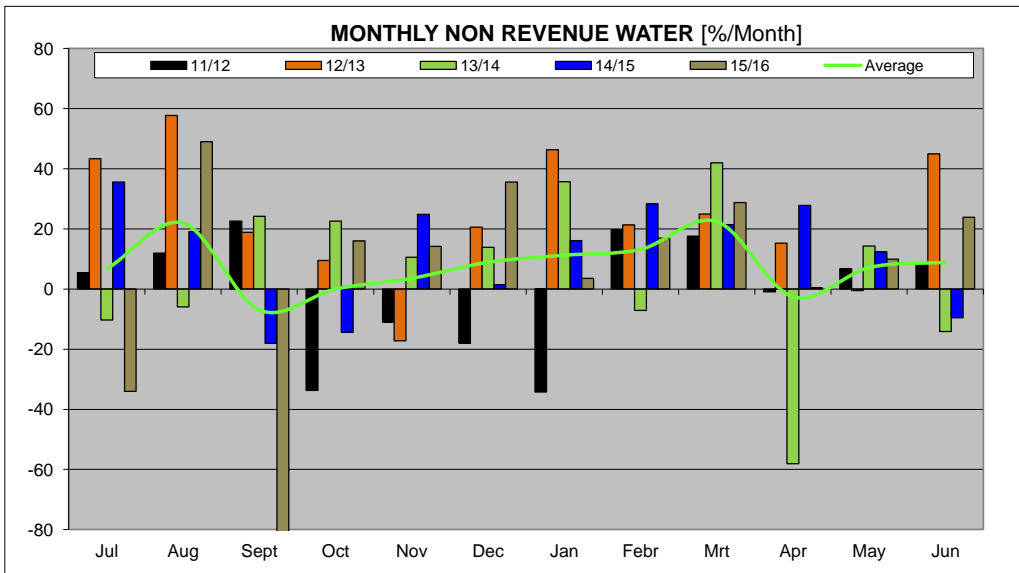
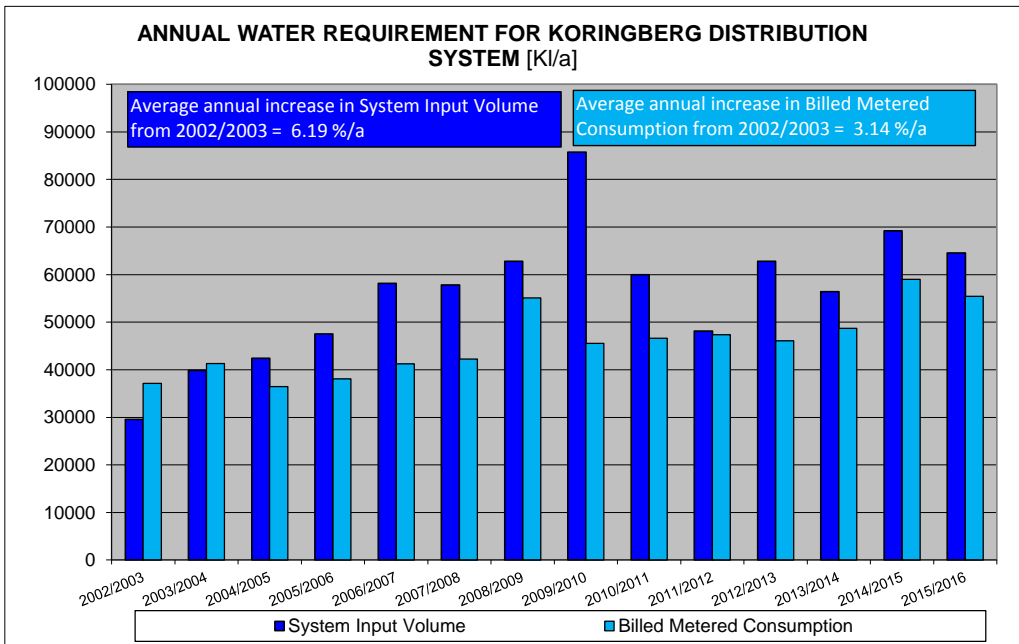
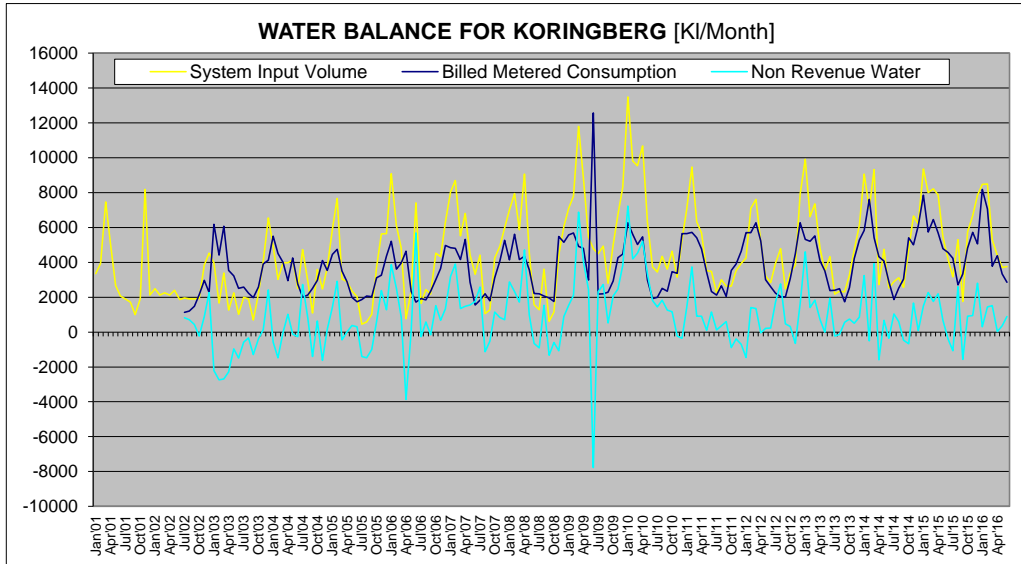


SWARTLAND MUNICIPALITY													
Koringberg													
Month	Year	BULK WATER SUPPLY				TREATED WATER SUPPLY				TOTALS (ONLY NETWORK LOSSES)			
		Raw Water Supply	System Input Volume	Monthly Losses (m³)	Monthly Losses (%)	System Input Volume	Billed Metered Consumption	Monthly Losses (m³)	Monthly Losses (%)	Monthly Losses (m³)	Monthly Losses (%)	Annual Losses (m³)	Annual Losses (%)
Jan/01	00/01					3357							
Feb/01						3907							
Mar/01						7468							
Apr/01						5051							
May/01						2871							
Jun/01						2061							
Jul/01						1901							
Aug/01						1722							
Sep/01						995							
Oct/01						1929							
Nov/01						8122							
Dec/01						2118							
Jan/02	01/02				2487								
Feb/02					4123								
Mar/02					2243								
Apr/02					2118								
May/02					2400								
Jun/02					1859								
Jul/02					1861	1137	824	42.0	824	42.0			
Aug/02					1895	1198	826	38.3	826	38.3			
Sep/02					1905	1477	428	22.5	428	22.5			
Oct/02					1913	2146	233	-12.2	233	-12.2			
Nov/02					3943	2956	885	23.1	885	23.1			
Dec/02					4223	2284	2259	49.9	2259	49.9			
Jan/03	02/03				3978	6180	2202	-55.4	2202	-55.4	-7511	-25.4%	
Feb/03					3169	4410	2751	-165.8	2751	-165.8			
Mar/03					3386	6071	2685	-79.3	2685	-79.3			
Apr/03					1257	3538	2281	-181.5	2281	-181.5			
May/03					2254	3224	970	-43.0	970	-43.0			
Jun/03					1013	2501	1488	-146.9	1488	-146.9			
Jul/03					1995	2578	284	-29.3	284	-29.3			
Aug/03					1905	2285	381	-17.4	381	-17.4			
Sep/03					686	1862	1296	-188.9	1296	-188.9			
Oct/03					2195	2285	390	-17.8	390	-17.8			
Nov/03					4046	3903	139	3.4	139	3.4			
Dec/03					6541	4122	2419	37.0	2419	37.0			
Jan/04	03/04				4828	5500	572	-11.6	572	-11.6	-1453	-3.6%	
Feb/04					4267	4174	-87	-48.7	-87	-48.7			
Mar/04					3972	3989	16	-0.4	16	-0.4			
Apr/04					2917	2917	0	0.0	0	0.0			
May/04					4125	4247	115	-2.8	115	-2.8			
Jun/04					2481	2739	258	-10.4	258	-10.4			
Jul/04					4729	2088	2720	87.4	2720	87.4			
Aug/04					2363	2112	641	28.5	641	28.5			
Sep/04					1091	2500	1409	-129.1	1409	-129.1			
Oct/04					3699	2956	633	17.4	633	17.4			
Nov/04					2462	4093	1631	-66.2	1631	-66.2			
Dec/04					3695	3539	156	4.2	156	4.2			
Jan/05	04/05				4879	1438	243	14.8	243	14.8	5886	13.9%	
Feb/05					7660	4745	2915	38.1	2915	38.1			
Mar/05					3346	3488	442	14.5	442	14.5			
Apr/05					3880	3880	0	0.0	0	0.0			
May/05					2365	1992	373	15.8	373	15.8			
Jun/05					2030	1727	303	14.8	303	14.8			
Jul/05					1854	1854	0	0.0	0	0.0			
Aug/05					583	2066	1483	-254.4	1483	-254.4			
Sep/05					1025	2019	994	-97.0	994	-97.0			
Oct/05					3708	605	163	6.8	163	6.8			
Nov/05					5622	3254	2368	42.1	2368	42.1			
Dec/05					6634	4355	1279	22.7	1279	22.7			
Jan/06	05/06				6105	3598	2507	41.1	2507	41.1	9446	19.9%	
Feb/06					4811	3962	849	17.6	849	17.6			
Mar/06					770	4634	3864	501.8	3864	501.8			
Apr/06					2365	2334	33	1.4	33	1.4			
May/06					7388	1711	5687	76.9	5687	76.9			
Jun/06					1916	1916	0	0.0	0	0.0			
Jul/06					2428	1853	575	23.7	575	23.7			
Sep/06					2179	2331	152	-7.0	152	-7.0			
Oct/06					4224	3025	1199	33.6	1199	33.6			
Nov/06					4314	3636	678	15.7	678	15.7			
Dec/06					6296	4871	1324	21.0	1324	21.0			
Jan/07		06/07				6030	3192	387	31.92	387	31.92	18899	29.1%
Feb/07					8652	4797	3855	44.8	3855	44.8			
Mar/07					5512	4164	1348	24.5	1348	24.5			
Apr/07					6785	6398	1485	21.9	1485	21.9			
May/07					4413	2861	1552	35.2	1552	35.2			
Jun/07					3306	1852	1754	53.1	1754	53.1			
Jul/07					4498	1627	2869	58.7	2869	58.7			
Aug/07					1055	2189	1134	-107.5	1134	-107.5			
Sep/07					1289	1792	504	-41.9	504	-41.9			
Oct/07					4227	3166	1151	27.0	1151	27.0			
Nov/07					4904	4065	839	17.1	839	17.1			
Dec/07					5977	3264	2713	11.9	2713	11.9			
Jan/08	07/08				7003	4138	2865	40.9	2865	40.9	15575	26.9%	
Feb/08					7933	5607	2326	29.3	2326	29.3			
Mar/08					4168	1774	2394	17.4	2394	17.4			
Apr/08					3049	4348	1701	52.0	1701	52.0			
May/08					4544	3564	980	21.8	980	21.8			
Jun/08					1561	2203	642	41.1	642	41.1			
Jul/08					1279	2198	907	-70.9	907	-70.9			
Aug/08					3606	2066	1540	42.7	1540	42.7			
Sep/08					623	1963	1339	-213.8	1339	-213.8			
Oct/08					1145	1746	601	-52.5	601	-52.5			
Nov/08					4407	5483	1076	-24.4	1076	-24.4			
Dec/08					6046	5147	899	14.9	899	14.9			
Jan/09	08/09				7093	5596	1527	21.5	1527	21.5	7722	12.3%	
Feb/09					7785	6889	2096	26.9	2096	26.9			
Mar/09					11788	3918	6869	58.3	6869	58.3			
Apr/09					8833	4793	4040	45.7	4040	45.7			
May/09					5429	2988	2437	44.9	2437	44.9			
Jun/09					4161	15653	11722	-162.6	11722	-162.6			
Jul/09					4478	2171	2307	51.5	2307	51.5			
Aug/09					4929	2922	2727	55.3	2727	55.3			
Sep/09					2903	2277	626	18.8	626	18.8			
Oct/09					4999	2927	2072	41.4	2072	41.4			
Nov/09					6759	4269	2470	36.7	2470	36.7			
Dec/09					6295	4474	1821	46.1	1821	46.1			
Jan/10	09/10				13476	6258	7217	53.6	7217	53.6	40201	46.9%	
Feb/10					5805	5607	4198	42.8	4198	42.8			
Mar/10					6233	5015	4518	47.4	4518	47.4			
Apr/10					10664	5456	5208	48.8	5208	48.8			
May/10					6315	2989	3326	52.7	3326	52.7			
Jun/10					2721	1920	1811	48.5	1811	48.5			
Jul/10					3447	2000	1447	42.0	1447	42.0			
Aug/10					4331	2614	1817	42.0	1817	42.0			
Sep/10					3600	2335	1265	35.1	1265	35.1			
Oct/10					4639	3467	1172	25.3	1172	25.3			
Nov/10					3144	3384	220	-7.0	220	-7.0			
Dec/10					6283	6639	356	-9.7	356	-9.7			
Jan/11	10/11				7072	5639	1433	20.3	1433	20.3	13358	22.3%	
Feb/11					9847	5222	3725	39.5	3725	39.5			
Mar/11					6335	6299	336	-5.2	336	-5.2			
Apr/11					5679	4770	909	16.0	909	16.0			
May/11					3573	3416	97	2.8	97	2.8			
Jun/11					3472	2325	1143	32.9	1143	32.9			
Jul/11					2245	2122	123	5.5	123	5.5			
Aug/11					3008	2648	360	12.0	360	12.0			
Sep/11					3642	2043	699	22.7	699	22.7			
Oct/11					2642	3532	891	-33.7	891	-33.7			
Nov/11					3512	3900	388	-11.0	388	-11.0			
Dec/11					3934	4940	706	-17.9	706	-17.9			
Jan/12	11/12				4243	6684	1451	-34.2	1451	-34.2	802	1.7%	
Feb/12					3705	5698	1602	19.7	1602	19.7			
Mar/12					7607	6264	1343	17.7	1343	17.7			
Apr/12					5174	5219	45	-0.9	45	-0.9			
May/12					3223	3008</							

SWARTLAND MUNICIPALITY													
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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 (%)
Jul 12	12/13					3933	2226	1707	43.4	1707	43.4		
Aug 12						4774	3020	2754	57.7	2754	57.7		
Sep 12						2470	2004	466	18.9	466	18.9		
Oct 12						3382	3060	322	9.5	322	9.5		
Nov 12						3821	4479	658	17.2	658	17.2		
Dec 12						7897	8273	1624	20.6	1624	20.6		
Jan 13						8897	8306	4591	46.4	4591	46.4		
Feb 13						5817	5208	1409	21.3	1409	21.3		
Mar 13						7348	5513	1835	25.0	1835	25.0		
Apr 13						4821	4087	734	15.2	734	15.2		
May 13						3428	3516	-17	-0.5	-17	-0.5	16710	26.6%
Jun 13						4318	2375	1943	45.0	1943	45.0		
Jul 13	13/14				2189	2391	-222	-10.2	-222	-10.2			
Aug 13					3246	3486	-140	-4.0	-140	-4.0			
Sep 13					2238	1741	557	24.2	557	24.2			
Oct 13					2379	2537	742	22.6	742	22.6			
Nov 13					4705	4205	500	10.6	500	10.6			
Dec 13					6125	5275	850	13.9	850	13.9			
Jan 14					8048	6818	3230	35.7	3230	35.7			
Feb 14					7101	7608	-506	-7.1	-506	-7.1			
Mar 14					6519	5406	3913	42.0	3913	42.0			
Apr 14					2722	4319	-1587	-58.1	-1587	-58.1			
May 14					4749	4070	878	14.3	878	14.3			
Jun 14					2525	2882	-357	-14.1	-357	-14.1			
Jul 14	14/15				2897	1865	1032	35.6	1032	35.6			
Aug 14					3111	2218	893	19.1	893	19.1			
Sep 14					2568	3031	-463	-18.0	-463	-18.0			
Oct 14					4727	5402	-675	-14.3	-675	-14.3			
Nov 14					6660	5095	1655	24.8	1655	24.8			
Dec 14					6187	6101	86	1.4	86	1.4			
Jan 15					9381	7847	1504	16.1	1504	16.1			
Feb 15					7950	6729	2264	28.3	2264	28.3			
Mar 15					6205	6447	1758	21.4	1758	21.4			
Apr 15					7889	5882	2187	27.8	2187	27.8			
May 15					5485	4787	878	12.4	878	12.4			
Jun 15					4170	4568	-398	-9.5	-398	-9.5			
Jul 15	15/16				3181	4238	-1077	-34.1	-1077	-34.1			
Aug 15					5297	2701	2596	49.0	2596	49.0			
Sep 15					1760	3336	-1576	-89.5	-1576	-89.5			
Oct 15					5733	4818	915	16.0	915	16.0			
Nov 15					6895	5717	948	14.2	948	14.2			
Dec 15					7849	5056	2793	35.6	2793	35.6			
Jan 16					8472	8172	300	3.5	300	3.5			
Feb 16					6493	7051	-1442	-17.0	-1442	-17.0			
Mar 16					5296	3773	1522	28.7	1522	28.7			
Apr 16					4395	4375	20	0.5	20	0.5			
May 16					3706	3338	367	9.8	367	9.8			
Jun 16					3752	2855	897	23.9	897	23.9	9147	14.2%	

ANNUAL TOTALS				
Year	System Input Volume	Billed Metered Consumption	Losses m³	Losses %
2001/2002	30984			
2002/2003	29589	37100	-7511	-25.4%
2003/2004	39878	41330	-1453	-3.6%
2004/2005	42388	36452	5936	13.9%
2005/2006	47543	36397	11146	23.9%
2006/2007	61136	41207	19889	32.5%
2007/2008	57829	42254	15575	26.9%
2008/2009	62809	55087	7722	12.3%
2009/2010	89786	49265	40521	45.1%
2010/2011	59852	46584	13268	22.3%
2011/2012	48187	47365	822	1.7%
2012/2013	62777	49087	13690	21.8%
2013/2014	56396	48736	7660	13.6%
2014/2015	69202	58981	10221	14.8%
2015/2016	64976	55431	9147	14.2%

WATER BALANCE AND USAGE FOR KORINGBERG DISTRIBUTION SYSTEM



WATER BALANCE AND USAGE FOR KORINGBERG DISTRIBUTION SYSTEM

