



## MINUTES OF MEETING

**Algoa Reconciliation Strategy:Administrative and Technical Support Group Meeting No 6, held on 29 January 2013at the offices of Aurecon, Port Elizabeth**

Item		Action																																																																											
1.	<b>WELCOME</b>  The chairperson, Ms Isa Thompson welcomed everybody to the meeting.																																																																												
2.	<b>ATTENDANCE AND APOLOGIES</b>  <b>Attendance</b> <table><tr><td>Ms Isa Thompson</td><td>DWA: CE: NWRP (S)</td><td>IT</td></tr><tr><td>Mr Dewald Coetzee</td><td>DWA: D: NWRI: Southern Operations</td><td>DC</td></tr><tr><td>Ms Jenny Pashkin</td><td>DWA: CE: WRPS: System Operations</td><td>JP</td></tr><tr><td>Mr Graham Taylor</td><td>Coega IDZ</td><td>GT</td></tr><tr><td>Mr Paul du Plessis</td><td>NMBM</td><td>PdP</td></tr><tr><td>Mr Stephen Mullineux</td><td>DWA: EC RO: DCE:Water Use Regulation</td><td>SM</td></tr><tr><td>Mr Stan Groenewald</td><td>NMBM</td><td>SG</td></tr><tr><td>Mr Stuart Fergusson</td><td>NMBM</td><td>SF</td></tr><tr><td>Mr Ricky Murray</td><td>Groundwater Africa</td><td>RM</td></tr><tr><td>Mr Erik van der Berg</td><td>Aurecon</td><td>EvdB</td></tr><tr><td>Mr Dup van Reenen</td><td>AfriCoast Engineers SA</td><td>DvR</td></tr><tr><td>Ms Reina Zastron</td><td>Aurecon</td><td>RZ</td></tr></table> <b>Apologies</b> <table><tr><td>Ms SiziweBlie</td><td>DWA: EC RO: DD:IE</td><td>SB</td></tr><tr><td>Mr Theo Geldenhuys</td><td>DWA: EC RO: CE: Water Resources Management</td><td>TG</td></tr><tr><td>Mr Pierre Joubert</td><td>Gamtoos IB</td><td>PJ</td></tr><tr><td>Ms RienetteColesky</td><td>Gamtoos IB</td><td>RC</td></tr><tr><td>Mr Menard Mugumo</td><td>DWA: CE: OA (S)</td><td>MM</td></tr><tr><td>Mr Elias Nel</td><td>DWA: SM: WRPS: Integrated Hydrological Planning</td><td>EN</td></tr><tr><td>Mr Martin Labuschagne</td><td>DWA: ECRO: CE: WR&amp;U-WUE</td><td>ML</td></tr><tr><td>Mr Willie Olivier</td><td>Coega IDZ</td><td>WO</td></tr><tr><td>Ms CeliweNtuli</td><td>DWA: SM: WRPS System Operations</td><td>CN</td></tr><tr><td>Mr Pieter Viljoen</td><td>DWA: SM: WRPS: Water Quality Planning</td><td>PV</td></tr><tr><td>Mr Nick Chapman</td><td>VWSA</td><td>NC</td></tr><tr><td>Mr FanusFourie</td><td>DWA: SM:WRPS: IHP</td><td>FF</td></tr><tr><td>Mr Paul Herbst</td><td>DWA: D:WUE</td><td>PH</td></tr></table>	Ms Isa Thompson	DWA: CE: NWRP (S)	IT	Mr Dewald Coetzee	DWA: D: NWRI: Southern Operations	DC	Ms Jenny Pashkin	DWA: CE: WRPS: System Operations	JP	Mr Graham Taylor	Coega IDZ	GT	Mr Paul du Plessis	NMBM	PdP	Mr Stephen Mullineux	DWA: EC RO: DCE:Water Use Regulation	SM	Mr Stan Groenewald	NMBM	SG	Mr Stuart Fergusson	NMBM	SF	Mr Ricky Murray	Groundwater Africa	RM	Mr Erik van der Berg	Aurecon	EvdB	Mr Dup van Reenen	AfriCoast Engineers SA	DvR	Ms Reina Zastron	Aurecon	RZ	Ms SiziweBlie	DWA: EC RO: DD:IE	SB	Mr Theo Geldenhuys	DWA: EC RO: CE: Water Resources Management	TG	Mr Pierre Joubert	Gamtoos IB	PJ	Ms RienetteColesky	Gamtoos IB	RC	Mr Menard Mugumo	DWA: CE: OA (S)	MM	Mr Elias Nel	DWA: SM: WRPS: Integrated Hydrological Planning	EN	Mr Martin Labuschagne	DWA: ECRO: CE: WR&U-WUE	ML	Mr Willie Olivier	Coega IDZ	WO	Ms CeliweNtuli	DWA: SM: WRPS System Operations	CN	Mr Pieter Viljoen	DWA: SM: WRPS: Water Quality Planning	PV	Mr Nick Chapman	VWSA	NC	Mr FanusFourie	DWA: SM:WRPS: IHP	FF	Mr Paul Herbst	DWA: D:WUE	PH	
Ms Isa Thompson	DWA: CE: NWRP (S)	IT																																																																											
Mr Dewald Coetzee	DWA: D: NWRI: Southern Operations	DC																																																																											
Ms Jenny Pashkin	DWA: CE: WRPS: System Operations	JP																																																																											
Mr Graham Taylor	Coega IDZ	GT																																																																											
Mr Paul du Plessis	NMBM	PdP																																																																											
Mr Stephen Mullineux	DWA: EC RO: DCE:Water Use Regulation	SM																																																																											
Mr Stan Groenewald	NMBM	SG																																																																											
Mr Stuart Fergusson	NMBM	SF																																																																											
Mr Ricky Murray	Groundwater Africa	RM																																																																											
Mr Erik van der Berg	Aurecon	EvdB																																																																											
Mr Dup van Reenen	AfriCoast Engineers SA	DvR																																																																											
Ms Reina Zastron	Aurecon	RZ																																																																											
Ms SiziweBlie	DWA: EC RO: DD:IE	SB																																																																											
Mr Theo Geldenhuys	DWA: EC RO: CE: Water Resources Management	TG																																																																											
Mr Pierre Joubert	Gamtoos IB	PJ																																																																											
Ms RienetteColesky	Gamtoos IB	RC																																																																											
Mr Menard Mugumo	DWA: CE: OA (S)	MM																																																																											
Mr Elias Nel	DWA: SM: WRPS: Integrated Hydrological Planning	EN																																																																											
Mr Martin Labuschagne	DWA: ECRO: CE: WR&U-WUE	ML																																																																											
Mr Willie Olivier	Coega IDZ	WO																																																																											
Ms CeliweNtuli	DWA: SM: WRPS System Operations	CN																																																																											
Mr Pieter Viljoen	DWA: SM: WRPS: Water Quality Planning	PV																																																																											
Mr Nick Chapman	VWSA	NC																																																																											
Mr FanusFourie	DWA: SM:WRPS: IHP	FF																																																																											
Mr Paul Herbst	DWA: D:WUE	PH																																																																											

Item		Action
3.	<b>ADOPTION OF AGENDA</b> No changes were made to the agenda	
4.	<b>APPROVAL OF PREVIOUS MINUTES</b> The minutes of the meeting held on 18 October 2012 was adopted with the following minor corrections: P36.1: change '... when more water will be in the dam...' with '... when more water will be stored in the dam...'. Also '...balance between water quality and wasting of water' with '...balance between water quality and water required for flushing the system' P3 9.1 '.... 61% of the target for 5 years' with '.... 61% of the target after 5 years' 0.4 'Stephan Marais' with 'Stephen Marais'	
5	<b>RELEVANT PROJECTS &amp; INITIATIVES UNDERTAKEN BY OTHER RESPONSIBLE ENTITIES</b> <b>5.1 Annual Operating rules</b> JP reported that the System's dams are all basically full. DWA is looking at the necessity of discussion between DWA and main stakeholders with regards to keeping abstractions within limits of allocations for different parts of the system. DWA is also looking at Metro usage from the perspective of a stressed catchment, where the possibility of restrictions is constantly looming, even when the system is relatively full. The Metro has already used more than 50% of their allocation, and usually the water use during the second six months of the year (Jul-Jun) is higher than the first. DC asked the Metro to alert the public to the fact that the average consumption has gone up significantly and that they should use water wisely. <b>5.2 Establishment of upper Kouga/Kromme Irrigators WUA</b> SB could unfortunately not attend the meeting, but she provided the meeting with the following information: Establishing the Kouga WUA is still a challenge as it seems that water users are not clear about reasons for transforming even though a detailed presentation was made to them in both English and Afrikaans. SB is currently considering appointing a Service Provider to assist in accelerating the transformation of these irrigation boards. DWA is currently drafting a TOR for the appointment of the Service Provider. The transformation of the Gamtoos IB to a WUA is almost complete, thus it is hoped that the IBs in the Langkloof will learn from GIB and follow as well. <b>5.3 Verification and validation of water use study of a part of the Kromme and Kouga catchment areas</b> The following information was received from SB: An appointment of a PSP has finally been done. The PSP will do a V&V in L82 A-D where there are about 886 users. It was discovered that the rest of the catchment i.e. L82 E-H up to just above the Kouga Dam has about 100 users. This has been presented to the Regional Bid Committee (RBC) to appoint a PSP to complete the catchment. The RBC advised that we should rather check whether the current scope of the project can be extended for the same PSP. The drafting of a submission to the DBAC to request approval to extend the contract and scope for the PSP that has just been appointed is in process. A pre-inception meeting between DWA and the PSP is to take place on the 30 <sup>th</sup> of January 2013 in East London.	NMBM

Item		Action
5.4	<b>Algoa Bridging Study</b> The Algoa Bridging Study was completed and final signoff from the Chief Director IWRM, Mr Mabuda is awaited. IT will distribute the final report to the members after signoff.	IT
5.5	<b>South African Revenue Protection Group</b> ML has attended the revenue protection group meeting towards the end of 2012. As he was not able to attend this ATSG meeting, he has asked SM to report back on this matter. ML gave a brief description of what WC/WDM is about, and its value as a water and revenue saving method. At the next meeting he will be giving a full presentation on WC/WDM, using the Buffalo City project as an example to illustrate its value	ML
5.6	<b>Integrated Catchment Management</b> No discussion	
5.7	<b>Orange River Reconciliation Strategy</b> Thenext meeting will be held on 7 Feb 2013. DC or TG to report back at the next ATSG meeting.	DC/TG
6	<b>OPERATIONAL EFFICIENCY</b>	
6.1	<b>Darlington Dam Operating capacity and dam safety rehabilitation programme</b> DC indicated that there has been no further progress. DC alerted DvR that he should consider the Korhaansdrift overflows when monitoring flows in the Sunday River.	DvR
7	<b>WATER REQUIREMENTS AND USE</b>	
7.1	<b>Coega IDZ water requirements</b> GT indicated that there is no change to the requirements as previously reported. IT asked that an update of the water requirements be presented at the next Steering Committee meeting scheduled for 27 March 2013.	WO
7.2	<b>Kouga LM water requirements</b> ML could not attend the meeting due to other commitments. IT requested ML to report back at the next meeting on progress with implementation of WCWDM measures. Reg Botha will be encouraged to attend the ATSG meetings in future. He will be requested to report on operations and plans in place in the Kouga region to ensure the availability of water to all users in their area. SG mentioned that a new housing development is in progress at Sunninghill that will tap into the Chelsea-Loerie system, but this will be part of the current allocation as determined by the Water Master Plan.	ML RZ
8	<b>IMPROVING THE CONFIDENCE OF WATER AVAILABILITY</b>	
8.1	<b>Proposed water availability assessment study–Kouga-Loerie and Churchill-Impofu</b> It is a concern that although urgent, this study has been moved out another year due to budget cuts and will probably only be able to start by the beginning of 2014.	
9	<b>WC/WDM</b>	
9.1	<b>Report by NMBM</b> SG indicated that no new information is available. As previously reported, real losses has decreased. He assured the meeting of the NMBM's commitment to WC/WDM.	

Item		Action
<p><b>9.2</b></p> <p><b>WC/WDM at NMBM Schools</b></p> <p>SG reported that 17 schools were repaired with the money received from DoE. The money promised by DWA has not yet realised. SM indicated that ML followed up the matter with Andrew Lucas, who in turn applied for funds from the DWA Head Office. ML is unaware of any reaction to the application to date. SG reported that the \$60 000 from a USA city for school repairs was used for repairs at two schools. IT asked SG to report on water use before and after repairs at all the relevant schools.</p> <p><b>9.3</b></p> <p><b>Report on progress of other Municipalities</b></p> <p>DC mentioned that water use in Grahamstown has increased to the extent that they want to increase their abstraction from the Fish River. This abstraction by Grahamstown however requires flushing of the Fish River to decrease salinity to within acceptable levels, before they start abstracting. DC noted that flushing of the Fish River should be avoided as it is a significant waste of water. The consensus reached was that the poorer quality water should rather be treated by Grahamstown, and that the wastage due to flushing be avoided.</p> <p><b>9.4</b></p> <p><b>Fish to Tsitsikamma WC/WDM Strategy and BP</b></p> <p>No discussion as ML was not present.</p>		ML
<p><b>10</b></p> <p><b>10.1</b></p> <p><b>Nooitgedagt Low-Level Scheme (NLLS) Implementation and Financing</b></p> <p>The funding application presentation made to the departmental Capex committee was unsuccessful and therefore a new source of funding is needed. The Metro is busy with a 20%-80% job funding application with the Development Bank. The aim is for the application to be submitted by end February 2013.</p> <p>Phase 1 will be complete by May/June 2013. As the pump station was not part of phase 1, the water will only be augmented by 10 MI/day until such time that funding is secured and the next phase could be completed. The Coega Reservoir only supplies zones 1-4 with water, and therefore water from the NLLS is needed for supply to Coega. 25MI/day will be available to Coega from June 2013, but the source of this water will be both the high level and low level schemes. JP stressed that people need to be made sensitive to efficient water use as more water will not be available from the NLLS soon. The earliest that the NLLS scheme could be fully operational will be two years after funds are secured. IT requested that the different options with regard to funding be presented at the SSC meeting.</p> <p><b>10.2</b></p> <p><b>Trading of Orange River Irrigation Authorisations – Upper Fish River</b></p> <p>No discussion.</p> <p><b>10.3</b></p> <p><b>Desalination of Sundays River irrigation return flows</b></p> <p>EvdB mentioned that a feasibility study needs to start regarding this option. The question is what the committee could do to assist in the matter. IT indicated that DWA could perhaps develop an outline scope for such a study. This should be discussed at the next SCC meeting.</p>		<p>NMBM</p> <p>EvdB</p>

Item		Action
<b>11</b>	<b>RE-USE OF WATER</b>	
<b>11.1</b>	<b>NMBM Water Master Plan Update</b>  The second draft has been submitted and is proceeding through the approval process. Approval is expected by end March, after which it will be made available.	
<b>11.2</b>	<b>Re-use of water treated to industrial standards – Coega and Fish Water Flats WWTWs</b>  DvR indicated that implementation of this option will be in phases. The first return effluent will only become available four years after funding has been secured. CDC is busy with construction of a reservoir for treated water, but in the interim this reservoir will be filled with potable water.	
<b>11.3</b>	<b>Re-use of water treated to potable standards</b>  Nothing to report.	
<b>12</b>	<b>GROUNDWATER</b>	
<b>12.1</b>	<b>NMBM Groundwater Scheme study in Progress</b>  RM did a presentation on progress regarding the groundwater investigation. He discussed the following: <ol style="list-style-type: none"> <li>1. Re-cap on groundwater areas and provisional yields</li> <li>2. Re-cap on all borehole sites and priority areas</li> <li>3. Update on Coega Fault borehole sites</li> <li>4. Update on Humansdorp / Kouga LM groundwater areas</li> <li>5. Progress on drilling contract</li> <li>6. Progress on license application</li> <li>7. Progress on the Environmental management Plan (EMP)</li> <li>8. Wastewater sand filtration potential north of Ngqura harbour (Schelmhoek dune fields)</li> </ol> Treatateswater sand filtration may hold opportunities for CDC as well. A full report as well as a summary report regarding the sand filtration at the Schelmhoek dune fields will be distributed with the minutes. The presentation is also available to members of the committee.	
<b>12.2</b>	<b>Other Groundwater Issues</b>  Included under 12.1	
<b>13</b>	<b>SEAWATER DESALINATION</b>	
<b>13.1</b>	<b>NMBM desalination scheme</b>  NMBM is currently investigating the feasibility of constructing a 60 MI/d desalination plant to provide for future water requirements and to reduce exposure to the risk of variable supply from the existing surface water sources. Although a ROD has already been awarded for the proposed emergency desalination plant at the Swartkops site, the current study will review this site as a potential location for a larger capacity plant, along with a number of other potential sites that have been identified.  The study is currently in the site identification phase where a number of potential plant locations are being investigated. The NMBM has appointed a consultant to undertake the Environmental Impact Assessment and are preparing to appoint a service provider to initiate a long-term (one to two year) continuous monitoring program for sea water quality at the preferred site starting in April/May this year. The planned completion of the	

Item		Action																								
	feasibility investigation and concept design is June 2015.																									
14	<b>LOCAL SURFACE WATER DEVELOPMENT</b>																									
14.1	<b>Kouga Dam Potential Raising in light of Safety Work</b> <p>EvdB presented the cost and environmental impact of the <i>preliminary</i> findings of a slightly refined investigation into salient aspects of the potential raising of the dam. These are as follows:</p> <ul style="list-style-type: none"><li>• The findings from the Algoa Water Resources Bridging Study (undertaken by DWA) were recently made available. This study's scope included updating the land use and hydrology of the Kouga River. Historical and stochastic yield analyses were performed for the Kouga sub-system (Kouga Dam in conjunction with the Loerie Dam further downstream), as part of the AWSS.</li><li>• Raisings by 10.5m, 16.5m and 19.8m were considered.</li><li>• No EWR releases from the Kouga Dam were modeled in the Bridging Study, which is a shortcoming as this may reduce the estimated yields.</li><li>• The existing dam was designed to be raised but foundation problems (among others) have precluded this option. The proposed larger Kouga Dam is the construction of a new concrete gravity dam directly downstream of the existing one.</li><li>• Dam costs were updated and URVs determined. Costs include the dam wall only, and do not yet take into account any potential saving related to dam safety work. Costs relating to infrastructure and land have also not yet been factored in.</li></ul> <p>The findings were as follows:</p> <table><tr><td><b>Raised Dam Volume</b></td><td>200 Million m<sup>3</sup></td><td>255 Million m<sup>3</sup></td><td>293 Million m<sup>3</sup></td></tr><tr><td><b>Raising Height (m)</b></td><td>10.5</td><td>16.5</td><td>19.8</td></tr><tr><td><b>Cost (R million)</b></td><td>R 1 250</td><td>R 1 461</td><td>R 1 602</td></tr><tr><td><b>Yield (million m<sup>3</sup>/a)</b></td><td>74.4</td><td>79.0</td><td>84.0</td></tr><tr><td><b>Incremental yield (million m<sup>3</sup>/a)</b></td><td>+7.7</td><td>+12.3</td><td>+17.3</td></tr><tr><td><b>URV @ 6% (R/m<sup>3</sup>)</b></td><td>12.14</td><td>8.84</td><td>6.89</td></tr></table> <p>There are various environmental aspects that would require more detailed assessment to determine the significance of the impact. Environmental impacts seem significant though and are expected to trigger opposition from environmental groups. GT proposed providing the environmental/social impacts findings to Sanparks (Nature Conservation) to test their reaction. Hydropower generation is a possibility that could also be investigated. A draft report needs to be tabled at the SSC meeting. The presentation on preliminary findings will be distributed with the minutes.</p>	<b>Raised Dam Volume</b>	200 Million m <sup>3</sup>	255 Million m <sup>3</sup>	293 Million m <sup>3</sup>	<b>Raising Height (m)</b>	10.5	16.5	19.8	<b>Cost (R million)</b>	R 1 250	R 1 461	R 1 602	<b>Yield (million m<sup>3</sup>/a)</b>	74.4	79.0	84.0	<b>Incremental yield (million m<sup>3</sup>/a)</b>	+7.7	+12.3	+17.3	<b>URV @ 6% (R/m<sup>3</sup>)</b>	12.14	8.84	6.89	EvdB
<b>Raised Dam Volume</b>	200 Million m <sup>3</sup>	255 Million m <sup>3</sup>	293 Million m <sup>3</sup>																							
<b>Raising Height (m)</b>	10.5	16.5	19.8																							
<b>Cost (R million)</b>	R 1 250	R 1 461	R 1 602																							
<b>Yield (million m<sup>3</sup>/a)</b>	74.4	79.0	84.0																							
<b>Incremental yield (million m<sup>3</sup>/a)</b>	+7.7	+12.3	+17.3																							
<b>URV @ 6% (R/m<sup>3</sup>)</b>	12.14	8.84	6.89																							
15	<b>COMMUNICATION</b>																									
15.1	<b>Media Release</b> <p>The next media release will be drafted before the next SCC meeting.</p>	EvdB																								
15.2	<b>Progress Report</b> <p>IT asked for a short progress report to be drafted before the SCC meeting in March.</p>	EvdB																								
15.3	<b>Webpage Update</b> <p>A copy of the updated webpage was handed to IT. She will hand it to the webmaster.</p>	IT																								

Item		Action
<b>16</b>	<b>IMPACTS ON YIELDS OF EXISTING DAMS: ECOLOGICAL RESERVE AND CLIMATE CHANGE</b>	
<b>16.1</b>	<b>Implementing the Reserve for existing dams</b> No instruction for the implementation of the signed Reserve has been received. This should be followed up with Ms B Weston.	IT
<b>16.2</b>	<b>Climate Change</b> The director is busy compiling a strategy report on climate change. The report should be finalised by end February. IT will try to secure a short presentation for the next SCC meeting.	IT
<b>18.</b>	<b>GENERAL</b> Nothing under general	
<b>19.</b>	<b>NEXT MEETING</b> The next meeting will take place on Thursday 11 April 2013 at <b>09h00</b> . <b>The next SSC meeting is on 27 March 2013 at 08:30 for 09:00.</b>	
<b>20.</b>	<b>CLOSURE</b> The meeting was adjourned at 15h30.	