



MINUTES OF MEETING

Algoa WSS Reconciliation Strategy Continuation: Study Steering Committee Meeting 9
held on 27 September 2017 @ 09h00 at the offices of Aurecon, Port Elizabeth

Item		Action																																																																																	
1.	<p>WELCOME</p> <p>The Chair, Ms Isa Thompson welcomed everybody to the meeting on behalf of Mr Patrick Mlilo and Mr Livhuwani Mabuda, who could not attend.</p>																																																																																		
2.	<p>ATTENDANCE AND APOLOGIES</p> <p>Attendance</p> <table> <tr> <td>Ms Isa Thompson</td><td>DWS: NWRP (S)</td><td>IT</td></tr> <tr> <td>Mr Menard Mugumo</td><td>DWS: OA (S)</td><td>MM</td></tr> <tr> <td>Mr Stephen Mullineux</td><td>DWS EC: DCE: Water Regulation & Use</td><td>SM</td></tr> <tr> <td>Mr Bolekwa Kama</td><td>DWS: Proto CMA</td><td>BK</td></tr> <tr> <td>Mr Andrew Lucas</td><td>DWS EC: Water Regulation and Use</td><td>AL</td></tr> <tr> <td>Mr Paul Chilton</td><td>DWS EC: Proto CMA CE</td><td>PC</td></tr> <tr> <td>Mr Graham Taylor</td><td>Coega IDZ</td><td>GT</td></tr> <tr> <td>Mr Lukhanyo Mbambo</td><td>DWS EC: Proto CMA</td><td>L</td></tr> <tr> <td>Mr Paul du Plessis</td><td>NMBM</td><td>SG</td></tr> <tr> <td>Mr Harms du Plessis</td><td>Lower Sundays IB</td><td>HdP</td></tr> <tr> <td>Mr Pierre Joubert</td><td>Gamtoos IB</td><td>PJ</td></tr> <tr> <td>Mr Vhuthu Tshishonge</td><td>DWS</td><td>VT</td></tr> <tr> <td>Mr Nick Chapman</td><td>Nelson Mandela Bay Business Chamber</td><td>NC</td></tr> <tr> <td>Mr Nico Lombard</td><td>Cacadu District Development Agency</td><td>NL</td></tr> <tr> <td>Mr Dayalan Govender</td><td>DEDEA</td><td>DG</td></tr> <tr> <td>Mr Kevin McRae</td><td>AfriCoast</td><td>KmR</td></tr> <tr> <td>Mr Erik van der Berg</td><td>Aurecon</td><td>EvdB</td></tr> <tr> <td>Ms Reina Zastron</td><td>Aurecon</td><td>RZ</td></tr> </table> <p>Apologies</p> <table> <tr> <td>Mr Barry Martin</td><td>NMBM</td><td>BM</td></tr> <tr> <td>Mr Patrick Mlilo</td><td>DWS: NWRP</td><td>Pm</td></tr> <tr> <td>Ms Jenny Pashkin</td><td>DWS: SO</td><td>JP</td></tr> <tr> <td>Mr Martin Labuschagne</td><td>DWS EC: WR&U-WUE</td><td>ML</td></tr> <tr> <td>Ms Rienette Colesky</td><td>Gamtoos IB</td><td>RC</td></tr> <tr> <td>Ms Ilse Chilton</td><td>DWS EC: Proto CMA</td><td>IV</td></tr> <tr> <td>Mr Andreas Engelbrecht</td><td>GRFWUA</td><td>AE</td></tr> <tr> <td>Mr Robert Higgins</td><td>PetroSA</td><td>RH</td></tr> <tr> <td>Mr Dup van Reenen</td><td>AfriCoast Engineers SA</td><td>DvR</td></tr> </table>	Ms Isa Thompson	DWS: NWRP (S)	IT	Mr Menard Mugumo	DWS: OA (S)	MM	Mr Stephen Mullineux	DWS EC: DCE: Water Regulation & Use	SM	Mr Bolekwa Kama	DWS: Proto CMA	BK	Mr Andrew Lucas	DWS EC: Water Regulation and Use	AL	Mr Paul Chilton	DWS EC: Proto CMA CE	PC	Mr Graham Taylor	Coega IDZ	GT	Mr Lukhanyo Mbambo	DWS EC: Proto CMA	L	Mr Paul du Plessis	NMBM	SG	Mr Harms du Plessis	Lower Sundays IB	HdP	Mr Pierre Joubert	Gamtoos IB	PJ	Mr Vhuthu Tshishonge	DWS	VT	Mr Nick Chapman	Nelson Mandela Bay Business Chamber	NC	Mr Nico Lombard	Cacadu District Development Agency	NL	Mr Dayalan Govender	DEDEA	DG	Mr Kevin McRae	AfriCoast	KmR	Mr Erik van der Berg	Aurecon	EvdB	Ms Reina Zastron	Aurecon	RZ	Mr Barry Martin	NMBM	BM	Mr Patrick Mlilo	DWS: NWRP	Pm	Ms Jenny Pashkin	DWS: SO	JP	Mr Martin Labuschagne	DWS EC: WR&U-WUE	ML	Ms Rienette Colesky	Gamtoos IB	RC	Ms Ilse Chilton	DWS EC: Proto CMA	IV	Mr Andreas Engelbrecht	GRFWUA	AE	Mr Robert Higgins	PetroSA	RH	Mr Dup van Reenen	AfriCoast Engineers SA	DvR	
Ms Isa Thompson	DWS: NWRP (S)	IT																																																																																	
Mr Menard Mugumo	DWS: OA (S)	MM																																																																																	
Mr Stephen Mullineux	DWS EC: DCE: Water Regulation & Use	SM																																																																																	
Mr Bolekwa Kama	DWS: Proto CMA	BK																																																																																	
Mr Andrew Lucas	DWS EC: Water Regulation and Use	AL																																																																																	
Mr Paul Chilton	DWS EC: Proto CMA CE	PC																																																																																	
Mr Graham Taylor	Coega IDZ	GT																																																																																	
Mr Lukhanyo Mbambo	DWS EC: Proto CMA	L																																																																																	
Mr Paul du Plessis	NMBM	SG																																																																																	
Mr Harms du Plessis	Lower Sundays IB	HdP																																																																																	
Mr Pierre Joubert	Gamtoos IB	PJ																																																																																	
Mr Vhuthu Tshishonge	DWS	VT																																																																																	
Mr Nick Chapman	Nelson Mandela Bay Business Chamber	NC																																																																																	
Mr Nico Lombard	Cacadu District Development Agency	NL																																																																																	
Mr Dayalan Govender	DEDEA	DG																																																																																	
Mr Kevin McRae	AfriCoast	KmR																																																																																	
Mr Erik van der Berg	Aurecon	EvdB																																																																																	
Ms Reina Zastron	Aurecon	RZ																																																																																	
Mr Barry Martin	NMBM	BM																																																																																	
Mr Patrick Mlilo	DWS: NWRP	Pm																																																																																	
Ms Jenny Pashkin	DWS: SO	JP																																																																																	
Mr Martin Labuschagne	DWS EC: WR&U-WUE	ML																																																																																	
Ms Rienette Colesky	Gamtoos IB	RC																																																																																	
Ms Ilse Chilton	DWS EC: Proto CMA	IV																																																																																	
Mr Andreas Engelbrecht	GRFWUA	AE																																																																																	
Mr Robert Higgins	PetroSA	RH																																																																																	
Mr Dup van Reenen	AfriCoast Engineers SA	DvR																																																																																	

Item		Action
3.	<p>APPROVAL OF AGENDA</p> <p>The following items were added to the agenda:</p> <p>6.9 Pipeline servitude, Aquaculture & Combined Cycle Gas Turbine</p>	
4.	<p>APPROVAL OF PREVIOUS MINUTES</p> <p>4.1 The minutes were approved with the following amendments:</p> <p>P2 point 6.1: 'Restrictions on domestic, agriculture and industrial used have been proposed by DWS.' to be replaced by 'Restrictions on domestic, agriculture and industrial <i>water use</i> have been proposed by DWS. '</p> <p>P4 point 8.3: 'it would need to include through public participation.' to be replaced by 'it would need to include thorough public participation.'</p> <p>P7 point 14.2: 'Swartkops Seesout' to be replaced by 'Cerebos Sea Salt'.</p>	
5.	<p>MATTERS ARISING FROM PREVIOUS MINUTES</p> <p>No matters arising not on the agenda.</p>	
6.	<p>RELEVANT PROJECTS & INITIATIVES UNDERTAKEN BY OTHER RESPONSIBLE ENTITIES</p> <p>6.1 AWSS Annual Operating Rules – System Monitoring Report</p> <p>Neither JP nor Dr Mwaka were present to report on points 6.1 and 6.2. IT presented the information as per the minutes of the ATSG meeting of 16 August:</p> <p>'It was decided by the System Operations Forum (SOF) on 29 June that a 25% restriction will be applied to industrial and domestic use and 60% to agricultural use with effect from 1 July 2017. It was also decided to hold a monthly restriction monitoring meeting. The first such a meeting took place on 14 August 2017. PC said that the restriction notice is still in draft format and that stakeholder input will be needed before it could be published in the Gazette. Monthly monitoring reports are produced and distributed to all interested and affected parties.'</p> <p>PV indicated that the following monitoring meeting took place on 11 September. The restrictions have not yet been gazetted and the NMBM is close to meeting their targets. The next monitoring meeting will be held on 10 October 2017. PJ reported that the farmers have thus far been keeping to the restrictions.</p> <p>AL reported that the gazettement of the restrictions is now a top priority. The whole of the province will be restricted with specifics for the Kouga-Loerie scheme as this scheme is under severe stress.</p> <p>IT mentioned that the monthly monitoring reports are being circulated. KmR and EvdB asked to be included on the distribution list.</p> <p>6.2 Orange River Annual Operating Rules</p> <p>It was mentioned that, at the ATSG meeting held on 16 August, JP indicated that there is currently no restriction on the use of water in the Orange River System. Monthly monitoring reports are being produced and are distributed to all interested and affected parties.</p> <p>6.3 Establishment of upper Kouga/Kromme WUA and establishment of the CMA</p> <p>BK reported that a meeting regarding WUAs was recently held in Pretoria, where it was agreed that non-functional WUAs will be dissolved. New WUAs will only be considered if DWS receives such a request from water users. It was agreed that item need not be included in future meeting agendas.</p>	JP

Item		Action
6.4	<p>Verification and validation of water use</p> <p>LM reported on behalf of IC.</p> <p>As the surface water resources of the Kromme and Kouga catchment areas are perceived to be under stress, the need for verification and validation (V&V) of water use for these areas was identified many years ago. The validation of water use of a significant part of the Kouga River catchment has been completed. The validation process for the Eastern Cape as a whole is 95% complete with the verification process at about 44%.</p> <ul style="list-style-type: none"> ➤ Validation is the process to confirm whether the volume of water registered and used corresponds with the volume of water required for the crops cultivated and/or other non-irrigation water use during the two years prior to the commencement of the NWA in 1998. ➤ Verification is the process to check whether the volume of water actually used was authorised under previous legislation, so as to confirm how much water may be used lawfully. <p>Stakeholder engagements have been completed by the end of October 2016. A total of 7 532 Section 35 (1) application letters have been generated and distributed to date.</p> <p>The Return-to-Sender letters and users that fail to respond provide a challenge and it is being addressed. 95% of Section 33 letters (scheduled water uses in government water schemes and irrigation boards for which charges have been paid) have been generated and signed off by DWS Head Office. 3466 Letters received back are ready to be issued to water users. The CEOs of the Gamtoos and Lower Sundays River WUA will be contacted soon to assist with the distribution of the Section 33 letters. 1166 Section 35(4) letters (water use not part of scheduled water use) have been generated of which 774 have already been signed off by the DG and are ready to be issued to water users. 83.4% of the total volume of water identified in the V&V project has already been verified.</p> <p>The failure to respond (water users who did not respond to communications sent to them) amounts to 12.96% of the total volume and hence the DWS offices are trying various means to make contact with those water users. The PSP contract has been extended with six months until 31 March 2018. The need for Compulsory Licensing in the Seekoei-Swart and Kabeljous rivers have been identified as a priority.</p> <p>IT stated that the results of the V&V for the Kromme and Kouga catchments, above Churchill and Kouga dams, is needed to kick off the Kromme/Kouga/Baviaans WAAS study.</p>	
6.5	<p>Working for Water and Working for Wetlands</p> <p>PJ reported that a budget of R12 million for the Kouga catchment and R9 million for the Kromme catchment has been approved. Thus far, in the Kouga catchment R2.25 million was spent on the initial clearing of 260 ha as well as on 1 760 ha of follow-up clearing. R400 000 was spent on 7 600 ha high altitude follow-up work. In the Kromme catchment R1.6 million was spend on 1 540 ha of follow-up clearing. R300 000 was spent in the Kromme wetlands.</p>	
6.6	<p>WRC study by Living Lands</p> <p>IT reported the progress from the ATSG meeting on 16 August 2017:</p> <p>‘TG of Living Lands did a presentation on the work that they are busy doing. In the Baviaanskloof, restoration work is ongoing with the team making a dramatic, positive impact, especially on dead, capped soils. In the Langkloof, a nursery has been built in Haarlem together with the Haarlem Women’s Forum. This nursery will first enable the women’s forum to produce their own vegetable seedlings, while gaining experience in managing a nursery. In the future, there is the potential to produce seedlings that could be used for rehabilitation in the area. Honeybush trials</p>	

Item		Action
	<p>have been started in the Langkloof, looking at the different cultivation methods as well as potential intercropping with other, high value, water efficient plants. There has also been a Rehabilitation Blitz in the Kouga, where alien vegetation was removed and various rehabilitation interventions were applied. Interventions included stabilisation of head-cuts, re-sloping of gullies, erection of silt traps and digging of ponds to capture sediment and prevent gully-forming. In the Baviaanskloof and the Langkloof, the participatory hydrological model building project is well underway, with various workshops being held and large amounts of data gathered both in the field as well as from discussions with local stakeholders.'</p>	
6.7	<p>Water Quality Strategy</p> <p>IT reported on behalf of PV on this matter. The updated policy and final strategy as well as a number of other project reports have been completed and are available on the DWS Website at: https://www.dws.gov.za/projects/iwqms/Documents.aspx.</p> <p>The IWQM Policy has been published for public comment and the final print-ready versions of the Policy, Strategy and Implementation Plan are expected to be available towards the end of the year. The intention is to have another round of stakeholder workshops before the strategy is finalised.</p>	
6.8	<p>Additional storage for Kirkwood</p> <p>No discussion as SR did not attend the meeting, but PC mentioned that the initiative is supported by the DWS.</p>	
6.9	<p>Integrated Marine Pipeline servitude</p> <p>EvdB reported the following:</p> <ul style="list-style-type: none"> • The servitude is mainly intended for discharge from CDC to the marine environment. • An additional phase of marine modelling will be done. • The Final Scoping Report was approved by DEA. • The appointed PSP is busy with the Draft EIR, but have applied for a 6-month extension from DEA, and is awaiting their feedback. <p>The servitude itself should not have freshwater requirements, other than during the construction phase of the various infrastructural components that will form part of the servitude for dust control, concrete mixing, staff water requirements etc.</p>	
6.10	<p>Aquaculture</p> <p>EvdB reported that the final EIA report for this proposed development has been submitted. Approval by DEA is overdue as there are some authority issues around waste management that are still being discussed. JG indicated that this is a nationwide project. After the meetings, JG provided the following information:</p> <p>Enviroworks (www.enviroworks.co.za) was appointed to conduct six environmental impact assessments for the agri-hubs in the Eastern Cape, as proposed by the Department of Rural Development and Land Reform. The proposed areas are as follows:</p> <ul style="list-style-type: none"> • Sara Baartman (Santa Clara) • Amathole (Butterworth) • Chris Hani (Ncora) • OR Tambo (Lambasi) • Alfred Nzo (Cedarville) • Joe Gqabi (Lady Grey) <p>All six agri-hubs will be similar, to a certain extent, depending on the environment.</p>	

Item		Action
6.11	<p>Combined Cycle Gas Turbine (CCGT)</p> <p>EvdB indicated that the EIA application for the Gas to Power Project, termed the Combined Cycle Gas Turbine (CCGT) Project has not yet been lodged. The PSP is currently in the process of finalising the project description for the draft Scoping Report. Given that the details of the design and technology options have not yet been fully defined, the potable water requirements are not yet known.</p>	
<p>7.</p> <p>7.1</p> <p>7.2</p> <p>7.3</p>	<p>OPERATIONAL EFFICIENCY</p> <p>Darlington Dam operating capacity and Dam Safety Rehabilitation Programme No discussion as KV did not attend the meeting. At the ATSG meeting it was reported that the Terms of Reference for this programme has been sent to DBAC and that a response is awaited. Previously it was reported that the feasibility study and designs will be done in 2017 and that construction would start in 2018.</p> <p>Additional balancing storage in the LSRGWS EvdB presented the options to add balancing storage. After several bulk water infrastructure and conveyance options have been considered, the following options are being investigated further:</p> <ul style="list-style-type: none"> • Construction of a larger dam near the present Scheepersvlakte Dam site and integrating this dam with the existing gravity pipeline to the Nooitgedagt WTW. • Constructing a large balancing dam on the right bank of the Sundays River near the Nooitgedagt WTW. <p>The next steps in the process are:</p> <ul style="list-style-type: none"> • Preliminary environmental investigation showed no “fatal flaws” for either option, but may need to be revisited should sites change. • Meet with respective land owners for both dam sites. A meeting and site visit has been planned for 9 and 10 October 2017. The DWS NWRI office has sent out the invitations for this meeting. It is expected that further discussions will also be held with the Scheepersvlakte 98 Citrus Development Trust regarding their request for the temporary abstracting of water from the Scheepersvlakte Dam. • The next step will then be a detailed geotechnical investigation to assess the suitability of the short-listed dam sites. • A topographical site survey of the selected dam site will be done in support of the preliminary design and costing. This will be undertaken by the DWS NWRI survey team. <p>The use of the existing Scheepersvlakte balancing dam will be retained.</p> <p>HdP cautioned that the Scheepersvlakte balancing dam could potentially become a bottleneck in delivery. He indicated that farmers could potentially bypass the dam and utilise other bulk water infrastructure. BM said that NMBM needs to understand the system constraints. He will schedule a separate meeting with the DWS Infrastructure Branch and HdP to discuss options to overcome the bottleneck.</p> <p>OFS Real-time model</p> <p>EvdB reported that the model is up and running again. He recommended that a low level of ongoing support to the DWS operational staff will be needed for this model. He indicated that limited support can still be provided as part of the current Reconciliation Strategy Support project while some budget is available, and recommended that ongoing support form part of the scope of work of the following Reconciliation Strategy Support project. The real-time model should also be in place to be able to monitor efficiency savings.</p>	<p></p> <p>HdP/BM/ KV</p> <p>DWS</p>

Item		Action
<p>8.</p> <p>8.1</p>	<p>WATER REQUIREMENTS AND USE</p> <p>NMBM Water Requirements</p> <p>As BM could not attend the meeting, PdP reported that the NMBM Water Master Plan is being updated. EvdB asked for a draft copy as soon as it becomes available. The NMBM expects the water requirement to be 265 Mℓ/d by 2020 and that the current water availability will be adequate until 2023.</p>	<p>PdP</p>
<p>8.2</p> <p>8.3</p> <p>8.4</p>	<p>Coega IDZ water requirements</p> <p>GT said that there are no changes to the Coega IDZ estimated future water requirements. The timing of the re-use scheme remains a challenge. He noted that water supply schemes will be brought on line when investors have been signed and the water is needed.</p> <p>Kouga water requirements</p> <p>No discussion as no representative of the Kouga LM attended the meeting. EvdB indicated that Kouga has a total allocation from the Algoa System (Churchill Pipeline and Gamtoos Canal) of 4.5 million m³/a but is currently using 5.85 million m³/a. AL asked EvdB to send him the facts so that a regulatory process can be started on this matter. PV mentioned that Kouga LM is also not paying their bills to NMBM for water used.</p> <p>WUE Fish and Sundays catchments</p> <p>EvdB reported that this component of the study aims to evaluate the efficiency of the Eastern Cape Province component of the Orange River Project.</p> <p>The following WUE Interventions, aimed at reducing water wastage, have been shortlisted:</p> <ul style="list-style-type: none"> • Lining of earth canals in the GFRWUA. • Improved water abstraction measuring and monitoring. • Clearing of reeds along the Great Fish River. • Reduced operational releases at Elandsdrift Weir. • Rehabilitation of Darlington Dam. <p>Preliminary Recommendations on each intervention is as follows:</p> <p>Concrete lining of canals:</p> <ul style="list-style-type: none"> • The lining of the 500 km of earth canals in the GFRWUA is not recommended to be considered further, as the URV for this intervention is too high. • Clearing of vegetation along canals is recommended. • The lining of prioritised “hot spot” high-loss canal sections may be a more feasible option as this will potentially lead to large volumes of water savings at a lower cost. It is recommended that this sub-intervention be investigated in more detail. A pilot test case may be useful to ascertain actual costs and to test this sub-option. <p>Improved measuring and monitoring:</p> <ul style="list-style-type: none"> • The recommendations made for improved measuring and monitoring should be considered by the GFRWUA, LSRWUA and the DWS. • Although the potential water savings are not easily quantifiable at present, this intervention will lead to improved management of the system and improved compliance to water allocations and water requests made. <p>Removal of reeds:</p> <ul style="list-style-type: none"> • The removal of reeds along the Great Fish River should not be considered further. • Estimated potential water savings are very low in comparison to the other interventions. • Removal of reeds may lead to unintended environmental consequences such 	<p>Aurecon/ AL</p>

Item		Action												
	<p>as river bank erosion and additional sediment deposits in the river.</p> <p>Operational releases:</p> <ul style="list-style-type: none">A reduction in operational releases made at the Elandsdrift and De Mistkraal weirs should be implemented in a step-wise manner.The reduction of operational releases at the Elandsdrift and De Mistkraal weirs could reduce operational losses in the lower Fish River and will result in a potential maximum operational water saving of 66 million m³/a, although in practice this may be much less.This intervention has a very low capital cost, if any, as it does not involve the construction of any water supply infrastructure. <p>Refurbishment of Darlington Dam:</p> <ul style="list-style-type: none">The refurbishment of the Darlington Dam is currently being evaluated by the DWS. The refurbishment of Darlington Dam could result in water savings in the lower Sundays River catchment due to reduced spills at the Korhaansdrift Weir.Additional yield will also be created should additional allocations be made to the NMBM.This may influence the potential Lower Sundays River Return Flows Scheme. <p>Summary of the Potential Savings:</p> <table><tr><th>Recommended intervention</th><th>Potential water savings (million m³/a)</th></tr><tr><td>Reduced operational losses at the Elandsdrift and De Mistkraal weirs</td><td>Maximum of 66. Will be less in practice.</td></tr><tr><td>Clearing of vegetation along GFRWUA earth canals</td><td>4</td></tr><tr><td>Lining of 'hot spot' priority canal sections in the GFRWUA</td><td>Not quantified – needs further investigation.</td></tr><tr><td>Rehabilitation of Darlington Dam</td><td><ul style="list-style-type: none">Could save up to 18 by reducing spills at Korhaansdrift WeirRaising of dam could lead to additional HFY to potentially allocate to NMBM of maximum 10</td></tr><tr><td>Estimated total potential savings</td><td>15 – 30 million m³/a</td></tr></table> <p>IT asked EvdB and SM to compile a small proposal on the 'hot spots' of the canals in the GRFWUA. She also asked EvdB to add SM's page on recommendations to the final Water Use Efficiency component report.</p> <p>The following factors to consider were mentioned:</p> <ul style="list-style-type: none">The clearing of the vegetation could disturb the soil.Even using small amounts of chemicals to clean the canals could be very harmful for vegetation and crops downstream.	Recommended intervention	Potential water savings (million m ³ /a)	Reduced operational losses at the Elandsdrift and De Mistkraal weirs	Maximum of 66. Will be less in practice.	Clearing of vegetation along GFRWUA earth canals	4	Lining of 'hot spot' priority canal sections in the GFRWUA	Not quantified – needs further investigation.	Rehabilitation of Darlington Dam	<ul style="list-style-type: none">Could save up to 18 by reducing spills at Korhaansdrift WeirRaising of dam could lead to additional HFY to potentially allocate to NMBM of maximum 10	Estimated total potential savings	15 – 30 million m³/a	Aurecon SM
Recommended intervention	Potential water savings (million m ³ /a)													
Reduced operational losses at the Elandsdrift and De Mistkraal weirs	Maximum of 66. Will be less in practice.													
Clearing of vegetation along GFRWUA earth canals	4													
Lining of 'hot spot' priority canal sections in the GFRWUA	Not quantified – needs further investigation.													
Rehabilitation of Darlington Dam	<ul style="list-style-type: none">Could save up to 18 by reducing spills at Korhaansdrift WeirRaising of dam could lead to additional HFY to potentially allocate to NMBM of maximum 10													
Estimated total potential savings	15 – 30 million m³/a													
9.	IMPROVING THE CONFIDENCE OF WATER AVAILABILITY													
9.1	<p>Proposed Kromme and Kouga rivers water availability assessment study</p> <p>IT said that the submission motivating this study is being processed approval is expected back soon. She hopes that the study will start towards the end of the year.</p>													
10.	WC/WDM													
10.1	<p>Report by NMBM</p> <p>IT indicated that the detail on the NMBM WC/WDM progress is available in the status report. The non-revenue water has gone down from 43.4% in 2015/16 to 37.5% in 2016/17.</p> <p>AL indicated that if the NMBM can provide him with evidence of non-compliance and usage records at schools, he will be prepared to send DOE a directive to tend to the matters.</p>	BM/PdP												
10.2	<p>Report on progress of other municipalities</p> <p>No discussions. Limited information is available in the Status Report as no inputs were received.</p>													

Item		Action
11. 11.1	<p>ORANGE RIVER INTER-BASIN TRANSFER SCHEME</p> <p>Nooitgedagt Low-Level Scheme (NLLS) Implementation and Financing</p> <p>BM reported that the Nooitgedagt Water Treatment Works Phase 2 was funded by NMBM and was completed in July 2017. Phase 2 added 50 Ml/d to the system, increasing the average scheme supply from 90 Ml/d to 140 Ml/d. The four contracts of Phase 3, to augment and complete the Nooitgedagt Low-Level Scheme to a treatment and transfer capacity of 160 Ml/d (to complete Phase 3), is estimated at R350 million. Amatola Water Board has been appointed by the DWS as the implementing agent for Phase 3. The contract has been awarded and construction commenced in May 2017. Bulk excavations for WTW structures and the 45 Ml reservoir are complete.</p>	
11.2	<p>Desalination of Sundays River irrigation return flows</p> <p>No discussion.</p>	
12. 12.1	<p>RE-USE OF WATER</p> <p>Re-use of water treated to industrial standards and potable standards</p> <p>BM reported that the construction of the Fish Water Flats WWTW pre-commissioning Phase 1 has been completed.</p> <p>BM reported that the Coega Water Re-use Scheme is still in the planning phase and is earmarked to supply the industries within the Coega IDZ with industrial quality water for process use. 60 Ml/d of treated effluent will be supplied from the Fishwater Flats WWTW. The first 15 Ml re-use water reservoir is under construction at a value of R55 million and the total project cost for the Water Re-use Scheme is estimated at R600 million. The 15 Ml reservoir will be completed within 6 months and will be filled with potable water in the interim. NMBM does not have the necessary funding to support implementation of the rest of the project. There is currently no potential for uptake for the treated water. Once an investor has been secured, the scheme will be constructed. The planning and design phases of the projects are complete. Construction is dependent on uptake of the water and funding. JG cautioned BM to check the environmental authorisation and to apply for an extension if deemed necessary.</p>	BM
13. 13.1	<p>GROUNDWATER</p> <p>Coega Kop implementation</p> <p>The Phase 1 exploration boreholes drilling contract in the Coega Kop area has been completed at a cost of R25 million. Phase 2 of the contract, which involves drilling of production boreholes and the construction of a water treatment works is estimated to cost R120 million. The potential yield of the aquifer is estimated at 25 Ml/d. Construction will take 18 months to complete. The exploratory work has been completed and the sites for production boreholes have been identified. Procurement of a specialist driller has progressed well and drilling should commence in October 2017. Drilling should be completed by February 2019.</p> <p>The status of the Coega Kop WULA is as follows:</p> <ul style="list-style-type: none"> • The resource delineated reserve for the area was received. • DWS is currently busy assessing the Reserve against the water use applied for. • If all comments have been received and satisfied the application will be presented again at the next WUAAC in October/November. • Production boreholes have not yet been drilled • The plan for the completion of the WTW and the drilling of the boreholes as per the Algoa Report is estimated to be in 2019. • Section 21 (a) will be combined with section 21(c) and (i) applications as an integrated or combined WULA. 	

Item		Action
13.2	Other groundwater schemes BM reported that the NMBM has collected groundwater information on the potential Jeffrey's Arch wellfield and the information has been made available to the Kouga LM.	
14.	SEAWATER DESALINATION 14.1 NMBM 60 Mℓ/d Desalination Scheme Feasibility Study Desalination was identified by DWS in the Algoa Reconciliation Study as one of the next major potable water augmentation schemes for the NMBM. A decision on a site for the desalination plant has not yet been made.	
14.2	Other desalination scheme options The Coega harbour desalination scheme tender has not been awarded due to the poor quality of the tenders received. A potential desalination option in the CDC area that will be beneficial to both Coega IDZ and NMBM was mentioned. This involves aquaculture on land with Swartkops Seesout potentially using the brine of a desalination scheme. PC was of the opinion that a bigger desalination plant at Thyspunt for the proposed nuclear power generation plant should be considered as the water will already be heated and the intake built and this will lower the cost substantially. BM mentioned that as this is not in the NMBM area, this should be considered by the Departments of Water and Sanitation as well as Energy.	
15.	DESKTOP STUDY: RAISING OF THE KOUGA DAM and NEW DAM AT GUERNAKOP EvdB indicated that he will later in the study draft and distribute a short terms of reference, depending on the availability of remaining study provisional sums. Comparative costs are needed to determine whether this is feasible. The potential yields of these potential dams are also dependent on the results from the proposed WAAS study.	EvdB
16.	IMPACTS ON YIELDS OF EXISTING DAMS: ECOLOGICAL RESERVE & CLIMATE CHANGE 16.1 Implementing the Reserve for Existing Dams No discussion. Will only be considered when a new dam is constructed.	
16.2	Climate Change No discussion. Included for scenario planning purposes.	
17.	COMMUNICATION 17.1 Status Report The draft Status Report was distributed before the meeting. All comments should be mailed to RZ by 6 October 2017.	All
17.2	Media Release The media release will be drafted after the Status Report has been finalised.	All
18.	GENERAL AL said that the potential for hydro-fracking in the Karoo should be mentioned in the Status Report. All stakeholders are requested to send comments on the Status Report to the PSP by 6 October 2017.	Stakeholders

Item		Action
19.	NEXT MEETING The date for the next Strategy Steering Committee meeting is Wednesday, 18 April 2018 @ 09h00 in Port Elizabeth.	
20.	CLOSURE The meeting was closed at 14:00.	

Chairperson: Mr P Mlilo (DWS) Signed: _____ Date: _____

Study Leader: Mr E vd Berg (Aurecon) Signed: _____ Date: _____