

### 1.1 Project Boloka Metsi

Partnership between Emfuleni Local Municipality (ELM) (R16.5 million), GIZ (R5 million) and Sasol (R5 million). A twenty seven month contract which ran from April 2012 to June 2014



**Successes:**

- Repaired leaks to 108 000 households and 70 schools. (taps and cistern washers);
- Over 90 local people were employed (Water Conservation Warriors, plumbers and technicians employed;
- community training, education and awareness;
- Repairs to municipal reticulation network;
- Pressure Management and Pressure zone optimisation.
- ELM demand reduced from 82 million m<sup>3</sup> to 75 million m<sup>3</sup> (Theoretical savings of 6.8 million m<sup>3</sup> savings = R37 million).



Savings realised potentially equates to 17% of Sasol's Sasolburg Operations demand from the Vaal River which is 21 million m<sup>3</sup>/annum.

### 1.2. Metsimaholo Local Municipality (MLM)



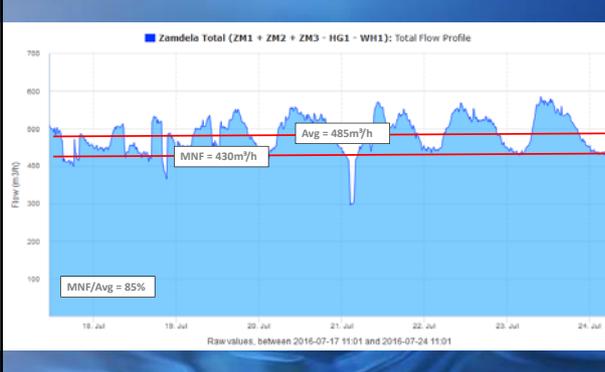
Partnership between MLM, DWS (R7 million), Sasol (R2.9 million), GIZ (60,000 Euros) and Rand Water as implementing agent.

**Successes:**

- 8 out of 16 bulk zonal meters and loggers have been installed to establish baseline.
- 40 plumbers were appointed in Phase 1 (installation of household meters and household audits).
- Baseline for the Zamdela zone was established.
- Funds for Phase 2 have been secured.



### Zamdela Flow Profile



### Greater Zamdela Excess Demand and Targeted Savings

Suburb	Measured Daily Demand (m3/day)	Average Excess Demand (m3/day)	Cost of Excess Demand (R / day)	Cost of Excess Demand (R / Year)
Zamdela	11448	5843.3	R 43,824.80	R 15,996,052.00
Harry Gwala	3558	1443.5	R 10,826.25	R 3,951,581.25
Zamdela Ext 13	1559	-1597.4	R (11,980.40)	R (4,372,846.76)
Amelia	1105	-756.3	R (5,672.45)	R (2,070,443.49)
Kragbron	193	-36.5	R (273.50)	R (99,826.74)
Holly Country	148	25.6	R 192.11	R70,119.54
<b>Total</b>	<b>18011</b>	<b>4922</b>	<b>R 36,916.81</b>	<b>R 13,474,635.80</b>

Targeted savings = 15% of Excess Demand

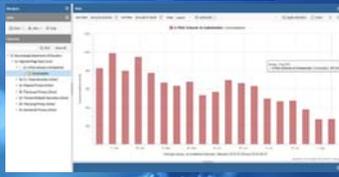
### 1.3. Govan Mbeki Municipality (GMM)



Pilot project demonstrating the impact of partnerships in reducing water leaks at schools in GMM.

**Successes:**

- Partnership between GMM, Rand Water (Water leak audits), Cogta (Skills Development); Cobra (leak audits) and Sasol (funder).
- 6 schools were identified for the pilot.
- Cobra conducted audits of the 6 schools.
- Sasol funded the installation of meters and loggers to obtain baseline for the 6 schools.
- Aquatrip, an innovative leak control device was installed at all 6 schools.



**Results:**

- Reduction of consumption from all 6 schools from an averaged 1000 m<sup>3</sup>/week to 275 m<sup>3</sup>/week.
- On the job training of 12 plumbers.
- Funds approved for implementation of water leakage reduction at a further 12 schools in GMM.

### Conclusion

- Sasol through Boloka Metsi demonstrated that water savings can be realised beyond our factory fence line. It is therefore worth pursuing this type of water offset opportunity.
- Sasol continues to invest in leak reduction projects beyond the fence line. In order to attract more meaningful investment from the private sector incentives (like Water Offsetting) should be recognised in law.

