

**7.
WRITING OFF OF 2018/19 NON-TECHNICAL WATER AND ELECTRICITY LOSSES**

5/17/2

S Müller

(028) 313 8019

Corporate Head Office

14 August 2019

1. Executive Summary

National Treasury issued guidelines (MFMA Circular No. 70, December 2013) on how to deal with non-revenue water and electricity. Annexure B of Circular No. 70 provides guidance on the accounting treatment of non-technical losses and mentions that a council resolution is required to write off the losses. The purpose with this report is to obtain Council's approval for writing off the water and electricity losses for 2018/19.

2. Service Delivery and Budget Implementation Plan - IGNITE

Directorate Finance
Department Financial Services

3. Compliance with Strategic Priorities

Provision of democratic, accountable and ethical governance
Provision and maintenance of municipal services

4. Delegated Authority

None

5. Legal Requirements

Local Government: Municipal Finance Management Act, Act 56 of 2003

6. Background/Discussion/Evaluation/Conclusion**Background**

National Treasury issued guidelines (MFMA Circular No. 70, December 2013) on how to deal with non-revenue water and electricity. Annexure B of the Circular provides guidance on the accounting treatment of non-technical losses and mentions that a council resolution is required to write off the losses.

Discussion

Losses occur in every water and electricity distribution system. Losses are divided into technical losses and non-technical losses. Technical losses are authorised, unmetered uses or unavoidable internal system losses, whereas non-technical losses are unauthorised, unmetered uses and avoidable system losses.

In the case of electricity:

- technical losses are caused by the physical properties of the components of the power system. The most obvious example is the power lost in the distribution lines and transformers due to unavoidable internal electrical resistance,
- non-technical losses are caused by illegal connections, inaccurate meters, incorrect meter readings, incorrect billing, etc.

In the case of water:

- technical losses are caused by unmetered, authorised water uses such as fire fighting, cleaning of reservoirs, flushing of pipelines and losses associated with the water treatment process (i.e. backwashing of filters),
- non-technical losses are caused by leaks, pipe bursts, illegal connections, inaccurate meters, incorrect meter readings, incorrect billing, etc.

Evaluation

Electricity (refer to Annexure A for details)

The Municipality purchased 256 543 040.51 kWh of energy from Eskom during the period under review (1 July 2018 to 30 June 2019) at a total cost of R189 560 223.76. The unit cost of electricity is therefore R0.7389 per kWh.

During the same period, the Municipality sold 240 005 798.4 kWh of energy to its customers. This equated to a total loss of 16 537 242.11 kWh (6.45%). The National Treasury norm for electricity losses is between 7% and 10%.

The technical losses were calculated for the different supply areas as follows:

Gansbaai	4.4%
Kleinmond, Hermanus and Hawston	7.4%

Based on the calculations above, it is estimated that the technical electrical losses for the entire system is 5.0%.

The non-technical losses are therefore 1.45%, or 3 710 090.08 kWh. At a unit cost of R0.7389 / kWh this equates to an amount of R 2 741 393.82.

Water (refer to Annexure B for details)

The Municipality produced 7 015 091 kl of potable water during the period under review (1 July 2018 to 30 June 2019).

During the same period, the Municipality sold 5 314 233 kl of potable water to its customers. This equated to a total loss of 1 700 858 kl (24.25%). The National Treasury norm for water losses is between 15% and 30%.

The technical water losses were calculated to be 222 190 kl (3.17%).

The non-technical losses are therefore 21.08% or 1 478 668 kl, and this equates to an amount of R2 126 487.53.

7. Financial Implications

None (Disclosed in the notes to the Annual Financial Statements)

8. Staff Implications

None

9. Comments from other Departments, Divisions and Administrations

None

10. Annexures

Annexure A: Details of Electrical Losses

Annexure B: Details of Water Losses

RECOMMENDATION TO THE COUNCIL:

1. that the non-technical electricity losses to the value of R2 741 393.82 for the 2018/19 financial year **be written off**; and
2. that the non-technical water losses to the value of R2 126 487.53 for the 2018/19 financial year **be written off**.

RESPONSIBLE OFFICIAL :

BA KING

TARGET DATE FOR IMPLEMENTATION :

1 SEPTEMBER 2019

Electricity : Value of kWh Units purchased from ESKOM July 2018 to June 2019

	<u>Kleinmond</u>	<u>Hawston</u>	<u>Hermanus</u>	<u>Stanford</u>	<u>Gansbaai</u>	<u>Total</u>
	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>	<u>R</u>
July	407 898.09	168 135.59	2 497 673.19	132 984.44	1 349 475.21	4 556 166.52
	780 629.57	301 909.37	4 567 610.46	278 300.85	2 348 364.63	8 276 814.88
	1 131 736.15	455 881.13	6 128 219.70	408 726.47	3 314 208.36	11 438 771.81
August	397 367.27	164 315.48	2 556 218.65	138 260.86	1 401 330.55	4 657 492.81
	797 370.30	310 337.37	4 921 683.14	289 527.41	2 385 658.96	8 704 577.18
	1 127 961.34	457 080.54	6 493 158.31	409 998.94	3 233 059.12	11 721 258.25
September	513 707.00	204 849.15	3 151 668.54	187 329.51	1 565 356.40	5 622 910.60
	315 184.19	124 848.24	1 839 091.77	113 203.51	917 719.60	3 310 047.31
	355 983.06	148 328.98	2 255 722.70	125 406.02	1 237 341.83	4 122 782.59
October	546 370.10	217 795.48	3 369 752.63	199 880.83	1 717 052.07	6 050 851.11
	356 627.84	140 091.24	2 084 438.05	127 969.92	1 079 997.19	3 789 124.24
	316 414.51	134 470.15	1 980 245.80	112 597.32	1 124 683.84	3 668 411.62
November	512 659.34	205 635.74	3 233 896.98	193 420.65	1 648 567.87	5 794 180.58
	327 193.32	127 513.18	1 966 611.69	119 404.17	1 012 099.71	3 552 822.07
	307 789.85	131 279.46	1 946 497.72	110 770.97	1 111 423.10	3 607 761.10
December	533 424.45	190 343.99	2 971 865.60	172 260.54	1 523 337.55	5 391 232.13
	293 265.92	107 014.76	1 640 326.31	95 937.97	868 204.67	3 004 749.63
	471 664.02	178 067.16	2 656 373.81	149 155.48	1 531 724.01	4 986 984.48
January	553 463.79	207 241.05	3 241 710.25	182 480.78	1 566 974.69	5 751 870.56
	343 255.46	124 581.15	1 950 200.34	111 741.96	971 707.54	3 501 486.45
	367 873.39	148 143.05	2 097 617.08	117 050.51	1 170 818.40	3 901 502.43
February	479 984.62	183 408.16	2 971 836.82	172 747.80	1 426 555.13	5 234 532.53
	301 700.61	111 477.85	1 751 333.84	102 823.73	858 643.04	3 125 979.07
	314 872.90	130 619.39	1 926 605.52	108 768.66	1 080 397.29	3 561 263.76
March	515 492.04	196 366.79	2 974 119.71	174 625.10	1 551 379.51	5 411 983.15
	298 066.59	112 020.96	1 843 153.27	110 435.30	969 474.51	3 333 150.63
	362 571.61	150 391.10	2 192 480.19	124 354.16	1 282 946.78	4 112 743.84
April	494 930.58	194 365.79	3 005 636.67	177 293.78	1 553 270.47	5 425 497.29
	326 101.13	126 799.29	1 854 809.11	113 889.60	968 876.78	3 390 475.91
	371 085.75	149 478.36	2 208 259.49	122 609.29	1 295 021.30	4 146 454.19
May	541 866.49	215 498.57	3 302 530.31	191 770.24	1 694 445.20	5 946 110.81
	348 123.65	136 533.68	1 979 720.16	118 574.10	1 010 774.19	3 593 725.78
	341 933.10	141 743.90	2 113 955.11	115 281.80	1 204 807.79	3 917 721.70
June	1 012 790.12	391 389.75	5 575 536.72	338 076.68	2 861 770.23	10 179 563.50
	434 004.80	171 427.35	2 668 458.95	139 740.73	1 473 801.82	4 887 433.65
	739 061.31	278 838.43	4 406 691.61	247 316.44	2 209 881.81	7 881 789.60
Value of kWh	17 640 424.26	6 938 221.63	104 325 710.20	6 134 716.52	54 521 151.15	189 560 223.76
kWh purchased	23 265 202.50	9 204 813.74	141 949 634.08	8 028 703.70	74 094 686.49	256 543 040.51
Unit Cost R/kWh	0.7582	0.7538	0.7349	0.7641	0.7358	0.7389
kWh lost in Distribution 1 July 2018 to 30 June 2019						16 537 242.11
Less : 5 % Non-Revenue Technical losses (256 543 040.51 kWh x 5 %)						12 827 152.03
Non-Technical Losses to be written off at cost price (MFMA Circular No 70)						3 710 090.08
Nett Electricity Distribution Loss 2018/19 (July 2018 - June 2019)					1.45%	
						R 2 741 393.82

ELECTRICITY LOSSES : 12 Months Moving Average : June 2019

Administration	Suburb	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	TOTAL	
		kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	
KLEINMOND	Metered	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Subtotal	829 810	724 828	857 041	799 018	742 063	697 928	1 009 999	836 432	755 472	745 173	820 923	748 380	9 566 667	
	Streetlights	33 885	33 885	33 885	33 885	33 885	33 885	33 885	33 885	33 885	33 885	33 885	33 885	406 620	
	PREPAID	985 057	1 017 651	962 782	955 411	936 278	1 055 751	970 086	890 662	952 020	966 399	979 779	1 019 591	11 691 456	
	Total Sales	1 848 752	1 776 364	1 853 708	1 788 314	1 712 226	1 787 164	2 013 970	1 760 979	1 732 723	1 745 447	1 834 587	1 801 856	21 664 743	
	ESKOM	2 032 838	2 028 725	1 890 503	1 888 740	1 789 868	2 184 195	2 004 385	1 732 723	1 791 078	1 908 870	1 932 465	2 000 815	23 265 203	
	Electricity Losses	184 086	252 362	36 794	100 426	77 641	377 031	-9 585	-28 236	149 701	163 423	97 878	198 959	1 600 460	
	% Electricity Losses	9%	12%	2%	5%	4%	17%	0%	-2%	8%	9%	5%	10%	6.9%	
	HAWSTON	Metered	162 883	144 999	167 739	146 301	152 287	134 966	172 209	154 636	149 928	132 767	147 884	150 692	1 817 291
		Subtotal	412	200	251	264	565	676	806	676	489	421	731	787	5 970
		Streetlights	12 473	11 202	12 361	10 858	12 158	11 321	15 926	13 936	15 366	10 644	13 317	13 517	146 740
		PREPAID	175 768	156 401	180 351	157 527	164 709	146 852	186 941	169 248	161 377	144 572	159 259	164 996	1 970 001
Total Sales		15 366	15 366	15 366	15 366	15 366	15 366	15 366	15 366	15 366	15 366	15 366	15 366	184 392	
ESKOM		518 598	526 685	498 141	498 751	482 827	519 052	493 236	441 986	483 783	494 801	506 093	504 964	5 968 916	
Electricity Losses		709 732	698 482	693 888	671 644	662 902	681 270	697 543	626 600	660 526	680 718	665 526	685 326	8 123 309	
% Electricity Losses		103 171	116 356	73 878	77 055	73 232	79 167	770 539	682 033	747 163	757 013	779 894	773 271	9 204 814	
		13%	14%	10%	13%	9%	15%	9%	8%	12%	14%	13%	11%	11.7%	
GREATER HERMANUS		Metered	6 415	6 388	8 155	5 142	6 534	6 295	7 449	6 953	6 855	5 196	5 766	428	71 576
		Subtotal	906 582	861 039	913 735	1 024 048	841 409	834 958	1 161 767	810 033	872 657	759 862	894 235	912 959	10 792 884
		Streetlights	23 171	10 876	41 660	15 113	25 606	34 082	25 397	34 446	21 885	22 226	22 864	28 864	310 176
	PREPAID	110 995	110 035	120 447	106 015	94 635	90 170	147 380	79 652	109 184	75 907	108 832	110 197	1 263 419	
	Total Sales	495 046	433 996	508 219	485 142	482 935	428 506	431 514	356 526	428 738	379 649	434 764	481 563	5 346 598	
	ESKOM	2 015	2 337	5 027	4 306	2 061	2 931	2 431	2 324	2 046	2 431	2 046	2 483	33 756	
	Electricity Losses	32 024	35 833	27 522	37 503	30 989	27 372	18 881	43 078	27 407	27 531	37 548	25 613	371 401	
	% Electricity Losses	1 043 775	1 054 959	1 142 170	1 089 307	1 106 789	1 072 670	1 039 441	1 105 814	1 128 516	1 039 416	1 039 333	1 043 549	13 032 370	
		1 223 813	1 166 103	1 357 306	1 242 687	1 261 753	1 290 085	1 426 481	1 310 940	1 343 886	1 371 306	1 371 306	1 371 306	15 853 265	
	ESKOM	634 470	630 204	670 958	630 260	570 448	584 980	1 044 365	459 583	565 118	513 744	579 378	623 956	7 907 064	
	Electricity Losses	3 258 676	3 299 711	3 436 429	3 236 738	3 216 032	3 139 783	3 185 958	3 020 726	2 849 798	2 987 748	3 092 305	3 050 055	37 773 859	
	% Electricity Losses	213 031	225 233	248 068	225 106	243 138	257 406	266 644	266 644	244 374	242 590	244 374	252 877	2 924 211	
	7 950 013	7 836 414	8 479 696	8 101 367	7 890 805	7 759 492	9 110 047	7 544 531	7 943 270	7 373 146	7 788 348	7 903 450	95 280 579		
Streetlights	108 151	108 151	108 151	108 151	108 151	108 151	108 151	108 151	108 151	108 151	108 151	108 151	1 297 812		
PREPAID	3 001 720	3 226 944	2 995 750	2 953 921	2 862 473	3 059 232	2 822 943	2 641 666	2 844 049	2 835 247	2 929 464	2 981 639	35 159 047		
Total Sales	11 059 884	11 171 909	11 587 597	11 163 439	10 861 459	10 926 875	12 041 141	10 294 348	10 495 470	10 316 544	10 252 963	10 993 240	131 737 438		
ESKOM	12 176 020	12 805 770	11 885 473	11 767 124	11 418 666	12 350 175	11 762 043	11 404 624	11 577 098	11 931 898	11 931 898	12 167 295	141 949 634		
Electricity Losses	1 116 136	1 634 261	297 876	603 685	557 237	1 423 300	-279 097	-279 097	409 100	909 154	1 260 954	1 105 935	10 212 196		
% Electricity Losses	9%	13%	3%	5%	5%	12%	-2%	4%	8%	11%	9%	10%	7.2%		

TOTAL FOR HERMANUS / KLEINMOND / HAWSTON

Consumption	8 955 591	8 717 643	9 517 088	9 057 912	8 797 577	8 603 872	10 308 987	8 550 211	8 460 119	8 262 891	8 262 891	8 768 530	8 816 826	106 817 247
Streetlights	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	1 868 824
PREPAID	4 903 374	4 771 280	4 460 674	4 408 082	4 281 578	4 634 035	4 286 265	3 974 313	4 279 851	4 296 437	4 415 335	4 506 193	4 506 193	52 819 419
Total Sales	13 618 367	13 646 325	14 135 164	13 623 396	13 236 557	13 395 309	14 772 654	12 681 926	12 897 372	12 716 730	13 341 267	13 480 421	13 480 421	161 525 490
ESKOM	15 021 760	15 649 304	14 943 712	14 425 918	13 940 766	15 311 537	14 536 967	13 118 204	14 045 865	14 242 981	14 644 257	14 941 381	14 941 381	174 419 650
Electricity Losses	1 403 393	2 002 978	408 549	802 522	704 208	1 916 228	-215 087	436 277	1 145 492	1 526 251	1 302 989	1 460 959	1 460 959	12 894 160
% Electricity Losses	9.3%	12.8%	2.8%	5.6%	5.1%	12.5%	-1.5%	3.3%	8.2%	10.7%	9.9%	9.8%	9.8%	7.4%

Administration	Suburb	July 2018 kWh	August 2018 kWh	September 2018 kWh	October 2018 kWh	November 2018 kWh	December 2018 kWh	January 2019 kWh	February 2019 kWh	March 2019 kWh	April 2019 kWh	May 2019 kWh	June 2019 kWh	TOTAL kWh	
STANFORD	Stanford North	74 927	72 665	72 479	69 057	87 069	68 567	81 611	50 525	69 169	66 054	71 811	76 683	860 617	
	Metered	203 388	185 392	207 318	165 322	227 295	186 912	232 439	165 732	192 713	192 242	183 642	187 153	2 329 548	
	Subtotal	278 315	258 057	279 797	334 379	314 364	255 479	314 050	261 882	238 296	238 296	255 453	263 836	3 190 165	
	PREPAID	380 839	410 708	372 850	379 078	379 994	378 842	348 860	368 225	366 640	384 890	384 890	386 140	4 482 967	
	Total Sales	659 154	668 765	632 647	613 457	659 358	634 321	665 910	630 107	649 936	649 976	640 343	649 976	7 673 132	
	ESKOM	701 620	724 749	677 481	681 165	658 871	692 841	649 635	657 677	666 028	658 301	658 301	658 301	8 058 704	
	Electricity Losses	42 466	55 984	24 834	67 709	-35 486	56 520	-14 275	23 570	66 143	23 570	32 097	25 685	8 325	355 572
	% Electricity Losses	6%	8%	4%	10%	-5%	8%	-2%	4%	11%	4%	5%	4%	1%	4.4%
	GANSBAAI	Birkenhead	11 004	8 957	10 332	9 999	10 603	9 881	11 754	7 674	9 949	10 303	11 687	10 323	122 466
		Blompark	12 961	10 371	15 646	12 966	14 566	11 757	8 138	12 775	11 037	11 037	14 344	15 959	152 011
De Kelders		145 735	118 404	173 674	133 396	160 484	130 944	193 603	118 986	118 986	133 792	118 086	125 641	1 671 402	
Franskrual		151 632	115 968	153 987	144 904	147 632	122 811	243 436	114 199	114 199	127 514	124 944	152 360	1 737 955	
Gansbaai		158 886	1 163 174	1 192 172	1 025 104	1 157 509	1 097 021	1 092 789	1 019 548	923 610	1 019 548	1 252 843	1 035 611	1 114 268	
6B Industrial Park		56 419	46 849	61 209	52 282	64 687	56 400	56 160	47 811	54 113	44 022	44 022	51 349	57 723	
Kleinbaai		104 101	90 898	109 706	99 208	108 340	80 310	134 723	90 346	90 346	94 591	94 591	96 697	88 734	
Mashekane		7 347	6 767	8 060	7 197	6 695	5 114	5 209	6 017	6 118	6 118	7 582	7 573	1 178 397	
Penny Beach		145 791	134 374	153 363	134 426	142 368	128 208	234 412	131 856	147 055	147 055	150 051	134 252	1 772 446	
Bredasdorp Distrik		21 380	23 651	24 994	24 106	22 384	22 502	33 254	23 175	28 830	24 560	24 560	38 925	309 317	
Caledon Distrik	2 330 165	2 426 482	2 454 147	2 378 704	2 407 009	2 379 185	2 432 827	2 330 540	2 150 390	2 150 390	2 379 102	2 312 861	2 586 948		
Subtotal	4 145 421	4 145 895	4 357 290	4 022 292	4 242 237	4 044 668	4 451 210	3 799 728	3 749 995	4 228 367	4 722 184	4 318 514	49 677 801		
PREPAID	1 761 389	1 834 233	1 774 328	1 748 883	1 715 755	1 935 060	1 722 845	1 582 700	1 582 700	1 741 664	1 757 023	1 747 057	1 808 438		
Total Sales	5 906 810	5 980 128	6 131 618	5 771 175	5 957 992	5 979 728	6 174 055	5 382 428	5 382 428	5 491 659	5 985 390	5 919 241	6 126 992		
ESKOM	6 330 092	6 447 424	6 089 789	6 195 259	5 996 088	6 637 674	5 973 039	6 206 688	6 206 688	6 277 334	6 277 334	6 277 334	6 279 543		
Electricity Losses	423 282	467 297	-61 829	424 083	38 076	657 946	-201 016	715 029	62 635	715 029	251 323	388 094	152 991		
% Electricity Losses	7%	7%	-1%	7%	1%	10%	-3%	12%	1%	12%	4%	5%	2%	4.4%	
TOTAL for GANSBAAI / STANFORD															
Consumption		4 423 736	4 403 952	4 637 087	4 256 671	4 556 601	4 300 147	4 765 260	4 015 985	4 011 877	4 486 663	4 427 637	4 582 350	52 867 966	
PREPAID		2 142 228	2 244 941	2 147 178	2 127 961	2 095 749	2 313 902	2 072 705	1 907 602	2 099 889	2 123 663	2 131 947	2 194 578	25 612 342	
Total Sales		6 565 964	6 648 893	6 784 265	6 384 632	6 652 350	6 614 049	6 837 965	5 923 587	6 121 766	6 610 326	6 559 584	6 776 928	78 480 308	
ESKOM		7 031 713	7 172 173	6 747 270	6 876 424	6 654 939	7 330 515	6 822 674	6 052 364	6 860 365	6 893 747	6 943 363	6 937 843	82 123 390	
Electricity Losses		465 748	523 281	-36 995	491 792	2 589	716 466	-219 291	128 777	738 599	283 421	383 779	160 915		
% Electricity Losses		6.8%	7.3%	-0.5%	7.2%	0.0%	9.8%	-3.3%	2.1%	10.8%	4.1%	5.5%	2.3%	4.4%	
TOTAL for OVERSTRAND															
Total Metered		13 379 327	13 121 595	14 154 175	13 314 583	13 354 178	12 904 019	15 074 247	12 566 196	12 471 996	12 749 554	13 196 167	13 399 176	159 685 213	
Total Streetlights		157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	157 402	1 888 824	
Total Prepaid		6 647 602.40	7 016 220.70	6 607 851.30	6 536 043.40	6 377 327.00	6 947 937.30	6 358 970.30	5 861 915.40	6 389 740.30	6 420 100.10	6 547 282.00	6 700 771.20	78 431 761.40	
Total Consumption		20 184 331.40	20 295 217.70	20 919 428.30	20 008 028.40	19 888 907.00	20 009 358.30	21 590 619.30	18 605 513.40	19 019 138.30	19 327 056.10	19 900 851.00	20 257 349.20	240 005 798.40	
ESKOM		22 053 472.82	22 821 476.87	21 290 982.29	21 302 342.57	20 595 704.45	22 642 032.13	21 159 640.99	19 170 567.71	20 903 229.57	21 136 727.58	21 587 619.63	21 879 223.90	256 543 040.51	
Electricity Losses		1 869 141	2 526 259	371 554	1 294 314	706 797	2 632 894	-430 978	565 054	1 884 091	1 809 671	1 666 769	1 621 875	16 537 242.11	
% Electricity Losses		8.48%	11.07%	1.79%	6.08%	3.43%	11.63%	-2.04%	2.95%	9.01%	8.56%	7.81%	7.41%	6.45%	
Metered consumption since 1 July 2018															
Streetlights adjusted w.e.f. 1 Jan 2012															

Overstrand Municipality Water Distribution Losses 2018/2019 per Distribution Area

Water Scheme	Bulk Water per Town and Scheme	Water Metered	Losses per Town	Operational Losses	Metered plus Operational Losses	Non- Technical Water Losses	Cost per Kℓ Purified	Cost of Water Losses
	Kℓ	Kℓ	Kℓ	Kl	Kℓ	Kℓ	R	R
Water: Kleinmond	712 261	528 818	183 443	12 862	541 680	170 581	R 0.67	R 114 289.40
Water: Buffelsrivier	740 396	333 340	407 056	73 190	406 530	333 866	R 0.93	R 310 495.19
Water: Preekstoel De Bos Dam	2 540 701	2 178 062	362 639	73 518	2 251 580	289 121	R 0.26	R 75 171.38
Preekstoel Groundwater	<u>1 113 569</u>	<u>954 627</u>	<u>158 942</u>	<u>32 223</u>	<u>986 850</u>	<u>126 719</u>	<u>R 0.42</u>	<u>R 53 222.11</u>
Greater Hermanus Total	3 654 270	3 132 689	521 581	105 741	3 238 430	415 840		R 128 393.49
Water: Stanford	321 677	230 809	90 868	7 001	237 810	83 867	R 0.02	R 1 928.93
Water: Franskraal	1 140 035	818 514	321 521	13 239	831 753	308 282	R 4.75	R 1 464 341.81
De Kelders	<u>281 861</u>	<u>152 250</u>	<u>129 611</u>	<u>5 337</u>	<u>157 587</u>	<u>124 274</u>	<u>R 0.32</u>	<u>R 39 767.78</u>
Greater Gansbaai Total	1 421 896	970 764	451 132	18 575	989 339	432 557		R 1 504 109.59
Water: Baardskeerdersbos	14 976	7 467	7 509	950	8 417	6 559	R 5.14	R 33 711.72
Water: Buffeljagsbaai	4 864	4 094	770	329	4 423	441	R 0.00	R 0.00
Water: Pearly Beach	144 751	106 252	38 499	3 542	109 794	34 958	R 0.96	R 33 559.20
Overstrand Totals	7 015 091	5 314 233	1 700 858	222 190	5 536 423	1 478 668		R 2 126 487.53
					5 536 423	7 015 091		
	%	Kl				21.08		
Total / General water losses	24.25%	1 700 858						
Operational / Technical Losses	3.17%	222 190						
Nett / Non-technical water losses	21.08%	1 478 668						

21.08%

Unit Cost per Water Scheme:

Water Scheme Name	Variable cost per Bulk O&M Contract (R/kl)
Buffelsrivier Bulk	R 0.93
Kleinmond Bulk	R 0.67
Greater Hermanus Preekstoel De Bos Dam	R 0.26
Greater Hermanus Preekstoel Groundwater	R 0.42
Stanford	R 0.02
Greater Gansbaai - Franskraal	R 4.75
Greater Gansbaai - De Kelders	R 0.32
Pearly Beach Bulk	R 0.96
Buffeljagsbaai Bulk	R 0.00
Baardskeerdersbos Bulk	R 5.14

Non-Revenue WATER LOSSES : 12 Months Moving Average : June 2019

Administration	Suburb	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	TOTAL
		K€	K€	K€	K€	K€	K€	K€	K€	K€	K€	K€	K€	K€
KLEINMOND	Kleinmond	31 311	25 946	33 660	31 767	38 002	36 101	66 504	48 224	46 773	37 431	36 074	33 216	465 009
Metered	Overhills	1 439	2 104	1 937	1 675	2 131	1 863	2 189	1 985	1 871	1 667	1 888	1 833	22 582
	Proteadorp	2 309	1 909	2 258	1 953	2 219	1 894	2 786	2 448	1 609	2 171	1 837	1 924	25 317
	Uitbreiding 6	1 111	1 573	1 430	1 192	1 392	1 282	1 715	1 324	1 278	1 165	1 265	1 183	15 910
Subtotal		36 170	31 532	39 285	36 587	43 744	41 140	73 194	53 981	51 531	42 434	41 064	38 156	528 818
Bulk Water		48 929	47 159	46 636	59 922	59 188	79 363	77 330	67 475	59 842	55 798	58 065		712 261
Water Losses		12 759	15 627	7 351	23 335	15 444	38 223	4 136	13 494	8 311	13 364	17 001	14 398	183 443
% Water Losses		26	33	16	39	26	48	5	20	14	24	29	27	26
BUFFELSRIVIER	(Betty'sbaai plus													
Metered	Pringlebaai plus	18 632	24 318	18 664	24 764	28 759	26 217	50 657	33 184	32 254	25 487	27 189	23 215	333 340
Bulk Water	Hangklip plus	43 582	43 370	48 173	59 473	54 714	75 659	88 839	82 469	70 136	59 815	62 373		740 396
Water Losses	Rooiels)	24 950	19 052	29 509	34 709	25 955	49 442	38 182	49 285	37 882	34 328	35 184	28 578	407 056
% Water Losses		57	44	61	58	47	65	43	60	54	57	56	55	55
GREATER HERMANUS	De Bos	9	10	26	8	23	60	126	53	67	36	44	15	477
Metered	Eastcliff	14 591	15 526	15 095	24 424	38 826	40 319	59 035	34 071	40 059	29 165	25 888	24 956	361 955
	Fisherhaven	3 767	3 817	4 860	3 962	5 289	4 998	8 088	5 464	6 064	4 458	5 041	5 307	61 115
	Group Development	1 956	1 946	1 760	2 633	3 957	3 778	5 624	3 898	3 588	2 026	1 791	6 122	39 079
	Hermanus Heights	2 872	3 017	3 151	3 630	4 920	5 290	9 085	5 196	6 383	3 484	4 173	3 899	55 100
	Hawston	15 085	14 593	18 776	14 712	16 904	15 347	19 901	16 987	17 513	14 714	16 196	22 600	203 328
	Industria	3 503	3 509	3 847	5 286	6 866	3 097	3 196	2 354	3 402	2 554	3 291	3 112	44 017
	Kleinrivier	61	83	74	134	144	284	300	139	197	228	155	166	1 965
	Mount Pleasant	10 707	10 680	8 942	11 434	14 226	11 896	17 356	18 385	16 599	11 578	13 713	9 965	155 481
	Moosig	3 727	3 719	4 985	3 771	6 141	5 839	9 554	6 334	6 149	4 645	4 919	3 775	63 558
	Northcliff	10 898	10 879	12 567	12 993	18 167	16 349	22 550	13 312	16 660	12 174	13 645	13 749	173 943
	Onrus	22 063	21 162	24 389	24 091	30 923	30 095	48 153	34 838	31 574	27 444	29 154	23 760	347 646
	Sandbaai	24 160	20 204	25 503	25 338	28 790	27 164	35 785	36 897	31 771	26 791	29 865	27 950	340 218
	Voëlkop	14 774	16 259	16 392	18 962	22 786	24 901	50 409	20 690	25 113	19 044	20 434	18 971	268 735
	Vermont	15 643	15 972	18 960	14 899	19 787	18 719	33 962	23 225	23 798	19 492	18 173	17 330	239 960
	Westcliff	16 349	17 110	21 021	21 564	25 291	25 643	30 620	23 255	54 220	22 308	22 923	22 417	302 721
	Zwelihle	2 840	58 110	37 583	44 357	38 734	45 126	43 688	37 723	45 738	33 890	35 752	45 687	469 228
	Bredasdorp Distrik	0	0	0	0	0	0	0	0	0	0	0	0	0
	Benguella Cove	2 602	3 224	2 595	2 148	5 576	6 735	4 445	3 343	3 481	3 513	2 180	12 400	52 242
	Caledon Distrik	5 375	4 960	7 372	5 613	16 604	14 110	21 719	22 690	12 263	13 294	8 871	7 946	140 817
Subtotal		170 982	224 780	227 898	239 959	303 954	299 750	423 596	308 854	344 639	250 838	256 208	270 127	3 321 585
Raw/Grey water														-188 896
Bulk Water		252 130	258 180	253 550	315 250	313 820	375 750	378 660	327 470	319 060	291 420	299 360		3 654 270
Water Losses		81 148	33 400	25 652	75 291	9 866	76 000	-44 936	18 616	-25 579	40 582	43 152	-507	521 581
% Water Losses		32	13	10	24	3	20	-12	6	-8	14	14	-0	14
STANFORD	Stanford North	9 605	9 837	8 978	7 281	14 163	10 105	14 114	9 204	11 776	9 500	9 806	11 850	126 219
Metered	Stanford South	6 094	6 393	7 301	6 259	12 127	8 413	13 432	9 039	11 343	7 817	8 192	8 180	104 590
Subtotal		15 699	16 230	16 279	13 540	26 290	18 518	27 546	18 243	23 119	17 317	17 998	20 030	230 809
Bulk Water		24 553	24 495	24 158	29 258	26 122	30 729	31 816	28 925	24 374	23 940	27 265		321 677
Water Losses		8 854	8 265	7 879	15 718	-168	12 211	4 270	10 682	1 255	6 623	9 267	6 012	90 868
% Water Losses		36	34	33	54	-1	40	13	37	5	28	34	23	28
GANSBAAI	Blompark	5 468	5 014	6 061	4 909	6 974	5 470	6 867	5 996	6 084	6 548	5 812	5 303	70 506
Metered	De Kelders	10 301	9 636	10 921	11 385	15 807	13 638	20 987	14 291	13 585	11 595	9 838	10 266	152 250
	Franskraal	8 415	7 466	9 182	8 976	13 087	12 085	22 265	13 746	14 054	11 027	10 807	10 040	141 150
	Gansbaai	25 544	28 034	30 009	24 958	36 260	28 162	35 148	28 207	31 754	28 008	25 435	29 185	350 704
	GB Industrie Park	1 391	1 073	2 360	1 162	1 815	1 532	952	1 303	1 509	1 283	1 329	1 396	17 105
	Kleinbaai	4 808	4 551	5 485	5 346	7 441	6 442	11 221	7 487	7 762	7 312	6 390	6 071	80 316
	Masakhane	3 376	3 653	3 047	3 404	3 626	2 825	2 796	4 199	3 825	2 988	5 130	2 764	41 633
	Bredasdorp Distrik	410	755	301	446	1 138	1 124	791	1 345	1 898	752	1 850	1 829	12 639
	Caledon Distrik	2 316	2 767	17 975	7 280	9 728	8 132	15 308	9 022	10 101	10 693	4 813	7 130	105 265
Subtotal		62 029	62 949	85 341	67 866	95 876	79 410	116 335	85 596	90 572	80 206	71 404	73 984	970 764
Raw/Grey water														-804
Bulk Water		112 276	109 336	109 194	123 181	125 302	152 692	146 763	116 055	113 917	104 821	105 852	102 507	1 421 896
Water Losses		50 247	46 387	23 853	55 315	29 426	73 282	30 428	30 459	23 345	24 615	34 448	28 523	451 132
% Water Losses		45	42	22	45	23	48	21	26	20	23	33	28	32
Metered	B/bas	483	484	550	516	448	756	1044	522	703	901	492	608	7 467
Bulk Water		876	1060	828	1104	1189	1568	1510	1484	1357	1306	1106	1106	14 976
Water Losses		413	596	278	588	741	812	544	988	781	456	814	498	7 509
% Water Losses		47	56	34	53	62	52	34	65	53	34	62	45	50
Metered	Buffeljags	409	482	358	301	213	298	422	235	311	443	251	371	4 094
Bulk Water		563	414	365	377	339	422	389	365	395	379	399	457	4 864
Water Losses		154	-68	7	76	126	124	-33	130	84	-64	148	86	770
% Water Losses		27	-16	2	20	37	29	-8	36	21	-17	37	19	16
Metered	Pearly Beach	7 275	6 510	6 826	7 809	9 233	8 501	16 286	8 889	9 949	9 482	8 455	7 037	106 252
Bulk Water		9 755	6 350	10 428	10 892	13 309	16 911	15 218	15 343	12 325	12 294	11 816	10 110	144 751
Water Losses		2 480	-160	3 602	3 083	4 076	8 410	-1 068	6 454	2 376	2 812	3 361	3 073	38 499
% Water Losses		25	-3	35	28	31	50	-7	42	19	23	28	30	27
TOTAL		311 659	367 265	395 201	391 342	508 517	474 590	709 080	509 504	553 078	427 108	423 061	433 528	5 503 933
Raw/Grey water														-189 700
Bulk Water		492 664												