



DEPARTMENT: WATER AND SANITATION
Directorate: National Water Resources Planning

IMPLEMENTATION AND MAINTENANCE OF THE WATER RECONCILIATION STRATEGY FOR RICHARDS BAY AND SURROUNDING TOWNS

STRATEGY STEERING COMMITTEE MEETING NO 1

MINUTES OF STRATEGY STEERING COMMITTEE MEETING NO 1 HELD AT EXCO ROOM, CITY OF UMHLATHUZE LOCAL MUNICIPALITY, RICHARDS BAY, WRP CONSULTING ENGINEERS BOARD ROOM, DWS KZN REGIONAL OFFICE BOARD ROOM VIA VIDEO LINK

Item	Description	Action
1.	OPENING WELCOME AM welcomed all to the meeting. She apologized that the meeting had been postponed twice and thanked all the Stakeholders for attending the meeting. A round of introductions followed.	
2	ATTENDANCE & APOLOGIES Attendance (in Richards Bay) Angela Masefield DWS KZN, In Chair AM Lilene Louw IX: Study Leader LL Caryn Seago WRP: Deputy Study Leader CS Sabelo Cele WRP: Stakeholder Engagement SC Zama Zuma Mhlathuze Water ZZ Marius Vlok Tronox MV Willem Jordaan Tronox WJ Siyabonga Buthelezi Mpact Paper SB Zingisa Mavuso Tongaat Hulett ZM Nosipho Ntombela Mondi NN Jacques du Toit Isizinda JdT Khalipha Mtshali Foskor KMt Mannana Ntompe Foskor MN Vika Mthethwa King Cetshwayo DM VM Phindile Hlalatu King Cetshwayo DM PH Muzi Khanyile King Cetshwayo DM MK Sakhile Hlalukane Umgeni Water SH Christa van der Walt ZCCI CvdW John Readman Irrigators JR NS Ngwane Dube Village NSN Attendance (in Pretoria) Kennedy Mandaza DWS: Study Manager KM Patrick Mlilo DWS: Planning PM Sakhile Mamba DWS: Planning SMa Richard Martin DWS: Systems operations RM	

Ntobeko Cele	DWS: Systems operations	NC
Sakhile Mndaweni	DWS: Systems operations	SMn
Kobus Bester	DWS: Options Analyses	KB
Johann Enslin	DWS: Options Analyses	JE
Alloycius Salagae	DWS: Climate Change	MS
Sebastian Jahnke	DWS: PSP Team Support	SJ

Attendance (in Durban)

Cobus van der Walt	DWS: IE: Water Use	CvdWa
Sizwe Madlala	DWS: Regulation and Planning	SMad
Nkosinjani Mkhize	DWS: IE	NM
Sipindile Shoba	DWS: IE: Water Use	SS
Manisha Maharaj	DWS: Regulation and Planning	MM
Gibson Gumede	DWS: Regulation and Planning	GG

Apologies

Celiwe Ntuli	DWS: Systems operations
Geert Grobler	DWS: Water Quality
Geoff Lagerwall	RBM: Industrial Sector
Alan Naidoo	RBCT: Industrial Sector
Ashley Starkey	DWS: Regional Office
Nkululeko Biyase	KCDM: District Municipality
Gavin Subramanian	Umgeni Water
Kevin Meier	Umgeni Water
Michelle Hiestermann	UWASP
Candice Webb	WWF

3. The agenda was accepted without modifications

4. PURPOSE OF THE MEETING

AM explained that the main purpose of the meeting was to introduce Stakeholders to the Study and provide an overview of the Study activities. Progress to date would also be presented.

5 ROLE OF THE STRASC

AM outlined and explained the role of the Strategy Steering Committee (StraSC).

6 BACKGROUND TO THE STUDY

KM provided the background to the Study and explained that it was a follow on to the first Reconciliation Strategy Study completed in 2015. He provided an overview of what is typically covered in a Reconciliation Strategy Study as well as the objectives thereof. He further introduced the Stakeholders to the appointed Professional Service Provider.

7 OVERVIEW OF STUDY ACTIVITIES

CS provided an overview of the various Tasks that would be undertaken during the Study. She outlined that the broad approach would be to use the original Strategy as a point of departure and build from there. She said that any deviations or modifications would be carefully explained to Stakeholders. She presented the Study programme and explained the only modification to date had been the delay of the first StraSC meeting which was rescheduled from May to

	<p>August (this meeting). She mentioned it would not impact on the overall programme. CS briefly showed a summary of the outcome of the previous assignment in terms of the water balances presented in the Final Strategy.</p>	
8	STRATEGY INTERVENTIONS	
8.1	<p>Water Conservation/Water Demand Management</p> <p>The City of Mhlathuze Local Municipality was unfortunately not in attendance in order to provide feedback relating to progress made in terms of WC/WDM initiatives. AM was able to provide some information that DWS has relating to the budgets spent to date.</p> <p>The representatives from the King Cetshwayo District Municipality were not in a position to provide feedback of WC/WDM initiatives. AM reported the information she had relating to expenditure.</p> <p>AM requested that the Municipal representatives prepare to provide feedback at the next StraSC meeting relating to the WC/WDM initiatives</p> <p>MV provided feedback from Tronox relating to reduction in water use over recent years. He stated that the reductions were resulting from good engineering designs at the mine and that they had been able to recycle significant quantities of water. KM queried if it would be possible for MV to provide further information relating to the reduced water use in order to share with Stakeholders in other areas. AM mentioned that the drought in the area had done the catchment a favour whereby the major users had become increasingly more efficient with their water use during the time of limited availability.</p>	KCDM uMLM
8.2	<p>Infrastructure</p> <p>AM presented progress made to date relating to the Thukela Transfer Project on behalf of KB/JE due to a temporary break in connection in the video link. She explained that the project which was included as a high priority intervention in the Strategy had been fast tracked and was given emergency status as a result of the drought. She said that the R650 million project was to increase the existing transfer of water from the Thukela River to Goedertrouw Dam from the current 90 MI/d to approximately double that (current transfer 1m³/s, 86 MI/d, 32 million m³/a, emergency phase increase to 2.2 m³/s, 190 MI/d, 69 million m³/a). The contract was awarded in September 2017 and construction is currently underway, and is about 30% complete. She said it was likely to be completed in the middle of 2019. She said that a presentation relating to the progress would be attached and distributed with the minutes of the meeting.</p> <p>AM further explained the situation relating to the Mfolozi transfer intervention. She mentioned that the intention had been to initiate a detailed study including updating the hydrology and detailed feasibility on a transfer scheme from the Mfolozi catchment. She said that the Terms of Reference for the Study had been prepared. KB then continued the feedback and stated that, as a result of funding constraints within the Department, no further progress had been made after the preparation of the Terms of Reference, and that he did not foresee the study getting underway for at least another two years.</p> <p>KB mentioned that any further phases in transfer from the Thukela would need to be assessed in combination with the option to raise Goedertrouw Dam in order to maximize the benefits of the transfer. He said that some preliminary reconnaissance work has been done (no report available) and that it does</p>	AM

	<p>appear possible to raise the Dam. Again due to funding constraints with DWS, no further work has been done after the initial reconnaissance, and he said that, as with all the other DWS interventions, he thought that the option would be delayed by two to three years.</p> <p>PM queried the expected completion date of the Thukela Transfer Scheme. AM responded that due to delays and negotiations with the contractor, she suspected that it would be completed between the middle and third quarter of 2019. KM queried the additional volume that the transfer would then provide. AM confirmed that the current contract was to double the existing capacity. PM queried whether the delay would impact on the implementation date assumed in the Strategy, and KB explained that the intervention will actually come on line earlier as a result of the emergency of the drought. He said that, however, only the second phase is being fast tracked as a result of the drought. He said the third phase needs to be re-evaluated as a result of changes in the Thukela catchment. The uncertainty is a result of outdated hydrology in the Thukela, as well as modifications in transfers to the Vaal system. KM confirmed that the original plan (included in the White Paper WP-E94) was to transfer 8 m³/s from the Thukela River to the Mhlathuze system which is almost 250 million m³/a, however, a revisit of the hydrology is required to determine whether that volume is still feasible. KB stressed again that due to many changes within the catchments over the years, both the Thukela and the Mfolozi catchment hydrology needs to be updated.</p>	
8.3	<p>Land care</p> <p>CS presented the information she had received from UWASP relating to the clearance of alien vegetation. The presentation is attached to these minutes. She mentioned that a number of different organisations were getting involved with alien vegetation removal, however, it appeared that the efforts were not coordinated. She said that UWASP was starting to work with Stakeholders in a coordinating role. PM stated he was concerned that there was a lack of coordination and suggested that the Department of Environmental Affairs be engaged with to determine if there is a more coordinated programme relating to the removal of alien vegetation. AM agreed that better alignment was required and requested that NM from DWS KZN engage with the relevant groups to assist with getting the alignment in place. JR suggested the coordination issue could also be addressed at the Catchment Management Forum.</p> <p>KM mentioned the area of 13500ha of alien vegetation, and queried the potential volume that could be added to the water balance as a result of the clearing initiatives. He also queried where the clearing was taking place. CS said that she was not sure of the exact volume that the 13500ha of aliens is estimated to be using, nor the potential impact of removing them. She said that would be addressed in the water requirements report, and the final Reconciliation Strategy. KB stated that he was aware of a study that was done in the Eastern Cape quantifying the impacts of alien vegetation clearing, and that it was lower than originally believed. He said he would provide the information. CS further clarified that she understood that they would target removing the aliens from the high impact area upstream of Goedertrouw Dam, which is quaternary catchments W12A and W12B.</p> <p>NM reported that no progress had been made to date with the illegal forestry removal and that this would be taken forward with the catchment management forum.</p>	<p>NM</p> <p>KB</p> <p>NM</p>

8.4	<p>Other</p> <p>ZZ reported her knowledge on the status of the seawater desalination as a high priority intervention. She mentioned that the Municipality may have been in a better position to report back on the existing installation. She said it was still operated by a private entity (North Coast Water) and that Mhlathuze Water's role was currently just to sample and analyse the water produced. She further stated that, currently, the water quality is complying. She said she was not in a position to report back on anything relating to the day to day operation of the plant.</p> <p>AM clarified that the Strategy had identified the development of large scale desalination as an important intervention option, and said that the feasibility thereof should be looked into as a high priority. DWS implemented a 10 MI/d treatment plant as part of the drought intervention. AM explained that this is a small capacity plant in the context of desalination, and that this should not be confused with the large scale desalination included as a Strategy intervention. AM further said that she was not aware of any progress relating to investigating the feasibility of large scale desalination for the Richards Bay WSS and the importance thereof should not be lost in relation to the implementation of the small plant.</p> <p>CS queried that the action item does in fact sit with Mhlathuze Water, given that the Action Plan in the Strategy mentioned the responsibility was "to be determined". AM confirmed that MW is best suited as the bulk water provider to investigate the feasibility of desalination. She clarified that the usual approach is for DWS to determine the feasibility of the major bulk water infrastructure projects, and the local water services providers focus on the options relating to localized water supply. She said the Municipality would then focus on the smaller projects relating to water reuse.</p> <p>KM confirmed that the PSP should not focus only on the existing desalination plant that has been implemented, but that the option of large scale desalination should also be addressed.</p> <p>AM requested that Umgeni Water provide documentation to Mhlathuze Water relating to their investigations on the feasibility of desalination such that they can be guided to initiate the process. Umgeni said they would confirm what information was available.</p> <p>PM queried whether the documentation relating to the existing 10 MI/d plant had been obtained, as it was mentioned at the first TSG meeting. AM confirmed that the NWRIB would be best positioned to provide the report as they are responsible for the operation of the plant. She confirmed that the design capacity is about 10 MI/d, however, the plant currently produces about 6 MI/d. It is constrained by the intake works which is not able to take the water at low tide. There have been additional issues of the supply into the Mhlathuze system relating to the pressure causing pipe breakages, as well as concerns with the quality of the water provided.</p> <p>KB requested that the planned URVs used for the small desalination plant be obtained from NWRIB and then compared with the actual information now that the plant is operational.</p> <p>AM reported back her knowledge of the status of reuse of effluent that was tasked as a responsibility of the Local Municipality. She mentioned a study had been initiated to determine the feasibility of a Public Private Partnership to carry</p>	<p>Umgeni</p> <p>LL</p>
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9	<p>out reuse and desalination in the Richards Bay area. A number of organisations feature on the Steering Committee including National Treasury, DWS etc. The study is well advanced and Private Partners are now being sought via a tender process. The intention would be to treat the effluent to a standard suitable for industrial use, as opposed to potable water standard.</p> <p>PM mentioned that Eskom had queried the possible installation of an Open Cycle Gas Turbine and queried whether this would be discussed. CS confirmed she had been made aware of this and that Eskom would be further engaged with under the water requirements task in order to account for their needs. AM stated that Eskom had been consulted relating to the take up of the reused effluent water.</p> <p>NM reported back on the status of the billing of irrigators on actual use rather than registered use. He said that no progress had been made in this regard and that the registered use was still used. He requested that further discussion relating to the intervention take place outside the meeting.</p> <p>CvdWa provided feedback relating to the overall operations of the Mhlathuze system and the improvements that were made in efficiency during the drought. CvdWa mentioned that Goedertrouw dam's storage is at about 47%. They had experienced some difficulty recently with releases due to maintenance at the Mhlathuze weir. He said that pumping was currently not taking place. AM added that the Thukela transfer had been operated since July 2014. She said that in the last few years much better control was taking place on the releases from the Dam in terms of the users' requirements. She thanked the users for assisting with information in this regard. AM said that DWS KZN would provide the figures on the savings made as a result of improved operations over recent years. She said that further improvements could be made with increased monitoring in the system.</p> <p>KM queried if improvements to operation extended to abstractions from the Lakes supplying the system. AM responded that there have been improvements from the industrial sector, however, operations have not been optimized from the City of Mhlathuze Local Municipality. The Mzingazi WTW is currently not being operated at capacity resulting in water spilling from the Lake. DWS has raised the issue with the City who are currently refurbishing the WTW, as they had decommissioned the plant during the drought when the Lake was empty.</p> <p>AM suggested that RBM be approached for progress relating to the artificial recharge outside the meeting as they were not there to present.</p> <p>MS queried the challenge of sediment in the catchment relating to reduced water resources resulting from sand mining. JR stated that the sand was not a problem above Goedertrouw dam. He said the sand mining usually occurred at the bottom end of the river closer to the sea and city, so sedimentation in the Dam was not a problem.</p> <p>CURRENT PROGRESS</p> <p>CS presented the progress relating to the demographics and socio economics task.</p> <p>JR pointed out that Ngwelezane and Empangeni were incorrectly switched on the locality map and CS confirmed that would be adjusted.</p>	<p>CS</p> <p>NM</p> <p>AM</p> <p>CS</p> <p>CS</p>
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	<p>SB queried whether the impacts of immigration had been included in the future population projections. CS confirmed that the demographer would have considered it in the work.</p> <p>AM summarized that the Final Demographics Report would be uploaded on the DWS website for Stakeholders to access. She said it was important for the Municipalities to review the report and provide any information that may have not been considered from a local perspective. CS said that the report would be circulated to Stakeholders via email by the end of August 2018.</p> <p>CS proceeded to report on the progress relating to the Water Requirements Task. She presented a summary of the water requirements determined and used in the water balance of the Reconciliation Strategy (2015). She showed how the actual use had tracked over the last few years since the Strategy was completed, and highlighted the impact of the drought on the use. She also elaborated further on the parallel process of Compulsory licensing that took place in the Mhlathuze catchment and the importance to consider that moving forward with the study.</p> <p>ZZ queried whether it is possible to obtain documentation relating to the updated allocation for Mhlathuze Water. She said that she was aware of the Gazette and had reviewed it, however, Mhlathuze Water had not been provided with any letter or documentation from DWS which should now supersede their previous license showing the updated allocation. DWS KZN were not sure of the status of such paperwork and said they would look into the matter.</p> <p>PM mentioned that Mhlathuze Water could contact Mr Sipho Skosana in order to obtain the required documentation relating to the updated license. CS said she would provide the contact details for him to Mhlathuze Water. SB mentioned that Mpact had received updated paperwork, however, they had queries and comments and wanted to request an amendment. He said they had communicated with Mr Skosana, however, no response had been received to date. PM said he would provide further information outside the meeting.</p> <p>KM stated that he would like the Study Team to determine how much water could be used under General Authorisations and if it is significant enough to include in the water balance. He also queried whether it would be considered as a reduction in yield or whether it will form part of the water requirements. CS confirmed that the query was noted and that the Study Team would look into how best to handle this portion of registered water. She first needed to establish what the volume is officially applicable to the Mhlathuze Catchment specifically.</p> <p>JR referred to the plot showing that actual consumption over the last few years is decreasing. He stated that 3500ha of previously used land is out of production due to land reform which previously consumed close to 32 million m³/a. He also said that, since 2014, the irrigated agriculture sector has been on 80% restrictions and therefore only making use of 20% of their allocation. He further mentioned that the Agriculture Sector had agreed to take part in the Compulsory License Programme as they were led to believe that if there was to be a reduction in allocation volumes, an improvement in their assurance of supply could be negotiated.</p> <p>AM confirmed that as part of this study, assurance of supply volumes in each user category should be carefully reviewed, and impacts of any changes shown.</p>	<p>CS</p> <p>DWS KZN</p> <p>CS</p> <p>PM</p> <p>PSP</p>
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	<p>CS went on to present the information obtained to date for the large water users in the Study Area. She highlighted that information had been requested from the District Municipality on the smaller towns and this was still outstanding. She requested that the District Municipality to provide the information.</p> <p>ZZ confirmed that the current Mhlathuze Water contract with Mondi is 100 MI/d.</p> <p>ZZ confirmed that the Foskor Clarified component falls under the Mhlathuze Water license. CS said she would investigate further regarding the potable water component of their license.</p> <p>JDT confirmed that Isizinda has taken over Bayside Aluminium and the water use has reduced over the years. He said the intention is to grow the business into the future, however, the water use will likely not return to the higher volumes used in the past.</p> <p>ZZ stated that the Industrial Development Zone has a Phase 1F development under construction and that they had approached Mhlathuze Water to supply 18 MI/d from 2020.</p> <p>KM queried about the allocation to Fairbreeze mine falling under Mhlathuze Water. He asked which source this was from, the Thukela or Mhlathuze. It was clarified that the same license was currently being used for Hillendale from Mandini and Fairbreeze from the Mhlathuze. Further engagements were underway relating to the license.</p> <p>PM stressed the importance of considering both the allocated volumes and the actual use volumes for various scenarios in the water balance. The Study Team confirmed this would be done.</p> <p>KM requested that the Study Team outline the details of the future urban growth assumptions relating to the improved level of service for the various demand centres. CS apologized for hiding the slides and went through the details. ZZ further queried the assumed values per capita per day for the various types of housing, and CS further showed the DWS standard figures used. She confirmed that both the theoretical water use based on the population, types of housing and standard consumption per type as well as the actual historical use volumes were considered when calibrating the future water requirements model.</p> <p>CS queried whether the actual water use from the agricultural sector was available. JR confirmed that the figures are sent monthly to Celiwe Ntuli, and CS said she would obtain the information from her.</p> <p>CS stressed the need for the users to provide their future requirements as realistically as possible in terms of the time frames of taking up the additional use.</p> <p>KM queried whether an opportunity would be given to the Stakeholders to provide inputs into the scenarios that would be analysed under the water resources task. AM stated that she felt this was not yet necessary given that this was the introductory meeting, and said that Stakeholders should rather start thinking about possible scenarios, and this could be discussed at a StraSC meeting in the future.</p>	<p>KCDM</p> <p>CS</p> <p>PSP</p> <p>CS</p>
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10	<p>DISCUSSION</p> <p>AM opened the discussion by stating the importance of Mhlathuze Water's inputs in the study as they are one of the largest Stakeholders involved.</p> <p>JR pleaded with the group to attempt to get the Local Municipality to the meeting in order to be involved with the process. He further expanded on water that had been lost from Goedertrouw Dam with a major impact on the irrigators as a result of poor operations by the Municipality at Lake Mzingazi.</p> <p>SB mentioned the previous Strategy interventions and the fact that some were given high priority status. He noted, however, that many of the feedback mentioned that projects were delayed and the timing was therefore no longer accurate. He further stated that the responsible parties need to show improved commitment, and noted the absence of some Stakeholders who should have reported back on high priority items. AM stated that it will be important to update the prioritized interventions and possibly relook at the priority status, especially given that some interventions were fast tracked due to the drought, and therefore the timing and order of implementation of others will be affected.</p> <p>Foskor indicated that they were concerned about the graphs indicating they are using more than they are licensed for and CS confirmed this would be further investigated and corrected.</p>	CS
11	<p>STRASC COMMUNICATION AND CONFIRMATION</p> <p>SC presented a brief overview of the typical communication that will be circulated to the Stakeholders and requested that the Stakeholders check and update the database list printed out.</p> <p>AM requested that KM arrange for a letter to be directed to the Municipal Manager indicating the importance of the Study and the need for the Local Municipality to get involved with the StraSC.</p>	KM
12	<p>NEXT MEETING</p> <p>The meeting proposed that the next meeting be scheduled for the end of January 2019, in about six months' time. This would also correspond to further progress being made.</p> <p>A request was made that future meetings be scheduled around other meetings held in the area, as there had been a clash of times with this meeting and the UWASP meeting. CS apologized and said she was aware of the clash only after sending out the invite, and that this would be carefully coordinated in the future.</p> <p>Foskor queried whether status updates on the progress of the interventions would be made available between StraSC meetings. CS confirmed the progress would usually only be discussed at the meetings, and the reports would be circulated by email.</p> <p>KM requested that the next meeting be held in early December 2018 based on the original timeline required to produce the portfolio of evidence of progress with the Study. He said that a window between 1 December 2018 to 31 January 2019 be considered for the next StraSC meeting.</p> <p>KM further mentioned that the annual status report prepared by the Study Team</p>	

13	<p>would provide updated information of the intervention progress made to date, and these reports would be circulated to the Stakeholders.</p> <p>CLOSURE</p> <p>PM thanked AM for chairing the meeting on behalf of NWRP and the PSP for arranging the video link.</p> <p>AS thanked the Stakeholders for attending the meeting and for their patience with the technology. She closed the meeting.</p> <p>MINUTED BY: C J Seago.</p>	PSP
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