

Directorate: National Water Resource Planning

Development of a Reconciliation Strategy for the Luvuvhu and Letaba Water Supply System

STUDY STEERING COMMITTEE - MEETING 2

Draft Minutes

DATE: Wednesday, 25 April 2012

TIME: 10:00 - 13:30

VENUE: Tzaneen Country Lodge, Tzaneen

1.	WELCOME AND INTRODUCTION	ACTION
	The Chairperson and Study Manager, Mr Tendani Nditwani (Department of Water Affairs – DWA) welcomed all to the second meeting of the Study Steering Committee (SSC) for the development of the Luvuvhu and Letaba Water Supply System Reconciliation Strategy (LLRS).	
	Mr Nditwani reminded the meeting that the objectives of this study are to address the growing water demands, identify serious water problems, identify resource development options, provide reconciliation interventions (structural and administrative/regulatory) and facilitate communication and strengthen the partnership between the DWA and key stakeholders. Mr Nditwani also gave a brief background to the study area and the project.	
	(All presentations will be sent out with the minutes and can be accessed on the study website http://www.dwa.gov.za/Projects/Luvuvhu/default.aspx)	
2.	ATTENDANCE AND APOLOGIES	
	Mr Nditwani asked all present to briefly introduce themselves.	
	Ms Hanli du Plessis (Office of the Premier: Limpopo Province) mentioned that the Limpopo Premier is having a high profile function on this day and most of the invited municipal officials are most probably not present due to this. Mr Ockie van den Berg (DWA) said that a more concerted effort must be made to involve municipalities more actively in the SSC meetings.	
	The attendance register can be found at the back of this document.	
	The following apologies were received: Ms Ndileka Mohapi, Resource Directed Measures, DWA Ms Defend Name and Selection of Chaptific actions DWA	
	Mr Rufus Nengovhela, Water Resources Classification, DWA Mr Paul Herbst, Water Use Efficiency, DWA	
	Mr Jakkie Venter, National Water Resource Infrastructure, DWA	
	Ms Marcia Mofokeng, Institutional Establishment, DWA	
	Mr Kgauta Mokoena, Department of Mineral Resources	
	Dr Freek Venter, SA Parks Board	

Dr. Thomas Condu Ababia CA Bada Basad	
Dr Thomas Gyedu-Ababio, SA Parks Board	
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Mr Carel Schmal, Lepelle Water Board.	
ACCEPTANCE OF AGENDA	
The agenda was accepted.	
APPROVAL OF MINUTES	
The minutes were approved with minor changes.	
Mr Johan van Rooyen (DWA) commented that the study's documents are sometimes too big for electronic distribution and the website address where all these documents can be found must therefore be on all documents	Study Team
Mr Van den Berg had the following points to make about the previous minutes:	Study Team
Point 5 a – The study area needs to be qualified as a stressed region and not as a dry area.	
Point 5 f – The previous minutes referred to the DWA process to register all water users, this should be the DWA process of Verification and Validation, as the registration process was completed a long time ago.	Study Team
MATTERS ARISING FROM THE PREVIOUS MINUTES	
Point 5 c: Municipalities must be invited to the meeting (<i>This was done</i>). Point 5 e: Investigate the possibility of transferring water from the Klein Letaba to the underperforming Middle Letaba Dam in order to increase its yield (<i>Discussed under Point 8 in these minutes</i>).	
Point 6 c: Align the Limpopo Employment Growth and Development Plan (LEGDP) with what this Strategy is planning to cover. (<i>This was done</i>).	
STATUS AND RECAP SINCE THE PREVIOUS MEETING	
Mr Nditwani presented the current status of the study. The Inception Phase of the project is completed and a Draft Inception Report and a Literature Review Draft Report were produced.	
Information about the project is available on the study website (www.dwa.gov.za/Projects/Luvuvhu/default.aspx). The website address is given in the Background Information Document (BID) and will in future be included in all documentation. The	
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Currently Phase 2 is in process.	
PROGRESS ON STUDY TASKS	
	Mr John Dini, SA National Biodiversity Institute Mr Wandile Nomquphu, Water Research Commission Ms Ledile Mashilwane, Office of the Premier: Limpopo Mr Louis van Rooyen, Letaba Water Users Association Mr Labane Leballo, Lepelle Water Board Mr Carel Schmal, Lepelle Water Board Mr Carel Schmal, Lepelle Water Board. ACCEPTANCE OF AGENDA The agenda was accepted. APPROVAL OF MINUTES The minutes were approved with minor changes. Mr Johan van Rooyen (DWA) commented that the study's documents are sometimes too big for electronic distribution and the website address where all these documents can be found must therefore be on all documents Mr Van den Berg had the following points to make about the previous minutes: Point 5 a – The study area needs to be qualified as a stressed region and not as a dry area. Point 5 f – The previous minutes referred to the DWA process to register all water users, this should be the DWA process of Verification and Validation, as the registration process was completed a long time ago. MATTERS ARISING FROM THE PREVIOUS MINUTES Point 5 c: Municipalities must be invited to the meeting (This was done). Point 5 c: Investigate the possibility of transferring water from the Klein Letaba to the underperforming Middle Letaba Dam in order to increase its yield (Discussed under Point 8 in these minutes). Point 5 h: Investigate new dam sites in the Letaba River System (Discussed under Point 7 in these minutes). Point 6 c: Align the Limpopo Employment Growth and Development Plan (LEGDP) with what this Strategy is planning to cover. (This was done). STATUS AND RECAP SINCE THE PREVIOUS MEETING Mr Nditwani presented the current status of the study. The Inception Phase of the project is completed and a Draft Inception Report and a Literature Review Draft Report were produced. Information about the project is available on the study website (www.dwa.agov.za/Projects/Luvrhu/default.aspy). The website address is given in the Background Information Document (BIO) and will in future be included in all docume

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	 Draft Inception Report. Preliminary reconciliation strategy moved to after the completion of the 		
	hydrology;		
	 Irrigation data from the Validation and Verification of Water Use in the Luvuvhu- Letaba Water Management. Area study is suspect. 		
	Draft Literature Review Report.		
	 Summary of pertinent information from existing studies and past reports; 		
	 Synthesis of available information (main catchments); and 		
	 Identified augmentation/intervention options. 		
8	SCREENING WORK SESSION		
	Mr Pieter Van Rooyen (Study Team) presented the Starter Document for the development of the Reconciliation Strategy for the Luvuvhu and Letaba Water Supply System. He discussed the methodology and purpose of this preliminary screening work session. He also described typical interventions options and interventions that are applicable to all systems.		
	Mr Nditwani requested Mr Pieter Van Rooyen to explain the term 'yield' to the meeting. Mr Pieter van Rooyen said yield is water volume measured in million cubic metres per year. It is the total amount of usable water in a specific catchment. Normally two methods of yield determination are used: historic yield (based on actual natural flow records covering a specific period of time) and stochastic yield (when risks are added to the calculations by analysing a large number of stochastic flow sequences).		
	The next session focused on the various intervention options as mainly identified in previous studies for each of the main catchments. This was an interactive session discussing the options as listed in the Starter Document.		
a)	Luvuvhu Catchment Intervention Options		
	LU1 Albasini Dam in combination with Lutanandwa Dam and other interventions		
	Mr Johan van Rooyen (DWA) mentioned that Louis Trichardt is located outside the demarcated study area. Is the study assuming that a certain quantity of water will be transferred out of the study area?		
	Mr Pieter van Rooyen responded that Louis Trichardt will be included in the study, which will result in a slightly bigger study area. This also applies to other users such as Polokwane, which receives water from the Letaba Basin but is located outside of the catchment boundary.	Study Team	
	Mr Nditwani mentioned that Louis Trichardt was studied in detail during the All Towns Study. This data will be used in the analysis of the bigger system.		
	Mr Peter van Niekerk (DWA) commented that years ago the Sand River was considered a possible water source. Have you considered this now?		
	Mr Nditwani responded that this will be investigated.	Study Team	
	Mr Van den Berg remarked that the afforestation in the Albasini Dam catchment can be managed in order to increase flows into the dam.	July 10um	
	Mr Bernie Badenhorst (DWA) commented the Nzhelele Valley in the Vhembe district has a shortage of primary water supply and a decision must be taken whether a transfer from the Nandoni Dam will be a viable option.		
	Mr Nditwani replied that the Nandoni Dam will be fully utilised by 2018.		
	Mr Van den Berg suggested that it must be investigated what can quantity can be supplied by the Nandoni Dam and the rest of the water will have to come from other sources.		
	Mr Johan van Rooyen suggested this should be noted and added as a point to be considered as		

part of the investigations of the study. Study Team Mr Dries Enslin (Agri Limpopo) suggested that rain water harvesting could also be investigated as potential water resources for the Vhembe district. Mr Jacques Venter (SA Parks Board) wanted to know how irrigation usage is bought. Mr Johan van Rooyen explained that, as an example, when a mine needs additional water, then it can buy out the water rights from a neighbouring farm. Previously the mine would have bought out the whole farm in order to obtain the water. Today it is possible to sell only the water rights. Mr Hendrik Monama (Lepelle Water Board) commented that institutional arrangements must first be in place when buying out water rights and municipalities must be involved in such processes. Municipalities must also be given an option to buy water should a land owner sell his water rights. Mr Enslin added that food production could suffer if water rights are sold to the mining sector. Mr Johan van Rooyen agreed and said the commercial value of water to the agricultural sector cannot be ignored. Ms Nomazizi Mdi (Limpopo Economic Development, Environment and Tourism) asked if a feasibility study has been done on water re-use in the Limpopo. Mr Johan Van Rooven replied that no studies on this subject have been done in the Limpopo. Beaufort West is currently building a water re-use plant. Water re-use is also being investigated in KwaZulu-Natal for the direct re-use of sewage for domestic use. Mr Nditwani concluded that water re-use can be a recommendation as an outcome from this Study Team meeting. LU2 Nandoni Dam as the primary source for Louis Trichardt Ms du Plessis mentioned that a coal mine near Louis Trichardt is also looking for water resources. Mr Nditwani replied that the DWA is aware of this coal mine and the Limpopo office of the DWA is in communication with the mine. LU3 Nandoni and Albasini in combination and LU4 Utilising Groundwater in Nandoni supply area Mr Pieter van Rooyen reported that groundwater and surface water information have been evaluated. Pipelines from Nandoni Dam are being investigated. Mr Van den Berg suggested that groundwater should be classified as a regional source and not just a local source. Investigate pipelines to transport water into an area and then it can be referred to as a regional source. Groundwater can be used in a large system to improve water quality. LU5 Raising of Vondo Dam, LU6 Mid Dzindi Dam, LU7 Lutanandwa Dam, LU8 Phaswane Dam and LU9 Xikundu Dam Mr Pieter van Rooyen explained that LU5 and LU6 in the north are both 'sweet spots' with high rainfall runoff characteristics. Mr Badenhorst commented that the proposed dam site upstream in the Lutanandwa River is a

Mr Badenhorst commented that the proposed dam site upstream in the Lutanandwa River is a concern. He suggested moving this site downsteam below the confluence with the Tshakuma tributary.

Mr Pieter van Rooyen replied that this will be investigated.

Mr Van den Berg asked what effect this will have on the ecological flow of the river.

Mr Pieter Van Rooyen said this can only be verified by running additional scenarios.

Mr Pieter de Witt (Limpopo Department of Agriculture) added that there are planned developments in the Upper Luvuvhu Basin that should also be included in this study.

Study Team

Study Team

Mutale Catchment Intervention Options

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	MU1 Water Conservation and Demand Management, MU2 Groundwater Developments, MU3 Dams on the Mutale River and MU4 Abstraction from the Limpopo River	
	Mr Andries Munzhedzi (DWA) commented that downstream from the proposed dam site on the Mutale River is a more suitable area to build a dam using the surrounding mountains.	
	Mr Pieter van Rooyen replied that the study came up with two feasible options which are presented here but the team will look into this other option.	
	Mr Maré added that initially there were four sites which were investigated but these two options were the most feasible. He is not sure where the other two options are but maybe one is the downstream site Mr Munzhedzi is talking about.	
	Mr Johan Van Rooyen commented that the demand from the communities and new mines must be considered as the Limpopo River is not a good source of water.	Study Team
c)	Shingwedzi Catchment Intervention Options	
	SW1 Groundwater development and SW2 Transfer of water from Luvuvhu catchment	
	All members were satisfied with the options listed under this heading. It was also noted that the Shingwedzi River is an important source of water for the Kruger National Park.	
d)	Letaba River Catchment Intervention Options	
	Groot Letaba (GL1-6), Middle and Klein Letaba (MKL1-7) Catchments	
	Mr Pieter van Rooyen reported that yield modelling will be done to see if the proposed Hobson's Choice Dam (GL4) is viable.	Study Team
	Mr Van den Berg commented that the proposed Hobson's Choice dam site fell out in the pre- feasibility study of the Groot Letaba River Water Development Project.	
	Mr Johan van Rooyen suggested that yield calculations can be done for GL5 but there is no additional water to be used.	
	Mr Badenhorst added the Thabina River was investigated years ago for primary water use which can also be mentioned in the report.	Study Team
	Mr Enslin mentioned that Polokwane gets 3.2 million m³/a from the study area. Can Polokwane not source its water from the Olifants System so that this water can be used in the Luvuvhu/Letaba study area?	
	Mr Johan Van Rooyen answered that the Olifants System is similar and in some areas more water-stressed than the Luvuvhu Letaba area. In fact, the Olifants System has too little water for its own needs. Augmenting the study area with water from the Vaal will be too expensive and not viable.	
	Mr Van den Berg suggested the legal status of water use in the Mooketsi district must be investigated through validation and verification to reduce unlawful water use and make more water available in the system.	
	Mr Enslin commented that unlawful use of water is very low in the Mooketsi area and very little water will be made available by validating water use in this area.	
	Mr Van den Berg also suggested the proposed pipeline from the Middle Letaba Dam to the Nsami Dam should rather be moved to the west of Giyani, because all the development in this area is taking place to the west of Giyani where the water will be needed in future. This will be a far cheaper option than first taking the water to Nsami Dam and then again transfer it to the west of Giyani.	Study Team
	Mr Pieter van Rooyen briefly explained the option to divert or transfer water from the Klein Letaba River (option MKL5) to Middle Letaba Dam to increase the system yield. This option was assessed before in 2003 and comprises of two possible dam or diversion weir sites in the Klein Letaba River - Majosi and Crystalfontein. It was decided to keep this as an option to evaluate for	
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	the purpose of this study. In addition to this option, the possibility to transfer water from Dap Naude Dam to the Koedoes River to support Middle Letaba Dam was also mentioned by one of the members. Mr Badenhorst asked that the study team make a correction on the slide of the proposed pipeline route to Nsami Dam. Mr Pieter van Rooyen thanked the SSC for the suggestions made and a few new options will be investigated by the study team.	
9	SCC TERMS OF REFERENCE FEEDBACK	
	Mr Andre Joubert reported back on the terms of reference for SSC members. He discussed the objectives of the SSC, the roles and responsibilities of SSC members as well as some practical arrangements. All the relevant information can be found in the Terms of Reference for SSC members that will again be sent with these minutes to all members.	
10	CONFIRMATION OF MEMBERSHIP	
	Mr Joubert reported that Mr Jakkie Venter from the Department of Water Affairs sent some names through to be included in this committee and that has been noted.	
	Ms Du Plessis asked that the Department of Rural Development and Land Reform must also be invited.	
	Mr Nditwani mentioned that there is a slide which summarises the Terms of Reference and the points which people are expected to contribute to. This should be included in the next meeting along with a list of all the members of the SCC.	Study Team
11	DISCUSSION AND COMMENTS	
	Mr Van Niekerk observed that groundwater is a difficult resource to manage, but not impossible. A town like De Aar, for example, gets all its water from groundwater.	
12	GENERAL	
	Mr Van den Berg asked if the study will be addressing the pricing of water. Structural interventions which have been considered today are costly and cannot be recovered from direct water users. These costs can only be recovered through benefactors. A similar system which is being used for the Vaal and Western Cape Systems should be implemented where the cost is shared by all users.	
	Mr Nditwani responded that this issue isn't being addressed here. The DWA must address this.	DWA
	Mr Johan Van Rooyen added that he has been appointed to the Water Tariffs Structure Committee which addresses water tariffs. This committee should investigate this issue. Mr Venter commented that surface and groundwater impacts on flow in the study area are addressed in a document which he will pass onto Mr Pieter Van Rooyen. Ms Mdi asked about illegal water abstraction. What is being done to clamp down on this issue? How effective is this? Mr Nditwani responded that this will come out after the validation and verification of all water use have been done in the study area.	
	Mr Johan Van Rooyen added that unlawful water use is very high in the Vaal River System and it reached a point where directives had to be issued to the unlawful users. It is taking a lot of time but it is being done and most unlawful users should be removed from the Vaal System by 2014.	

	Mr Meshack Masindi (Department of Economic Development, Environment and Tourism) asked if climate change will be investigated.	
	Mr Johan Van Rooyen replied that climate change is being considered by the DWA in all its studies. South Africa has a varied climate without taking global climate change into account. The Western Cape, for example, is the most susceptible region in South Africa to climate change. The DWA will prepare for climate change and act accordingly.	
13	WAY FORWARD	
	Mr Nditwani announced that the recommendations considered in this meeting will be distributed to the committee and will be available on the website.	
14	DATE OF NEXT MEETING	
	The next SSC meeting will be on Wednesday, 31 October 2012.	
15	CLOSURE	
	Mr Nditwani thanked all members for attending the meeting.	

Attendance Register – 25 April 2012

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