

## Comments Schedule for Mbombela Preliminary Water Reconciliation Strategy

Abbreviations:

**G** General

**NS** Nsikazi South

**NN** Nsikazi North

**Nel** Nelspruit

**KP** Karino Plaston

**WR** White River

**M** Matsula

Item No.	Comments from	Comment	Response and Actions
G1	Focus Group	WC/WDM business plans have already been prepared and are being implemented for a number of water demand centres. In the Reconciliation Strategy Report the impression is given that nothing has been done as yet which gives a wrong/negative image of the service provider.	The recommended actions in the Reconciliation Strategy for the Reconciliation Strategy for WC/WCM will remain but for the water demand centres where plans exist and actions have been taken, the initiatives will be acknowledged and the service providers will be encouraged to continue with the work and try to achieve the targets.
G2	Focus Group	<p>Statements on water quality are incorrect for most of the water demand centres.</p> <p>Each water demand centre must be viewed in context. For example, the Kingstonvale WWTW will not affect the Water quality of Nelspruit despite of the fact that it treats Nelspruit's waste water. It will in fact affect the intake water of Karino, Nsikazi South and Matsulu.</p> <p>There are further "sweeping statements" about risks and water quality that is deteriorating which need to be placed in context. The WQ sections also refer to the general DWA standard whilst the special standard for the Crocodile River</p>	The water quality section of each WDC will be reviewed. As agreed, the commentator will show the suggested changes in "track changes"

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		is approximately 10 times stricter.	
G3	Focus Group (Sembcorp)	The final strategy report should be sent to MLM and Sembcorp first for comment before it is distributed and presented to the other stakeholders.	Noted: This will however delay the project by one month as it will take time for Sembcorp and MLM to comment and for the consultants to consider and incorporate the comments. Sembcorp and MLM are part of the stakeholder group and wherever timing allows this special round of comments will be accommodated, otherwise not.
G4	Focus Group	The list of references is incomplete. DWA reports are listed but are not like the MLM Master Plan and the Spatial Development Plan. There is a need to know which SDP was used. A new one is being prepared.	Agree, will be updated.
G5	Focus Group	Water Quality: There is lots of illegal sand mining along the entire Crocodile River which affects the water quality.	This will be mentioned in the report.
G6	Focus Group	Littering is a big problem along the entire Crocodile and Sabie Rivers and should be mentioned under water quality.	This will be mentioned in the report.
NS1	Focus Group	The usage per person per day as provided in the SSC presentation is too high. This figure is influenced by the total water usage and the population for NS. The population is therefore under suspicion. It is acknowledged that the population of NS is based on a house count from aerial photos of 2009, but it seems that not all the structures on each stand have been counted. Several stands have more than one house or an additional squatter house has been erected. Furthermore the average number of persons (3.8) per house are too low. Sembcorp / MLM have worked on a figure of 5.4 persons/house which is based on physical count. The house count should also be repeated from 2012 aerial photos as many people have migrated into the area since 2009.	The budget for the study doesn't allow for a total recount of houses based on 2012 aerial photos. Such an exercise need to form part of a variation order or a follow up study which will be a decision that has to be taken by DWA. Kayamandi who compiled the population report will however be asked to check by means of a sample whether the growth rates are realistic and amend if necessary for the purpose of this study. Kayamandi will also be asked to confirm whether all structures on each stand have been counted and if not, to determine a factor for increasing the population based on a typical sample. Lastly Kayamandi will be asked to show how the average figure of 3.8 persons per household was determined and to adjust this figure if it seems to be too low.

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NS2	Focus Group	The statement that the WTW is operated above design capacity at 60 Ml/day is incorrect. The WTW has been upgraded to handle 54 Ml/day but the average volume of treated water supplied to NS is 41.9 Ml/day, which includes water from the emergency pump station but which excludes losses.	<p>It is acknowledged that 60 Ml/day is not the sustained water use and this will be amended. However it is also known that during the year in which the average supply was 41.9 Ml/day, there were several problems with pumps and therefore the flow had to be interrupted. The design capacity (54 Ml/day) is currently higher than the licenced abstraction (52 Ml/day) and it is therefore suggested to adopt the 52 Ml/day allowable abstraction as the current water use for NS.</p> <p>(Note: The latter was not agreed to by the Focus Group – the 41.9 Ml/day was the agreed figure but in hindsight this figure seems too low as a result of the interruption and restrictions experienced.</p>
NS3	Focus Group	Paragraph 9.5.2 mentions that the Crocodile River is fully allocated and that additional allocations to NS from the Crocodile River cannot be recommended. It is suggested to rephrase this paragraph so that it is clear why. Also with interventions (e.g. water trading) additional allocations can be made and this must become clear when reading this paragraph.	The paragraph will be rephrased. Same applies to other demand centres that get water from the Crocodile River.
NS4	Focus Group	WC/WDM: Status Quo Assessment and Strategy states that “the relationship between the stakeholders in the supply area is generally poor”. This statement is not True and should be deleted.	Will be deleted.
NS5	Focus Group	WC/WDM: Paragraph 9.8.1.1 states that “Most of the demand centres is informal and levels of services are below RDP standards...” This is incorrect as most levels of service are above RDP standards.	The word “most” will be replaced with “some”.
KP1	Focus Group	The population for Karino/Plaston in the Preliminary Strategy report ( $\pm$ 4 000) is far too low. Silulumanzi is currently supplying water to 20 000 people, and the	It is suspected that not all supply areas of KP was included in the population count and that a portion of KPs population is included in NS. Tekwane North, Mamelodi and Emoyeni are

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		population is growing fast to 60 000.	supplied from Primkop Dam and should be regarded to be part of the KP area. Kayamandi will be requested to check this. The total of KP and NS should tally after the adjustments as a result of comment NS1.
KP2	Focus Group	Tekwane North, Mamelodi and Emoyeni are currently supplied from Primkop Dam but will be supplied from the Crocodile River in future. Townships that are supplied from the White River are Plaston, Karino, B_____, Dwaleni, the Airport, Lifestyle Estate and Industrial Area.	Noted.
KP3	Focus Group	Paragraph 10.2.1 states that the one WTW supplying water to Karino/Plaston is situated at Primkop Dam which is incorrect. This WTW is situated approximately 10 km from Primkop Dam in the Broedershoek Area.	Noted. Will be corrected
KP4	Focus Group	Preliminary Reconciliation Strategy states that there is no industrial water use in the KP area but there are commercial centres.	Noted. This use is regarded as part of domestic water unless a proper breakdown between domestic and commercial can be provided.
KP5	Focus Group	There is no waste water treatment work for KP. Waste water is treated by plant in NS.	Noted.
Nel1	Focus Group	The population of Nelspruit looks correct but there is currently a daily influx of 80 000 people into Nelspruit from other areas – even from outside the MLM area. This is more than the current Nelspruit population. This should be mentioned in the report as this could be one reason for the high water consumption per person per day.	Noted. This will be mentioned and put into perspective.
Nel2	Focus Group	In 2010 there were 10 530 business meters and 10 844 domestic meters. The industrial use of Nelspruit could therefore be higher. No mention is made in the report of the commercial use, e.g. shops, schools, hospitals, etc.	Agreed. Will be specified in the report as long as a breakdown can be provided. Silulumanzi (Louis Klapprott) will provide this information.

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		This could also bring the high water use per person per day down. A distinction should be made between Business, Wet and Dry Industries, Schools and hospitals, golf courses, agricultural college etc.	
Nel3	Focus Group	Provision must be made for a higher growth rate for Nelspruit to accommodate the water requirements for the new university and new hospital.	This is new information and shall be taken into account for the Final Reconciliation Strategy. Kayamandi must however confirm that this has not as yet been taken into account.
Nel4	Focus Group	Provision must be made for the growth in Mattafin industrial area. Currently $\pm$ 1 000 additional stands have been allocated.	Same response as Nel 3.
Nel5	Focus Group	Water Quality: MMC & Delta dump manganese in sewer when they experience failures which then flow to the Kingston Vale WWTW. This might affect the water quality of the water demand centres lower down in the Crocodile River. Klarespruit is also a source of Manganese for the other water demand centres.	Noted.
Nel6	Focus Group	Irrigation canals including the feeder canal to the Nelspruit intake works are very old with high losses. These canals must receive attention (e.g. Crocodile Valley and Friedenheim Canals).	Noted. Will be included in the Strategy.
Nel7	Focus Group	The high pipe burst frequency (i.e. 100/week) must be checked. This is definitely not the situation.	Noted. Will check the source of this information.
Nel8	Focus Group	Water reuse for Nelspruit should be mentioned as an option.	Agreed. Will be added to the strategy. Must check impact on downstream users.
M1	Focus Group	Population figures for Matsulu are as follows:  2009: 12 000 2012: 16 000	Noted. Kayamandi will be asked to check.

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		The growth rate in the Preliminary Reconciliation Strategy therefore is too low.	
M2	Focus Group	The design capacity of the current WTW is 12 Mℓ/day (not 16 as in the report) and an extension is planned for another 12 Mℓ/day. This will be done in two steps of 6 Mℓ/day each.	Noted. Will be corrected in the strategy report.
M3	Focus Group	Matsulu abstraction works in the Crocodile River frequently runs dry as a result of the Van Graan Weir and canal taking water upstream of the works. This does not necessarily affect downstream users as the Van Graan canal discharges this water lower down in the river but this point is downstream of the Matsulu abstraction point.	This will be mentioned in the report. If the user of the Van Graan Canal is entitled to the water there is little that the Matsulu water service provider can do about it. An intervention must be put in place to bridge the time when water is diverted through the canal.
M4	Focus Group	WC/WDM 20% water saving possible for Matsulu. Plans are in place but not formally documented. Number of households is not correct in performance indicator table.	Preliminary report will be amended accordingly.
WR1	Focus Group	The growth rates of White River need to be revised. The total 7 million m <sup>3</sup> /a allocation of WR has already been allocated by the Town Council for new developments which will probably take place within the next 7 years. Spread sheets showing these approved allocations were handed to the consultants. A further 4 000 stands in Pumulani have been allocated.	Noted. The current water use in the report is correct but the high and low water demand curves have to be changed. This will be done in the preliminary strategy report.
WR2	Focus Group	WC/WDM: The current system losses in WR are 37% which is high. No formal WC/WDM measures are currently implemented.	This will be mentioned in the Preliminary Strategy Report and the importance for WR to introduce WC/WDM measures will be emphasised.
WR3	Focus Group	No groundwater available in WR.	The report mentions that the availability is generally low which is not a contradiction with the comment. Preliminary Report will remain as is on the description of groundwater.

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WR4	Focus Group	The licence for taking water from Longmere Dam should be in total 1.6 million m <sup>3</sup> /a and not 1.25 million m <sup>3</sup> /a.	Noted. This should however be verified with the Witrivier Irrigation Board. (Take up with Ronel Lotter).
WR5	Focus Group	Water Quality. Witklip Dam water contains lots of iron and the service provider experiences problems with the treatment of the water.	This will be mentioned under water quality. It must be determined if an additional intervention is necessary to overcome this problem.
HV1	Focus Group	The abstraction works from the Sabie River for Hazyview is not just an emergency scheme. Sometimes water is abstracted from the Sabie River and Sabie River Irrigation boards' canal at the same time.	Tendai Sawunyama of the consultant team had a different opinion and he undertook to go into this matter and verify.
HV2	Focus Group	WC/WDM Hazyview losses are high (46% in 2007) – no industrial water.	Noted Hermanus. Check with Pinti
HV3	Focus Group	The old WTW must be moved as it stands on private property. The new plant will be 6 Ml/day.	Noted.
HV4	Focus Group	Whole of Ward 1 of HV will move to Bushbuck Ridge in 2014.	Noted. For the purpose of the preliminary and final strategy the water balance of the entire HV will still be assessed.

