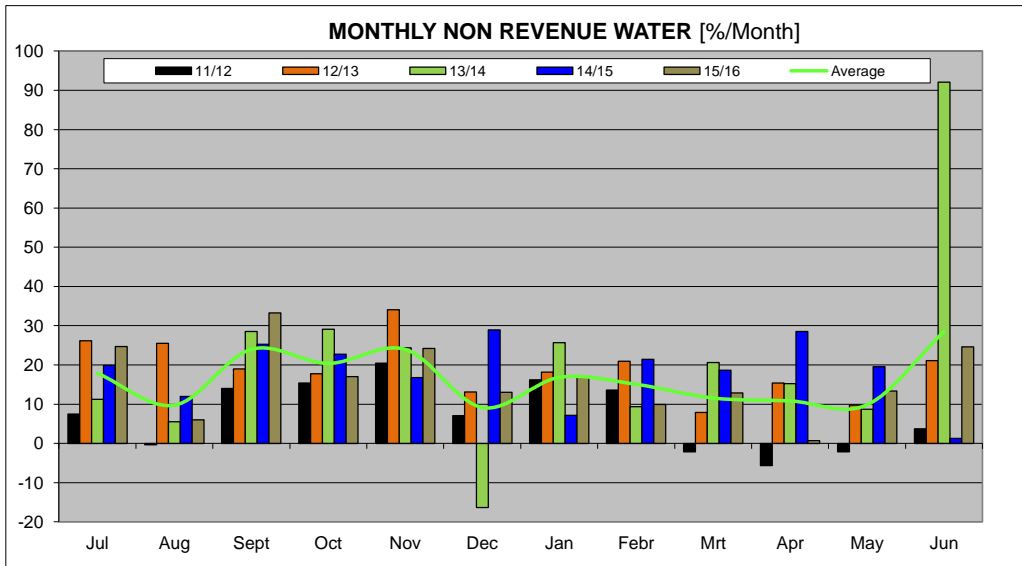
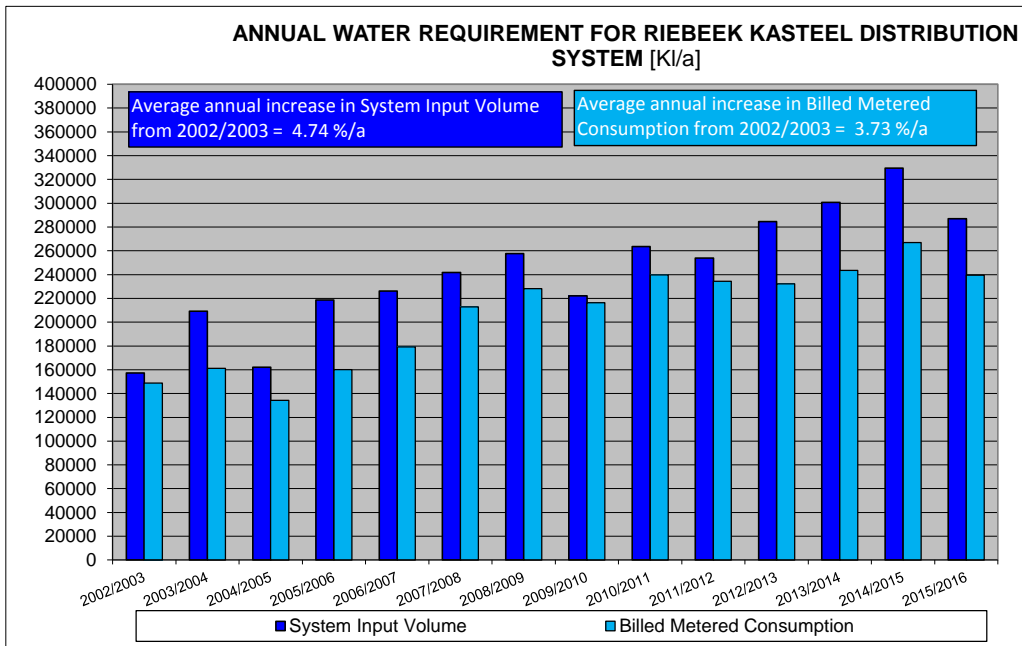
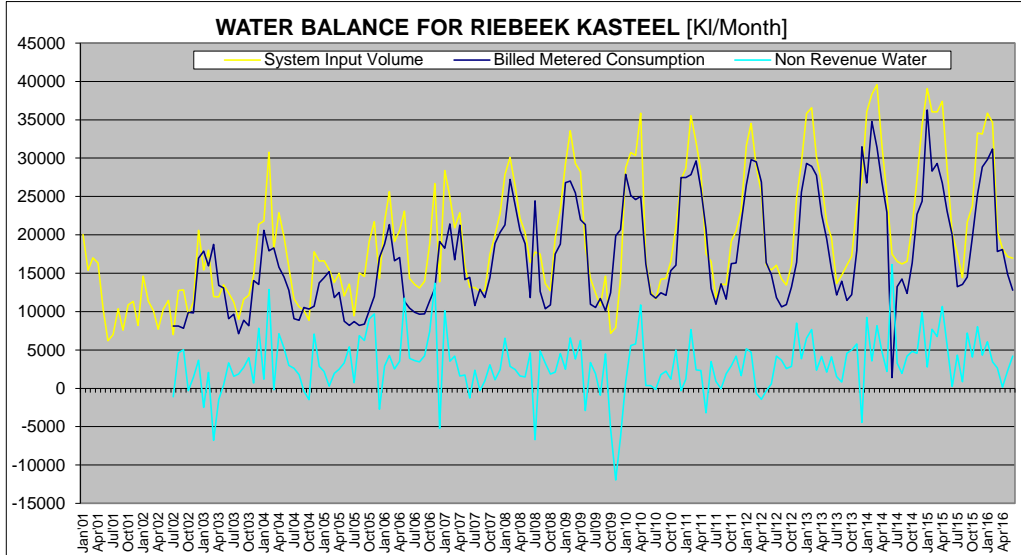


SWARTLAND MUNICIPALITY													
Riebeeck Kasteel													
Month	Year	BULK WATER SUPPLY				TREATED WATER SUPPLY				TOTALS (ONLY NETWORK LOSSES)			
		Raw Water Supply	System Input Volume	Monthly Losses [m³]	Monthly Losses [%]	System Input Volume	Billed Metered Consumption	Monthly Losses [m³]	Monthly Losses [%]	Monthly Losses [m³]	Monthly Losses [%]	Annual Losses [m³]	Annual Losses [%]
Jan01					20061								
Feb01					15367								
Mrt01					16989								
Apr01					16349								
May01					10331								
Jun01					6207								
Jul01					6991								
Aug01					10346								
Sep01					7554								
Oct01					10871								
Nov01					11310								
Dec01					8199								
Jan02					14636								
Feb02					11382								
Mrt02					10128								
Apr02					7712								
May02					10331								
Jun02					11443								
Jul02					6991	8105	-1114	-15.9	-1114	-15.9			
Aug02					12737	8107	4630	36.4	4630	36.4			
Sep02					12635	7616	5019	39.1	5019	39.1			
Oct02					8600	8926	-326	-3.4	-326	-3.4			
Nov02					11266	9843	1423	12.6	1423	12.6			
Dec02					20596	19663	933	4.5	933	4.5			
Jan03					15888	17873	-2475	-16.1	-2475	-16.1			
Feb03					18017	15862	2055	11.4	2055	11.4			
Mrt03					11960	18732	-6772	-56.6	-6772	-56.6			
Apr03					11927	13421	-1494	-12.5	-1494	-12.5			
May03					13489	13095	394	2.9	394	2.9			
Jun03					12399	9073	3326	26.8	3326	26.8			
Jul03					11233	9668	1565	13.9	1565	13.9			
Aug03					8989	7115	1874	20.8	1874	20.8			
Sep03					11608	8870	2738	23.6	2738	23.6			
Oct03					12126	8139	3987	32.9	3987	32.9			
Nov03					14745	14055	690	4.7	690	4.7			
Dec03					21362	13556	7806	36.5	7806	36.5			
Jan04					21788	20595	1193	5.5	1193	5.5			
Feb04					30782	17269	13513	41.8	13513	41.8			
Mrt04					18107	18286	-179	-1.0	-179	-1.0			
Apr04					22899	15787	7112	31.1	7112	31.1			
May04					19722	14504	5218	26.5	5218	26.5			
Jun04					15781	12737	2984	18.9	2984	18.9			
Jul04					11661	9070	2591	22.2	2591	22.2			
Aug04					10636	8862	1774	16.7	1774	16.7			
Sep04					10171	10539	-368	-3.6	-368	-3.6			
Oct04					8675	10343	-1468	-16.8	-1468	-16.8			
Nov04					17793	10712	7081	39.8	7081	39.8			
Dec04					16599	13736	2863	17.2	2863	17.2			
Jan05					16633	14423	2210	13.3	2210	13.3			
Feb05					15467	15180	277	1.8	277	1.8			
Mrt05					13773	11842	1931	14.0	1931	14.0			
Apr05					15010	12511	2499	16.6	2499	16.6			
May05					12043	8732	3311	27.5	3311	27.5			
Jun05					13528	9196	4332	39.7	4332	39.7			
Jul05					9440	8599	741	7.8	741	7.8			
Aug05					15053	8204	6849	45.5	6849	45.5			
Sep05					14595	8360.8	6234.2	42.7	6234.2	42.7			
Oct05					19150	10109.37	9040.63	47.2	9040.63	47.2			
Nov05					21700	12011.83	9688.17	44.6	9688.17	44.6			
Dec05					14293	17032	-2739	-19.2	-2739	-19.2			
Jan06					21695	18796	2899	13.4	2899	13.4			
Feb06					25621	21338	4283	16.7	4283	16.7			
Mrt06					19136	16533	2593	13.1	2593	13.1			
Apr06					20568	17034	3534	17.2	3534	17.2			
May06					23071	11331	11740	50.9	11740	50.9			
Jun06					14329	10442	3887	27.1	3887	27.1			
Jul06					13526	9804	3722	26.8	3722	26.8			
Aug06					13092	9650	3442	26.3	3442	26.3			
Sep06					13964	9719	4245	30.4	4245	30.4			
Oct06					18537	11422	7115	38.4	7115	38.4			
Nov06					26063	12976	13087	50.2	13087	50.2			
Dec06					13883	19128	-5245	-37.8	-5245	-37.8			
Jan07					28369	18258	10111	35.6	10111	35.6			
Feb07					24962	21430	3532	14.1	3532	14.1			
Mrt07					20932	16732	4200	20.1	4200	20.1			
Apr07					22863	21257	1606	7.0	1606	7.0			
May07					15886	14167	1719	10.8	1719	10.8			
Jun07					13181	14471	-1290	-9.8	-1290	-9.8			
Jul07					13127	10769	2358	18.0	2358	18.0			
Aug07					12606	12930	-324	-2.6	-324	-2.6			
Sep07					12759	11812	947	7.4	947	7.4			
Oct07					17466	14399	3067	17.6	3067	17.6			
Nov07					19070	16876	2194	11.2	2194	11.2			
Dec07					22796	20357	2439	10.7	2439	10.7			
Jan08					27845	21317	6528	23.4	6528	23.4			
Feb08					30099	27233	2866	9.5	2866	9.5			
Mrt08					26287	23892	2395	9.3	2395	9.3			
Apr08					22168	20577	1591	7.2	1591	7.2			
May08					20309	18844	1465	7.2	1465	7.2			
Jun08					16407	11817	4590	28.0	4590	28.0			
Jul08					17730	24439	-6709	-37.8	-6709	-37.8			
Aug08					17502	17631	-129	-0.7	-129	-0.7			
Sep08					13663	10385	3278	24.0	3278	24.0			
Oct08					12723	10881	1842	14.5	1842	14.5			
Nov08					19642	17519	2123	10.8	2123	10.8			
Dec08					23311	18774	4537	19.5	4537	19.5			
Jan09					29260	26790	2470	8.4	2470	8.4			
Feb09					33563	27005	6558	19.5	6558	19.5			
Mrt09					29306	29471	-165	-0.6	-165	-0.6			
Apr09					28201	21970	6231	22.1	6231	22.1			
May09					18411	21329	-2918	-15.8	-2918	-15.8			
Jun09					14322	10943	3379	23.6	3379	23.6			
Jul09					12413	10527	1886	15.2	1886	15.2			
Aug09					10903	11681	-778	-7.1	-778	-7.1			
Sep09					14629	10137	4492	30.7	4492	30.7			
Oct09					7160	12454	-5294	-73.9	-5294	-73.9			
Nov09					7898	19862	-11964	-151.5	-11964	-151.5			
Dec09					14313	20657	-6344	-44.3	-6344	-44.3			
Jan10					28711	27885	826	2.9	826	2.9			
Feb10					30709	25155	5554	18.1	5554	18.1			
Mrt10					30356	24599	5757	19.0	5757	19.0			
Apr10					35856	24997	10859	30.3	10859	30.3			
May10					16660	16201	459	2.8	459	2.8			
Jun10					12644	12279	365	2.9	365	2.9			
Jul10					11623	11758	-132	-1.1	-132	-1.1			
Aug10					14217	12455	1762	12.4	1762	12.4			
Sep10					14346	12110	2236	15.6	2236	15.6			
Oct10					16519	15346	1173	7.1	1173	7.1			
Nov10					21022	16036	4986	23.7	4986	23.7			
Dec10					27167	27489	-322	-1.2	-322	-1.2			
Jan11					28665	27489	1176	4.1	1176	4.1			
Feb11					35502	27930	7572	21.6	7572	21.6			
Mrt11					32052	29651	2401	7.5	2401	7.5			
Apr11					28320	25992	2328	8.2	2328	8.2			
May11					17531	20714	-3183	-18.2	-3183	-18.2			
Jun11					16503	13003	3500	21.2	3500	21.2			
Jul11					11834	10953	881	7.4	881	7.4			
Aug11					13580	13632	-52	-0.4	-52	-0.4			
Sep11					13500	11615	1885	14.0	1885	14.0			
Oct11					19184	16234	2950	15.4	2950	15.4			
Nov11					20517	16328							

SWARTLAND MUNICIPALITY													
Riebeek Kasteel													
Month	Year	BULK WATER SUPPLY				TREATED WATER SUPPLY				TOTALS (ONLY NETWORK LOSSES)			
		Raw Water Supply	System Input Volume	Monthly Losses [m³]	Monthly Losses [%]	System Input Volume	Billed Metered Consumption	Monthly Losses [m³]	Monthly Losses [%]	Monthly Losses [m³]	Monthly Losses [%]	Annual Losses [m³]	Annual Losses [%]
Jul12	12/13					16037	11847	4190	26.1	4190	26.1	52455	18.4%
Aug12						14244	10612	3632	25.5	3632	25.5		
Sep12						13437	10890	2547	19.0	2547	19.0		
Oct12						16079	13224	2855	17.8	2855	17.8		
Nov12						24578	16389	8189	34.1	8178	34.1		
Dec12						29400	25552	3848	13.1	3848	13.1		
Jan13						35813	29298	6515	18.2	6515	18.2		
Feb13						36379	29916	7661	20.9	7661	20.9		
Mrt13						30145	27778	2367	7.9	2367	7.9		
Apr13						26815	22683	4132	15.4	4132	15.4		
May13						21572	19472	2100	9.7	2100	9.7		
Jun13						19566	15457	4129	21.1	4129	21.1		
Jul13	13/14				13678	12142	1536	11.2	1536	11.2			
Aug13					14762	13944	818	5.5	818	5.5			
Sep13					16038	11461	4577	28.5	4577	28.5			
Oct13					17204	12198	5006	29.1	5006	29.1			
Nov13					23766	17974	5792	24.4	5792	24.4			
Dec13					27040	31463	-4423	-18.4	-4423	-18.4			
Jan14					36338	26781	9257	25.7	9257	25.7			
Feb14					38337	34758	3579	9.3	3579	9.3			
Mrt14					39554	31405	8149	20.6	8149	20.6			
Apr14					31841	26963	4858	15.3	4858	15.3			
May14					25925	22308	3617	13.9	3617	13.9			
Jun14					17517	1393	16124	92.0	16124	92.0			
Jul14	14/15				16522	13239	3283	19.9	3283	19.9			
Aug14					16208	14267	1942	12.0	1942	12.0			
Sep14					16537	12362	4175	25.2	4175	25.2			
Oct14					21155	16351	4804	22.7	4804	22.7			
Nov14					27250	24588	2662	9.8	2662	9.8			
Dec14					34292	24378	9914	29.9	9914	29.9			
Jan15					39051	36259	2792	7.1	2792	7.1			
Feb15					36032	28322	7710	21.4	7710	21.4			
Mrt15					36030	29307	6723	18.7	6723	18.7			
Apr15					37404	26746	10658	28.5	10658	28.5			
May15					28728	23111	5617	19.6	5617	19.6			
Jun15					20230	19980	250	1.2	250	1.2			
Jul15	15/16				17567	13229	4338	24.7	4338	24.7			
Aug15					14421	13551	870	6.0	870	6.0			
Sep15					21686	14482	7204	33.2	7204	33.2			
Oct15					23759	19706	4053	17.1	4053	17.1			
Nov15					33285	25241	8044	24.2	8044	24.2			
Dec15					33145	28838	4307	13.0	4307	13.0			
Jan16					35868	29506	6060	16.9	6060	16.9			
Feb16					34541	31190	3451	10.0	3451	10.0			
Mrt16					20455	17822	2633	12.9	2633	12.9			
Apr16					18198	18069	129	0.7	129	0.7			
May16					17168	14878	2290	13.3	2290	13.3			
Jun16					16947	12771	4176	24.6	4176	24.6			

ANNUAL TOTALS				
Year	System Input Volume	Billed Metered Consumption	Losses m³	Losses %
2001/2002	120933			
2002/2003	157215	148916	8299	5.3%
2003/2004	209142	161281	47861	22.9%
2004/2005	162254	134156	28098	17.3%
2005/2006	218651	159991	58660	26.8%
2006/2007	228158	179115	47043	20.8%
2007/2008	247840	212784	28056	11.0%
2008/2009	297634	229137	68497	23.0%
2009/2010	222052	216428	5624	2.5%
2010/2011	263467	239870	23597	9.0%
2011/2012	253825	234337	19488	7.7%
2012/2013	284585	232130	52455	18.4%
2013/2014	300867	243410	57457	19.1%
2014/2015	328440	267010	62430	19.0%
2015/2016	297140	235585	47555	16.6%

WATER BALANCE AND USAGE FOR RIEBEEK KASTEEL DISTRIBUTION SYSTEM



WATER BALANCE AND USAGE FOR RIEBEEK KASTEEL DISTRIBUTION SYSTEM

