Ingquza Hill Regional Bulk Water Supply Scheme (Umgeni Water appointed as Implementing Agent by OR Tambo District Municipality)

4. **BACKGROUND TO THE STUDY**

- (a) MM gave the background to the study. Also refer to the attached presentation. He indicated that the study formed part of a continuous assessment of water resources over a long period. It was mentioned that previous studies recommended further studies with the following focus:
 - A detailed feasibility study.
 - Implementation of a regional water supply scheme based on a dam in the Xura River (Zalu Dam).
 - Groundwater should also be considered as a source of water supply.
- The focus of the current study was the Lusikisiki Town and 23 surrounding villages. The existing regional (b) water scheme was encountering challenges in the form of insufficient capacity of source, design capacity of the existing distribution infrastructure, and management.



(c)	The current study was therefore aimed at achieving the following objectives:	
	☐ To complete an engineering investigation.	
	☐ To define the most attractive composition and size of water supply.	
	To supply the increasing water requirements.	
	☐ To develop a safe and reliable water source.	
	☐ To minimize consequences of future water shortages.	
	☐ Augment and expand the existing regional bulk system.	
	☐ Assess potential for development of irrigation.	
	□ Implementation of the Reserve.	
(d)	MM concluded by introducing the study team organisation namely BKS (Pty) Ltd, with the following sub-	
	consultants, AGES, Kariwa, Urban-Econ and Sherman, Colloty & Associates.	
(e)	MM further mentioned that the EIA professional service provider would be appointed later.	BKS/DWA
5.	PROGRESS	<u>.</u>
5.1	MANAGEMENT, STRUCTURE AND PROGRAMME OF THE STUDY	
	Hermien Pieterse (HSP) outlined the organization of the study, responsibilities allocated to identified	
	study member organisations, as well as the expected relationships, reporting, and communication lines	
	(see attached organogram in Appendix B). She also presented the study program and progress.	
5.2	WATER RESOURCES: HYDROLOGY	
(a)	Johan Rossouw (JDR) from BKS reported that this module had three sub-tasks namely Hydrology, Yield Analysis and Sedimentation and presented the results of the hydrological assessment.	
(b)	JDR also mentioned that 13 rainfall gauges were considered, and of those, only seven were patched. Monthly flows, rainfall, and evaporation data were assessed, and calibration was done with the WR2000 rainfall-runoff model. The results had been incorporated into the Water Resources Yield Model (WRYM), the model that would be used by the Study team to assess water availability and the impacts of potential future developments on the yield from the dam. There were good comparisons with previous studies' hydrological figures, and the confidence in simulated flows was higher with the inclusion of a longer flow record at the gauging station where water is currently abstracted for the water treatment works.	
(c)	With regard to yield analysis the WRYM has been set up and tested and would be used to determine yields from the proposed Zalu Dam. The model would also be used to assess the impact of the implementation of the ecological water requirements (Reserve) on dam size and assurance of supply.	BKS
(d)	JDR reported that the hydrological assessment was compiled into a draft report that had been submitted to DWA for their comments / approval. The DWA feedback would be incorporated into the final	

DWA/JDR

5.3 GROUNDWATER AUGMENTATION

future sedimentation.

(a) Jan Myburgh (JM) of AGES presented progress on this module. The current investigations included assessments of previous studies, Lusikisiki Groundwater Feasibility Study, SRK 2006/2009, Eastern Pondoland Basin Study, UWP 2001 and Groundwater Resource Information Project (GRIP).

hydrology report and in the WRYM to determine final dam size taking into account the determined



(b)	Their investigation included the following activities:	
	review of existing information and reports for the compilation of borehole and groundwater us statistics;	e
	delineating and ranking of known groundwater resources (aquifers);	
	 evaluation of groundwater vs. surface water availability and infrastructure to define conjunction 	/e
	use areas with special reference to the proposed Zalu Dam;	
	 evaluation of groundwater quality and possible treatment/blending scenarios as part of the groundwater potential assessment; 	ıe
	preliminary analytical groundwater flow balances;	
	assessment of community dependencies and attitudes towards groundwater;	
	assessment of regional groundwater use and infrastructure statistics;	
	☐ integration of survey outcomes with groundwater augmentation planning; and	
	groundwater awareness creation workshops in target areas to cultivate community competencies	28
	concerning issues related to groundwater.	
(c)	Conclusions from this study, amongst others, were :	
	villages in focus areas comprised communities with pronounced low levels of formal education;	
	$oldsymbol{\square}$ residents had poor perceptions of underground water and knowledge thereof, with a severe	ly
	negative attitude towards groundwater in the eastern zone;	
	$oldsymbol{Q}$ communities were generally traditionalist and loyal to their beliefs once their minds were made $oldsymbol{u}$	p;
	and	
	u there was a serious lack of sustainable and safe water sources for both humans and animals.	
(d)	The task team of this module planned to conduct interactive workshops as part of their groundwate awareness campaign with a view to improving people's knowledge, attitude and perception agroundwater.	1
	Lucas	
(e)	On a question from Andrew Deacon from DWA whether conjunctive use of groundwater and surfact water would be considered, JM replied that it made financial sense to use both sources, whe applicable.	- 1
(f)	Ashley Starkey (AS) from DWA said that it was good to hear about (some) positive feedback abo	ut
	groundwater use from the survey results.	
5.4	DOMESTIC WATER REQUIREMENTS	
(a)	Ben van der Merwe (BvdM) made a presentation and gave feedback on the work undertaken by Urba	n-
(u)	Econ. He explained that their investigation relied on the results of previous studies, focused on loc investigations and a socio-economic survey, as well as reliable estimates of current and futu population figures.	al
(b)	The target area was delineated into three distinct areas namely Primary, Secondary, and Planning area for study purposes.	as



(c)	Their investigations found that, amongst others:
	 average household size was 5 persons; largest proportion of the population was younger than 30 yrs; half of the population earned no income; most of disposable income was spent on retail goods and services; 50% had no schooling; and 72% of the population was both unemployed or economically inactive, 44% in Primary area and 62% in the Secondary area.
(d)	The population growth rate in the area was found to be reasonably low: 1.1% in the Planning area and 0.8% in the Primary area, while the household's growth rate was 1.5% and 1.4% , respectively.
(e)	Their study also found that domestic water demand was between 16 and 20 Me/d, and that this demand would increase by 2.5 Me/d from 2010 to 2025.
(f)	A question was raised as to the impact of the project on the socio-economic issues or levels/situation in the area. In response to this, it was said that a detailed micro-economic assessment would look at the economic injection the project would make in the area.
(g)	In response to a question as to how the different areas were delineated, BvdM explained that delineation was done based on the available scientific information.
5.5	AGRICULTURE / IRRIGATION POTENTIAL
(a)	HSP reported on this Module. She reported that the study revealed that the natural environment was steep and hilly and thus difficult to work on for agriculture and irrigation purposes. 8500 ha of land downstream of the planned Zalu Dam had been investigated. The soils that were investigated were limited to 60m above river bed level.
(b)	The investigations showed that:
	 □ current irrigation consisted mainly of irrigated community gardens; □ the vegetables irrigated were mostly cabbage and spinach; □ the average size of the irrigated land was 166 m² (13 m x 13 m); □ there was dry land crop production for about 1500 ha (mostly maize); □ there was 1800 ha under tea plantation (Magwa Tea Enterprise); and □ there was 2 100 ha used for forestry
(c)	The focus area investigation suggested that there was only 5.4 ha of land (well above the dam) that had good potential for irrigation. 25 and 240 ha was found to be, respectively, moderate and marginally suitable for irrigation.
(d)	Livestock farming was found to be more in cattle (89 000), followed by goat (84 000) and sheep (77 000). Total stock water requirements were estimated at 7094 m3/day (or 2.6 million m3/a).
6.	MEMBERSHIP OF THE STAKEHOLDER COMMITTEE
	MM advised the representatives that potential membership was as per the invitation list of stakeholders that had been identified. He requested the meeting to identify and nominate stakeholders that might

have been left out. The full list of Stakeholders to be invited to the following meetings is included in



Appendix C.

7. GENERAL

7.1 INGQUZA HILL REGIONAL BULK WATER SUPPLY SCHEME (UMGENI WATER APPOINTED AS IMPLEMENTING AGENT BY OR TAMBO DM)

- (a) David Stephen (DS) from Umgeni Water explained that the Qaukeni (Ingquza Hill) LM Regional Bulk Water Infrastructure Master Plan, dated April 2009, had been submitted to OR Tambo District Municipality (ORTDM), and provided the starting point for further investigations. It was noted that the Master Plan was at a reconnaissance, or conceptual, level of detail only.
- (b) Umgeni Water had received instructions from ORTDM to continue with the planning and preliminary design stage of the project, and draft terms of reference and a draft tender document had been prepared for a detailed feasibility study. UW was awaiting instructions from ORTDM regarding tendering processes to be followed. To date, no tenders had been invited.
- (c) DS was of the view that the study could run in parallel with the Lusikisiki Study, with combined stakeholder liaison meetings in order to improve the sharing of ideas and decision-making, and prevent unnecessary duplication of effort and the wasting of time and resources. The studies had the potential to supplement each other in terms of available development options and ideas insofar as the conjunctive use of available resources.
- (d) Galelo Mbambisa (GM) from DWA wanted to know the view of ORTDM regarding Umgeni Water's proposals, and whether they had already started with the preparation of infrastructure development plans in response to provincial development plans for submission to the EC Province. In response, Charles Kumbula (CK), representing ORTDM, explained that the complementary need for integration of studies is to be investigated in order to find an efficient way to do this. Regarding the infrastructure development plans, ORTDM is said to be on course, although challenges were part and parcel of this exercise.
- (e) HSP gave background on the study areas of the Lusikisiki Feasibility Study of DWA, and that of the proposed study to be undertaken by Umgeni Water.
- (f) DS mentioned that the Ingquza Hill Detailed Feasibility Study would adopt a regional planning approach, and would not necessarily be confined to municipal boundaries. The objectives of the study would also be to include recommended operation and maintenance (O&M) structures and arrangements.
- (g) Lately there had been discussions about integration of the above study with that of the DWA Lusikisiki Feasibility Study. Umgeni Water was having discussions with ORTDM about the formation of a Project Steering Committee.
- (h) On a question by JM from AGES on whether groundwater as a potential source would be included in the ToR, DS replied that the proposed feasibility study would not exclude the possible use of both groundwater and surface water, as Umgeni Water was mindful of the potential advantages of each.
- (i) JM from AGES emphasised that groundwater is becoming a big player in water supply and that it is critical to be included. Historical perspectives should not override new big thinking.
- (j) MM from DWA confirmed the importance of, and required, interaction between the DWA and ORTDM/ Umgeni Water initiatives. It was necessary to make sure that the proposed Zalu Dam would fit into the proposed Ingquza Hill RBWSS.

DWA/
ORTDM/
UW/ BKS



(k) DWA CD: Infrastructure Development currently focused on the Eastern Cape Province (but also KZN and Limpopo Provinces). The old Transkei area, which incorporated the Lusikisiki Feasibility Study area, should therefore be a focus area for DWA.

8. THE WAY FORWARD

(a) Future Stakeholder meetings would be held to report on progress.

BKS

(b) An Environmental Impact Assessment professional service provider would be appointed at a later stage to assess the various impacts the proposed project will have on the biophysical, human and social environments. BKS will prepare the scope of work for the PSP to be appointed.

BKS

(c) It was requested whether reports, to be presented at following Stakeholder Meetings, could be made available to the Stakeholder members before the meetings.

DWA

9. DATE FOR NEXT MEETING

The date for the next meeting will be dependent on the level of progress of the various study modules, but is expected to be around March 2012.

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10. CLOSURE

The meeting adjourned at 15h00.

Minutes certified as correct and final

PSP Study Leader

#Sketerse 29 Feb 2012

Date

DWA Study Leader

Date



Appendix A

Attendance Register



Leasibility Study for Augmentation of the Lusikisiki Legional Mater Supply Scheme

STAKEHOLDER MEETING

LUSIKISIKI COLLEGE, Opposite Department of Labour's Offices in Lusikisiki 26 May 2011

Date: Venue:

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Ř	Σ	Σ	Sogoni	Prov Premier's Office	040 609 6382	040 639 1419	082 788 7725	babalwa.shushu@otp.ecpr ov.gov.za	
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Feasibility Study for Augmentation of the Lusikisiki Zegional Mater Supply Scheme

STAKEHOLDER MEETING

26 May 2011 LUSIKISIKI COLLEGE, Opposite Department of Labour's Offices in Lusikisiki

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Company / Organization	BKS	DWA	BKS	BKS	DWA (Gauteng)	DWA (Eastern Cape)	DWA (Eastern Cape)	Cogta	Cogta	Cogta
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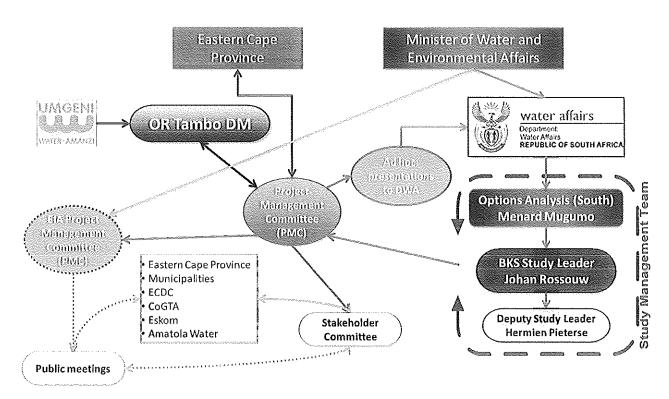


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Appendix B

Governance structure of Study





Appendix C

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