

initial projected savings of approximately R20 million (±\$3.3 million) per year (Mckenzie and Wegelin, 2005) were in fact exceeded and after the first full year of operation the actual savings achieved were closer to R27 million (±\$4.5 million) as highlighted by Mckenzie and Wegelin (2006). At the time of writing this paper, the project had been operational for 30 months and the initial level of savings had been maintained as shown in **Table 1** and again graphically in **Figure 3**.

Month	Water Use in m3		Savings		
	Expected	Actual	m3	Rands	US\$
Jul-05	3,130,000	2,438,310	691,690	1,909,064	318,177
Aug-05	3,140,000	2,460,620	679,380	1,875,089	312,515
Sep-05	3,048,000	2,459,070	588,930	1,625,447	270,908
Oct-05	3,159,000	2,406,260	752,740	2,077,562	346,260
Nov-05	3,066,000	2,421,960	644,040	1,777,550	296,258
Dec-05	3,178,000	2,427,780	750,220	2,070,607	345,101
Jan-06	3,188,000	2,337,020	850,980	2,348,705	391,451
Feb-06	2,887,000	1,997,250	889,750	2,455,710	409,285
Mar-06	3,207,000	2,200,560	1,006,440	2,777,774	462,962
Apr-06	3,112,000	2,118,830	993,170	2,741,149	456,858
May-06	3,226,000	2,055,280	1,170,720	3,231,187	538,531
Jun-06	3,131,000	2,076,990	1,054,010	2,909,068	484,845
Jul-06	3,245,000	2,149,000	1,096,000	3,178,400	529,733
Aug-06	3,255,000	2,305,861	949,139	2,752,503	458,751
Sep-06	3,159,000	2,393,860	765,140	2,218,906	369,818
Oct-06	3,274,000	2,545,230	728,770	2,113,433	352,239
Nov-06	3,177,000	2,107,670	1,069,330	3,101,057	516,843
Dec-06	3,293,000	2,384,830	908,170	2,633,693	438,949
Jan-07	3,303,000	2,387,810	915,190	2,654,051	379,150
Feb-07	2,991,000	2,212,620	778,380	2,257,302	322,472
Mar-07	3,322,000	2,411,900	910,100	2,639,290	377,041
Apr-07	3,224,000	2,067,000	1,157,000	3,355,300	479,329
May-07	3,341,000	2,393,900	947,100	2,746,590	392,370
Jun-07	3,242,000	2,404,140	837,860	2,429,794	347,113
Jul-07	3,360,000	2,496,270	863,730	2,504,817	357,831
Aug-07	3,370,000	2,546,540	823,460	2,388,034	341,148
Sep-07	3,270,000	2,732,270	537,730	1,559,417	222,774
Oct-07	3,389,000	2,500,200	888,800	2,577,520	368,217
Nov-07	3,289,000	2,527,910	761,090	2,207,161	315,309
Dec-07	3,408,000	2,465,850	942,150	2,732,235	390,319
Total	96,384,000	70,432,791	25,951,209	73,848,416	11,592,557

Table 1: Summary of water and financial savings for first 30 months of operation

The savings achieved in the first 30 months of operation of the installation exceeded all expectations of both the project team as well as the municipality and are the most obvious benefits to accrue from the project. After operating and managing the installation for two years, several other benefits also became apparent which were not

initially anticipated. In particular the following benefits have been achieved each of which will be discussed in turn:

- Defer upgrading of infrastructure
- Identification of bottlenecks in the system and problem infrastructure;
- Identification of bulk meter errors;
- Catalyst for funding;
- Improved municipality status;
- Creation of national WDM fund;
- Catalyst for other WDM interventions; and
- Sustainability of savings.

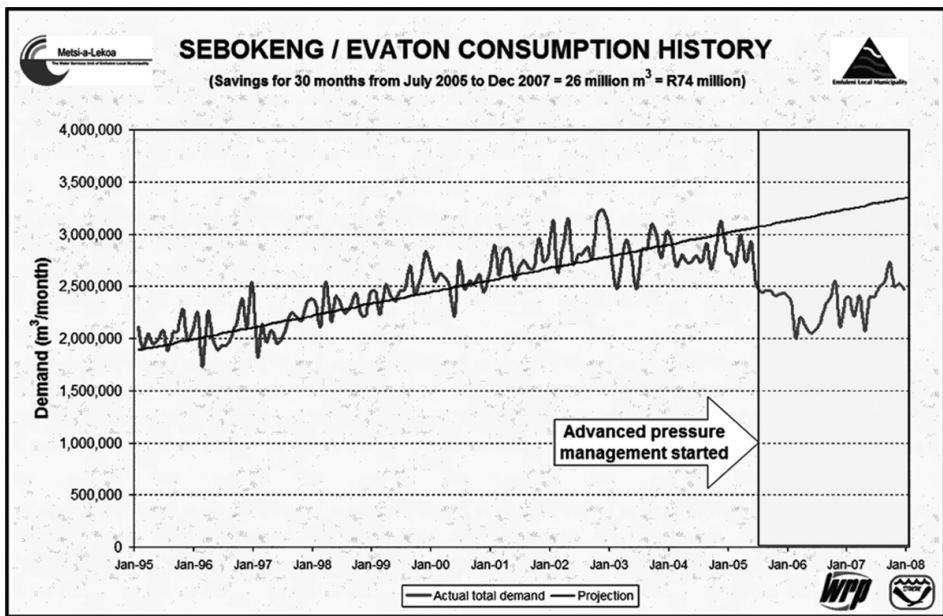


Figure 3: Historical water consumption in Sebokeng and Evaton areas for a 13 year period

Defer upgrading of infrastructure

With the implementation of the advanced pressure management system the water demand was reduced to 1997 figures as can be seen in **Figure 3**. The reduced water demand also had a significant impact