

SWARTLAND MUNICIPALITY													
Koringberg													
Month	Year	BULK WATER SUPPLY				TREATED WATER SUPPLY				TOTALS ( ONLY NETWORK NRW)			
		Raw Water Supply	System Input Volume	Monthly NRW [m³]	Monthly NRW [%]	System Input Volume	Billed Metered Consumption	Monthly NRW [m³]	Monthly NRW [%]	Monthly NRW [m³]	Monthly NRW [%]	Annual NRW [m³]	Annual NRW [%]
Jan/01	00/01					3357							
Feb/01						3927							
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						8172							
Dec/01						2118							
Jan/02	01/02				2487								
Feb/02					2123								
Mar/02					2243								
Apr/02					2118								
May/02					2200								
Jun/02					1859								
Jul/02					1861	1137	824	42.0	824	42.0			
Aug/02					1895	1198	826	38.9	826	38.9			
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					1267	3538	2281	-181.5	2281	-181.5			
May/03					2224	2970	490	-43.0	490	-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	331	-17.4	331	-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	-672	-11.6	-672	-11.6	-1453	-3.6%	
Feb/04					4267	4174	-89.7	-141.4	-89.7	-141.4			
Mar/04					3972	3989	-16	-0.4	-16	-0.4			
Apr/04					2977	2497	1026	25.8	1026	25.8			
May/04					4125	4247	-115	-2.8	-115	-2.8			
Jun/04					2481	2739	258	10.4	258	10.4			
Jul/04					4729	2038	2720	57.4	2720	57.4			
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	17.1	633	17.1			
Nov/04					2462	4093	1631	66.2	1631	66.2			
Dec/04					3695	3539	156	4.2	156	4.2			
Jan/05	04/05				4876	1438	24.3	1438	24.3	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	3	0.3	0.3	0.3	0.3			
May/05					2365	1992	373	15.8	373	15.8			
Jun/05					2030	1727	303	14.8	303	14.8			
Jul/05					1854	1483	1426	-310.2	1426	-310.2			
Aug/05					583	2066	1483	-254.4	1483	-254.4			
Sep/05					1025	2019	994	49.0	994	49.0			
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					4276	1916	271	-16.4	271	-16.4			
Jul/06					2428	1853	575	23.7	575	23.7			
Sep/06					2179	2331	-152	-7.0	-152	-7.0			
Oct/06					4224	3026	1519	33.6	1519	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	39.7	3192	39.7	18899	29.1%	
Feb/07					8652	4797	3895	44.8	3895	44.8			
Mar/07					5512	4164	1348	24.5	1348	24.5			
Apr/07					6785	6398	1486	21.9	1486	21.9			
May/07					4413	2861	1552	35.2	1552	35.2			
Jun/07					3306	1852	1754	53.1	1754	53.1			
Jul/07					4408	4408	2286	56.7	2286	56.7			
Aug/07					1055	2189	-1134	-107.5	-1134	-107.5			
Sep/07					1289	1792	524	43.9	524	43.9			
Oct/07					4247	3161	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	4168	1774	29.3	1774	29.3			
Apr/08					3049	4348	4701	52.0	4701	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	1338	213.8	1338	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	898	14.9	898	14.9			
Jan/09	08/09				7093	5956	1527	21.5	1527	21.5	7722	12.3%	
Feb/09					7785	6889	2096	26.9	2096	26.9			
Mar/09					11788	4918	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	12653	3722	162.6	3722	162.6			
Jul/09					4478	2171	2307	51.5	2307	51.5			
Aug/09					4929	2202	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	3821	66.1	3821	66.1	40201	46.9%	
Jan/10	09/10				13476	6268	7217	53.6	7217	53.6			
Feb/10					9805	5607	4198	42.8	4198	42.8			
Mar/10					6233	5015	4519	47.4	4519	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	13368	22.3%	
Feb/11					9847	5722	3735	39.5	3735	39.5			
Mar/11					6335	6399	916	14.5	916	14.5			
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	3905	393	11.0	393	11.0			
Dec/11					3934	4940	708	17.9	708	17.9			
Jan/12	11/12				4243	6684	1451	34.2	1451	34.2	802	1.7%	
Feb/12					3709	5698	1620	19.7	1620	19.7			
Mar/12					7607	6264	1343	17.7	1343	17.7			
Apr/12					5174	6219	45	-0.9	45	-0.9			
May/12					3223								

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		Raw Water Supply	System Input Volume	Monthly NRW [m³]	Monthly NRW [%]	System Input Volume	Billed Metered Consumption	Monthly NRW [m³]	Monthly NRW [%]	Monthly NRW [m³]	Monthly NRW [%]	Annual NRW [m³]	Annual NRW [%]
Jul 12	12/13					3933	2226	1707	43.4	1707	43.4	16710	26.6%
Aug 12						4774	3029	2754	57.7	2754	57.7		
Sep 12						3470	2004	168	16.9	168	16.9		
Oct 12						3382	3060	322	9.5	322	9.5		
Nov 12						3921	4479	458	17.3	458	17.3		
Dec 12						3997	5273	1624	20.6	1624	20.6		
Jan 13						5897	5306	4591	46.4	4591	46.4		
Feb 13						5813	5208	1429	21.3	1429	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		
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	-6.0	-140	-6.0		
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						9048	5818	3230	35.7	3230	35.7		
Feb 14						7101	7006	-95	-7.1	-95	-7.1		
Mar 14						6519	5406	3913	42.0	3913	42.0		
Apr 14						2722	4319	-1587	-58.1	-1587	-58.1		
May 14						4745	4070	876	14.3	876	14.3		
Jun 14						2625	2882	-367	-14.1	-367	-14.1		
Jul 14	14/15					2897	1865	1032	35.6	1032	35.6		
Aug 14						3111	2218	993	19.1	993	19.1		
Sep 14						2568	3031	-463	-18.0	-463	-18.0		
Oct 14						4727	5402	-675	-14.3	-675	-14.3		
Nov 14						5660	5095	1655	24.9	1655	24.9		
Dec 14						6167	6101	86	1.4	86	1.4		
Jan 15						9581	7847	1504	16.1	1504	16.1		
Feb 15						7395	6729	2264	28.3	2264	28.3		
Mar 15						6205	6447	1758	21.4	1758	21.4		
Apr 15						7889	5982	2197	27.8	2197	27.8		
May 15						5465	4797	878	12.4	878	12.4		
Jun 15						4170	4568	-398	-9.5	-398	-9.5		
Jul 15	15/16					3181	4238	-1077	-24.1	-1077	-24.1		
Aug 15						5297	2793	2296	49.0	2296	49.0		
Sep 15						1760	3336	-89.5	-1576	-89.5			
Oct 15						5733	4818	915	16.0	915	16.0		
Nov 15						6665	5717	348	14.2	348	14.2		
Dec 15						7849	5056	2793	35.6	2793	35.6		
Jan 16						8472	8172	300	3.5	300	3.5		
Feb 16						8455	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	3339	367	9.9	367	9.9		
Jun 16						3752	2856	897	23.9	897	23.9		
Jul 16	16/17					2930	2447	483	16.5	483	16.5		
Aug 16						3890	4228	-359	-8.4	-359	-8.4		
Sep 16						3609	2992	1017	28.2	1017	28.2		
Oct 16						4199	3360	839	15.2	839	15.2		
Nov 16						6219	4228	1993	32.0	1993	32.0		
Dec 16						5800	5485	1315	19.3	1315	19.3		
Jan 17						8053	7895	358	4.4	358	4.4		
Feb 17						6876	5012	1863	24.3	1863	24.3		
Mar 17						5623	5233	390	6.9	390	6.9		
Apr 17						4929	4895	234	4.7	234	4.7		
May 17						4781	4674	107	3.5	107	3.5		
Jun 17						3630	3177	453	12.5	453	12.5		

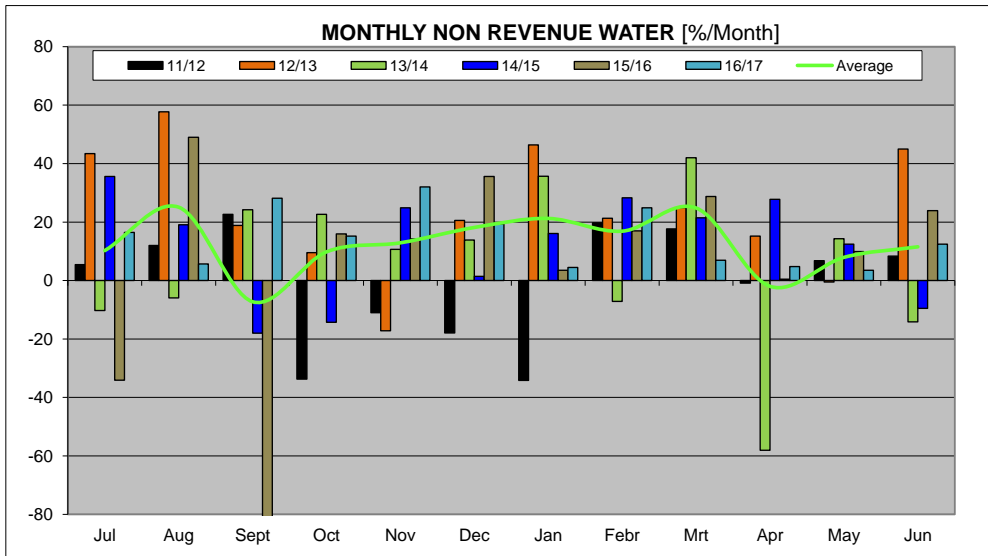
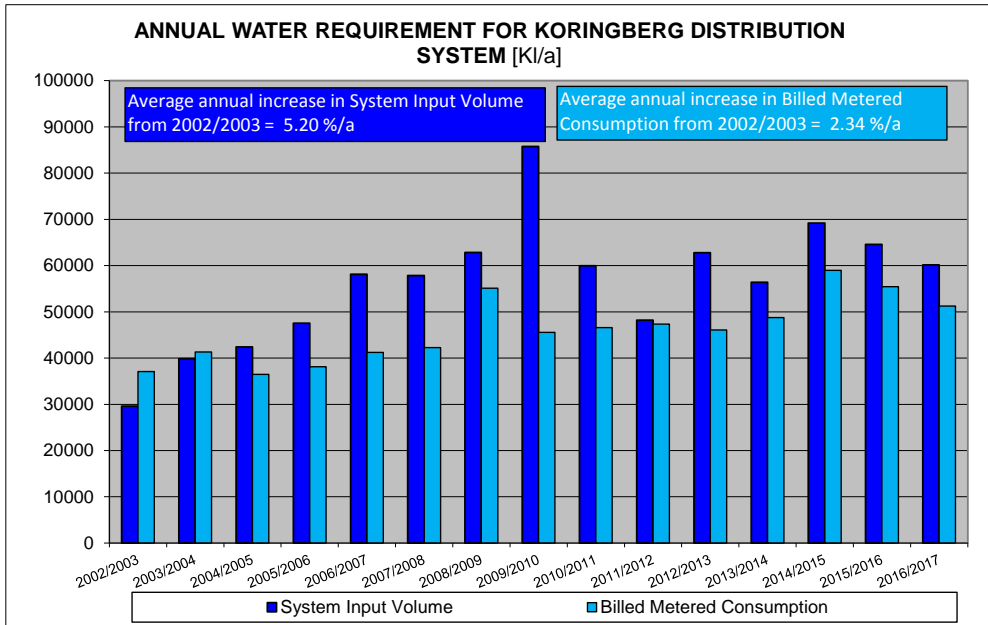
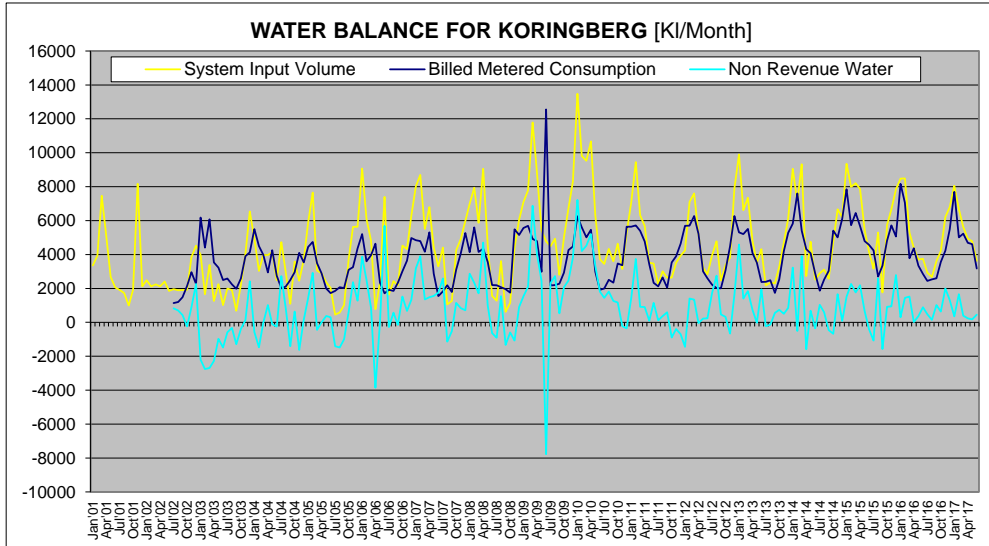
ANNUAL TOTALS				
Year	System Input Volume	Billed Metered Consumption	NRW m³	NRW %
2001/2002	30084			
2002/2003	29589	37100	-7511	-25.4%
2003/2004	39878	41330	-1453	-3.6%
2004/2005	42388	36492	5896	13.9%
2005/2006	47543	38907	8646	18.2%
2006/2007	58136	41237	16899	29.1%
2007/2008	57829	42254	15575	26.9%
2008/2009	62909	45887	17022	27.1%
2009/2010	85765	45565	40201	46.9%
2010/2011	59882	46594	13288	22.3%
2011/2012	48167	47365	802	1.7%
2012/2013	62777	46067	16710	26.6%
2013/2014	56396	48736	7660	13.6%
2014/2015	69202	59361	10021	14.5%
2015/2016	64576	55431	9147	14.2%
2016/2017	60128	51265	8863	14.7%

Water Balance Components		Water Balance Volumes					
Component	Units	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Consumer Units	Number of connections	390	346	328	332	335	333
System Input Volume	l/connection/day	338	497	471	671	528	495
Average Billed Metered Cons.	l/connection/day	333	365	407	487	453	422
Non-Revenue Water	l/connection/day	6	132	64	84	75	73

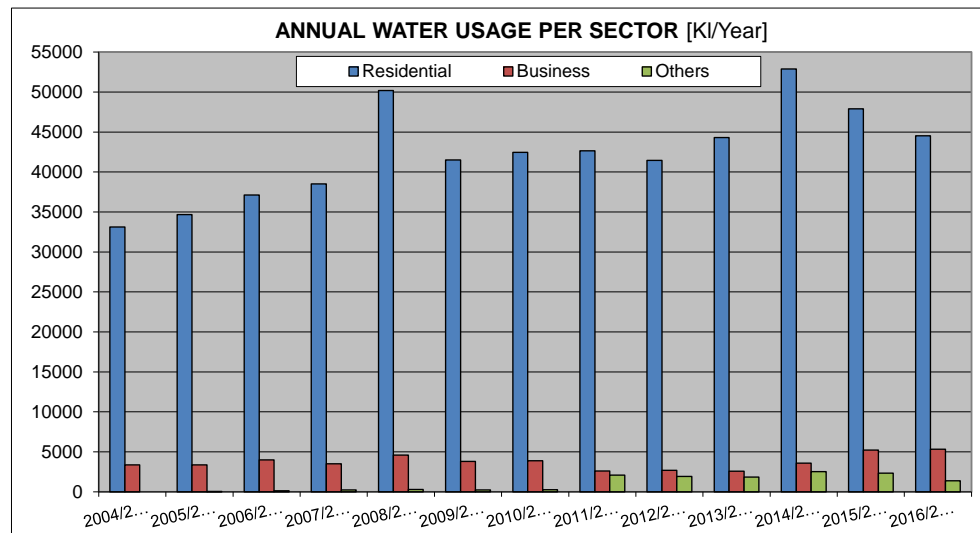
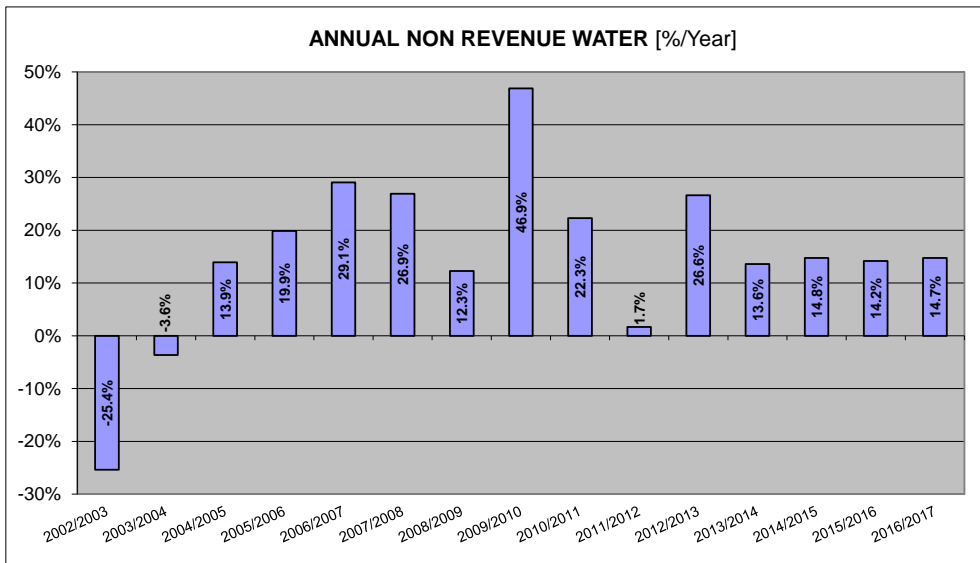
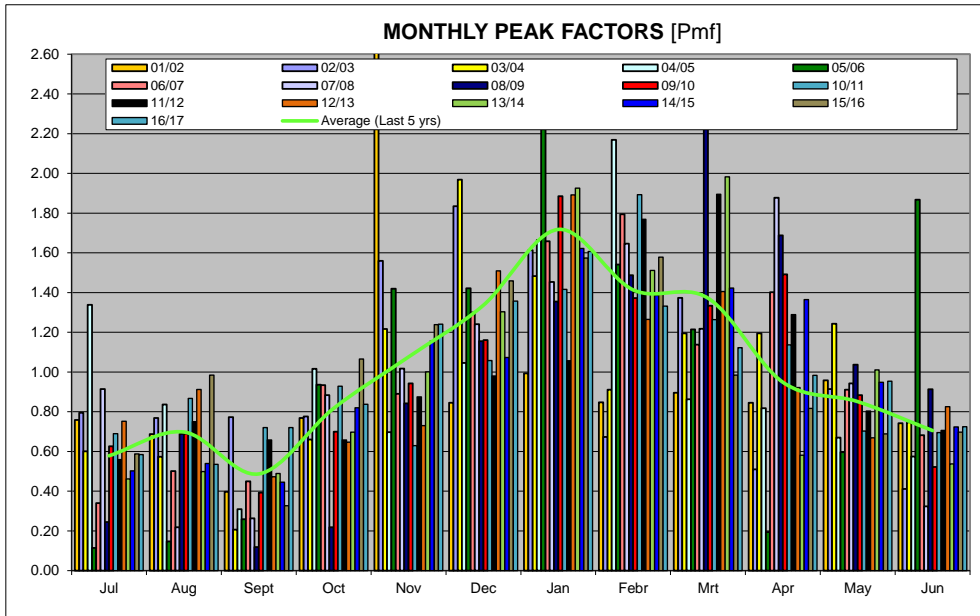
Water Balance Components		Percentage Change in Volumes in l/connection/day, year on year					
Component	Units	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
System Input Volume	% Change in Volume	-	46.91%	-5.23%	21.23%	-7.52%	-6.33%
Average Billed Metered Cons.	% Change in Volume	-	9.63%	11.60%	18.56%	-6.96%	-6.96%
Non-Revenue Water	% Change in Volume	-	2243.50%	-31.84%	31.83%	-11.13%	-2.52%

Water Balance Components		Did volume in l/connection/day Rise or Fall, year on year?					
Component	Units	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
System Input Volume	Rise or Fall	-	Rise	Fall	Rise	Fall	Fall
Average Billed Metered Cons.	Rise or Fall	-	Rise	Rise	Rise	Fall	Fall
Non-Revenue Water	Rise or Fall	-	Rise	Fall	Rise	Fall	Fall

**WATER BALANCE AND USAGE FOR KORINGBERG DISTRIBUTION SYSTEM**



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