



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

EDST

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MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

NATIONAL ASSEMBLY: QUESTION 1392 FOR WRITTEN REPLY

A draft reply to the above question asked by Mr G R Morgan (DA) is attached for your consideration.

DIRECTOR-GENERAL

DATE: 01/06/2012

DRAFT REPLY APPROVED/~~AMENDED~~

MRS B E E MOLEWA, MP
MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

DATE: 2012/06/04

NATIONAL ASSEMBLY

FOR WRITTEN REPLY

QUESTION NO 1392

DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 25 MAY 2012
(INTERNAL QUESTION PAPER NO. 14)

1392. Mr G R Morgan (DA) to ask the Minister of Water and Environmental Affairs:

- (1) What (a) is the average water loss in kiloliters for each month in each municipality in KwaZulu-Natal and (b) percentage of total water usage does this figure represent at the latest specified date for which information is available;
- (2) whether any measures are in place to assist municipalities in KwaZulu-Natal to decrease water loss; if not, why not; if so, what measures;
- (3) what is the current status of the (a) demand for water and (b) supply of water in each municipality in KwaZulu-Natal?

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REPLY:

- (1) The total water losses, non revenue water (NRW) as well as the average monthly total water losses as a percentage of system input in each of the Water Services Authorities (WSAs) in KwaZulu-Natal are presented in the attached **Annexure A**. Where possible, the figures are monthly average kilolitres for the 2011/12 municipal financial year i.e. from 1 July 2011 to 30 April 2012.
- (2) **Table 1** below reflects the financial assistance that has been provided to the WSAs in KwaZulu-Natal. In addition, the Umgungundlovu District Municipality (DM) has been assisted with their application to the Dutch Government and such bid for grant funding of approximately R380 million was successful, of which 60% is for water demand and conservation management. The Department is also in the process of adjudicating a tender for a three year study to update and maintain the reconciliation strategies that have been developed for the supply systems in the province. This study includes an evaluation of the water use efficiencies and potential savings in each system.

Table 1: Financial support to WSAs for Water Demand and Conservation Management

WSA	2008/09	2009/10	2010/11	2011/12	Total Project
Ethekwini Metropolitan Municipality	R 8 214 500	R 9 285 500	R 0	R 4 000 000	R 21 500 000
Msunduzi Local Municipality	R 0	R 0	R 3 000 000	R 1 500 000	R 4 500 000
Ilembe District Municipality	R 500 000	R 1 000 000	R 0	R 3 295 284	R 4 795 284
Umgungundlovu District Municipality	R 0	R 0	R 300 000	R 0	R 300 000
Ugu District Municipality	R 500 000	R 0	R 1 347 453	R 4 300 000	R 6 147 453
Umkhanyakude District Municipality	R 0	R 0	R 0	R 5 000 000	R 5 000 000
Mhlathuze Local Municipality	R 0	R 0	R 1 000 000	R 0	R 1 000 000
Amajuba DM	R 0	R 0	R 1 000 000	R 0	R 1 000 000
Uthukela DM	R 0	R 0		R 2 083 279	R 2 083 279
TOTAL	R 9 214 500	R 10 285 500	R 6 647 453	R 20 178 563	R 46 326 016

- (3) In 2009, the Department completed the KwaZulu-Natal Coastal Metropolitan Reconciliation Strategy Study. This study found that the demands in the area exceed the available supplies and strategies are being implemented to address the imbalances (details attached as **Annexure B**). These strategies include water demand and conservation management interventions and the Ethekewini Metropolitan Municipality, as the main user who utilises 80 percent of the water from the system, is reducing losses through the replacement of leak prone asbestos cement pipelines, leak detection, pressure reduction, rezoning and improvement in reservoir integrity. The NRW in Ethekewini in 2009/10 was 37.5 % and the target is to reduce this to 28% by 2013.

The Department also completed first order reconciliation strategies for the significant supply systems in the rest of the province in December 2011, and is in the process of awarding a tender to maintain these strategies and monitor their implementation. Each strategy determines the water demand, evaluates available water supply, and evaluated the best way balancing the two. In all cases, water demand and conservation management is considered as one of the first interventions.

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ANNEXURE A

Details of average water losses and percentage of usage in WSAs in KwaZulu-Natal

WATER SERVICE AUTHORITIES	Annual Input KI/Month	System Volume	Average Water Losses KI/Month	Percentage (%) Water Usage	NRW KI/Month	% NRW	Comment
Ugu DM	3,163,229		901,137	28.5%	981,028	31.0%	2011/12
Ilembe DM	1,760,692		810,532	46.0%	1,017,793	57.8%	2011/12
Ethekwini MM	26,151,540		9,391,140	35.9%	9,525,780	36.8%	2011/12
Mhlathuze LM	3,957,234		1,501,915	38.0%	1,609,737	40.7%	2011/12
Msunduzi LM	5,556,060		2,228,040	40.1%	2,950,530	53.1%	2011/12
Amajuba DM	169,055		44,060	26.1%	99,181	58.7%	2011/12
Umzinyathi DM	1,069,994		611,088	57.1%	376,962	35.2%	2011/12
Uthungulu DM	2,311,347		254,248	11.0%	254,248	11.0%	2010/11 excluding rural areas
Zululand DM	1,895,000		1,050,000	55.4%	1,050,000	55.4%	2011/12
Newcastle LM	1,831,824		1,282,277	76.0%	1,282,277	76.0%	2011/12 estimate
Sisonke DM	1,593,371		635,504	39.9%	810,775	50.9%	Information only for KwaSani and Ingwe LMs for 2010/11 and 2011/12 respectively.
Umgungundlovu DM	1,594,110		750,754	47.1%	1,053,981	66.1%	2009/10
Umkhanyakude DM	1,280,000		832,000	65.0%	832,000	65.0%	2011/12 estimate
Uthukela DM	3,150,000		1,890,000	60.0%	2,047,500	65.0%	2011/12 estimate

ANNEXURE B

DETAILS OF WATER SUPPLY AND DEMAND IN THE KWAZULU-NATAL

District Municipality	Supply System	Bulk water supply capacity (million m3/a)	Water Supply (Kl/month)	Current water requirements (million m3/a)	Water Demand (Kl/month)
Umgungundlovu	Wartburg New Hanover Dalton Supply Area	2.94	244 854	2.53	210 921
	Ntanzi Supply Area	0.07	5 475	0.06	4 691
	Masihambisane Supply Area	0.28	22 995	0.27	22 529
	Table Mountain Supply Area	0.38	31 481	0.53	44 000
	Hlatikhulu Supply Area	0.28	22 995	0.33	27 100
	Mooi River Supply Area	0.88	73 000	1.02	85 041
	Rosetta	0.10	8 745	0.03	2 803
	Impendle Supply Area	0.44	36 500	0.24	20 360
	Impendle Rural Supply Area	0.19	15 768	0.28	22 928
	Table Mountain Supply Area	0.38	31 481	0.53	44 000
	Richmond Supply Area	1.26	104 690	2.00	166 988
	Richmond Rural Supply Area	0.23	19 356	0.49	40 745
	Hopewell Baynesfield Supply Area	0.37	30 417	0.32	26 358
Zululand	Simdlangentsha West	1.53	127 500	3.81	317 500
	Paulpietersburg (eDumbe)	1.12	93 333	2.86	238 333
	Simdlangentsha Central	1.3	108 333	2.84	236 667
	Simdlangentsha East	2.84	236 667	6.82	568 333
	Vryheid	6.36	530 000	16.72	1 393 333
	Emondlo	3.3	275 000	7.14	595 000
	Coronation Regional Scheme	0.86	71 667	1.82	151 667
	Mkuze Regional Scheme	0.08	6 667	0.17	14 167
	Kambi Regional Scheme	0.13	10 833	0.29	24 167
	Nkonjeni Regional Scheme	5.51	459 167	14.95	1 245 833
	Babanango	0.18	15 000	0.32	26 667
	Usuthu Regional Scheme	3.03	252 500	0.21	17 500
	Mandhlakazi	0.09	7 500	0.8	66 667
	Sisonke	Kokstad	2.19	182 500	3.60
Pakkies		0.03	2 281	0.04	2 960
Kraansdai		0.01	621	0.01	752
Bulwer; Donnybrook; Creighton		0.83	69 481	1.62	135 057
Springvale		0.20	16 863	0.21	17 256
Mzimkulu Water Supply Area		0.74	61 473	0.48	39 766
Ixopo; Carisbrooke		0.74	61 473	0.48	39 766
Nokweja Water Supply Area		0.26	21 630	0.29	24 396
Mahehle		0.09	7 300	0.09	7 532
Centocow		0.68	56 916	0.72	60 374
Greater Stoffleton		0.10	8 334	0.14	11 342
Underberg Himeville		0.61	50 694	0.25	21 180
Kwa Pitela		0.02	1 379	0.01	685
Umkhanyakude	Enkhanyezini Supply Area	0.19	15 768	0.28	22 928
	Kwangwanase Supply Area	1.42	117 999	1.13	93 812
	Phelindaba Supply Area	0.21	17 520	0.32	26 822
	Manyiseni Water Supply Area	0.61	50 589	0.50	41 384
	Nondabuya Supply Area	0.08	6 759	0.34	28 619
	Jozini Malobeni Supply Area	1.84	153 210	2.79	232 287
	Makatini Flats Supply Area	0.49	40 556	0.64	53 265
	Mpini Supply Area	0.04	3 380	0.08	6 753

District Municipality	Supply System	Bulk water supply capacity (million m3/a)	Water Supply (Kl/month)	Current water requirements (million m3/a)	Water Demand (Kl/month)
	Mkuze Supply Area	0.42	34 698	1.13	93 987
	Ubombo Supply Area	0.07	6 083	0.11	8 862
	Mhlekezzi Supply Area	0.21	17 520	0.40	33 172
	Matshemhlope Supply Area	0.06	5 069	0.26	21 742
	Gula Supply Area	0.08	6 570	0.07	6 193
	Nhlwathi Supply Area	0.11	8 760	0.10	8 641
	Mgangatho Supply Area	0.17	14 235	0.12	10 148
	Sitezi Supply Area	0.05	4 380	0.05	4 010
	Mpembeni Supply Area	0.11	8 760	0.13	10 991
	Seme Supply Area	0.03	2 190	0.01	1 184
	Hlabisa Supply Area	0.57	47 653	0.47	38 822
	Hlabisa Rural Supply Area	0.37	30 660	0.44	36 558
	Hluhluwe Masibambane Supply Area	0.54	44 611	1.22	101 453
Uthungulu	Mbonambi Supply Area	1.05	87 296	1.39	116 190
	Upper Nseleni	5.65	470 951	5.65	471 058
	Greater Mthonjaneni Supply Area	2.88	240 002	4.12	343 180
	Melmoth Supply Area	0.62	52 039	0.72	59 603
	Eshowe water SA	2.07	172 767	3.33	277 099
	Kwahlokoheko water SA	2.76	230 031	3.30	274 903
	Mtunzini supply area	0.25	20 988	0.25	20 732
	Gingindlovu Supply Area	0.25	20 988	0.25	20 732
	Middledrift water SA	1.55	128 967	3.87	322 466
	Vutshini Water Supply Area	1.00	83 025	1.87	155 819
	Jameson's Drift	0.59	49 427	0.49	40 952
	Nkandla Water Supply Area	3.09	257 310	3.06	254 805
	Richards Bay	23.73	1 977 083	17.26	1 438 043
	Empangeni	9.13	760 417	8.79	732 648
	Esikhwaweni	12.41	1 034 167	7.17	597 587
	Ngwelezana	2.92	243 333	5.86	488 746
Amajuba	Amajuba Forest	0.26	21 462	0.27	22 201
	Utrecht supply area	1.70	141 776	1.20	100 016
	Dannhauser supply area	0.56	46 795	0.56	46 516
	Ngagane/Dannhauser supply area	2.19	182 750	0.56	46 516
	Durnaco supply area	0.42	35 096	0.33	27 136
Uthukela	Ladysmith supply area	9.73	811 111	7.43	619 137
	Driefontein supply area	0.65	54 203	1.11	92 100
	Ezakheni supply area	8.98	748 718	8.79	732 213
	Colenso supply area	0.74	61 769	0.62	51 885
	Ekuvukeni Lime Hill supply area	2.81	233 974	2.41	200 967
	Ngedlengedleni Water Supply Area	0.13	10 950	0.09	7 386
	Tugela Estates Supply Area	0.14	11 265	0.18	15 249
	Estcourt	8.48	706 603	5.03	418 912
	Weenen	0.97	81 111	0.61	50 985
	Cornfields	0.12	9 636	0.18	15 249
	Zwelisha Moyeni supply area	0.49	40 556	1.32	110 413
	Langkloof supply area	0.03	2 704	0.03	2 647
	Bergville	0.70	58 400	1.18	98 287
	Hambrook	0.09	7 300	0.07	6 073
	Winterton	0.33	27 375	0.25	20 732
	Loskop	1.83	152 083	1.42	118 001
Umzinyathi	Dundee/Glencoe	4.33	360 494	4.76	396 486

District Municipality	Supply System	Bulk water supply capacity (million m3/a)	Water Supply (Kl/month)	Current water requirements (million m3/a)	Water Demand (Kl/month)
	Nquthu Supply Area	1.52	126 968	1.29	107 540
	Ngolokodo Supply Area	0.14	12 045	0.17	14 140
	Nondweni Supply Area	1.14	94 801	0.90	74 626
	Pomeroy supply	0.20	16 898	0.57	47 438
	Tugela Ferry	0.32	27 037	0.89	73 871
	Keats Drift	0.80	66 743	0.93	77 086
	Mudeni	0.85	70 711	0.63	52 112
	Greytown	0.95	78 858	1.47	122 604
	Kranskop	0.25	20 773	0.12	9 584
Ugu	Harding/Weza Supply Area	1.93	160 800	1.81	150 482
	Umtamvuna supply area	5.41	450 617	4.88	406 920
	Uzimkhulu/Bhoboyi Supply area	14.60	1 216 667	15.46	1 288 333
	Umzinto	3.65	304 167	3.69	307 817
	Umtulwane	1.74	144 708	2.13	177 288
	Ndelu Supply Area	1.30	108 333	1.50	125 000
	Vulamehlo Supply area	1.18	97 942	2.15	178 770
	Hlokozi Supply area	1.47	122 647	1.75	145 824
	Kwalembe supply area	0.28	23 397	0.61	51 062
	Pungashe Mahlabatshane Supply Area	0.64	52 925	1.71	142 774
	Kwafodo Mbotho supply area	0.10	8 111	0.37	31 005
	Sisonke	Kokstad	2.19	182 500	3.60
Pakkies		0.03	2 281	0.04	2 960
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Greater Stoffleton		0.10	8 334	0.14	11 342
Underberg Himeville		0.61	50 694	0.25	21 180
Kwa Pitela		0.02	1 379	0.01	685
Ilembe		Sundumbili Water Supply Area	7.00	582 986	6.52
	Mandini Water Supply Area	1.02	85 167	0.80	66 912
	Tugela South Water Supply Area	0.14	11 660	0.28	23 606
	Darnall Zinkwanzi Water Supply Area	0.73	60 833	2.50	208 260
	Umgeni Northern Feeder Supply Area	5.04	419 750	4.84	403 128
	Stanger Water Supply Area	3.36	279 833	2.68	223 521
	Emalangen Supply Area	0.56	46 639	0.75	62 287
	Ozwanthini Supply Area	0.97	81 182	1.39	115 450
	Dwedwe Supply Area	2.10	174 896	1.83	152 734
	Glendale Supply Area	0.21	17 520	0.17	13 972
	Maqumbe Otimati Supply Area	0.47	39 420	0.58	48 323
	Maphumulo Supply Area	0.47	39 420	0.62	51 621
	Ntunjambi Supply Area	0.32	26 280	0.25	21 121
	Mphise Ngebo Supply Area	0.47	39 420	0.48	39 887