

APPENDIX A

Comprehensive Summary of Data Characteristics

Summary of Available Data: Characteristics Table 1

Municipality	Development Characteristic	Towns and Cities	Economic and Development Attribute	Water Region (DWAF)	Number of records	Total Number of Stands	Number of Vacant records	Number of Vacant Stands	Number of Occupied Stands	Large User Definition (kL/day)	Number of Large Users (Stands)	Number of Large Users (meters)
Beaufort West	Rural	Beaufort West	Inland Town	Southern Coastal	7,443	6,941	878	830	6,111	20	13	32
		Veldrif, Porterville, Pikeberg, Laaipele, Aurora, Eendekuil, Dwarskersbos, Redelingshuys	Coastal Town	South Western	10,012	10,012		6,386	3,626	20		5,258
BergRiver	Rural											
Blaauwberg	Urban	Blaauwberg, Minerton, Mamre, Atlantis, Melkbos	Coastal Metro	South Western	55,362	49,298	20,509	16,415	32,883	50	51	59
Breede River	Rural	Robertson, Bonnievale, Ashton, Montagu, McGregor	inland town	South Western	20,612	20,079	9,249	9,244	10,835	20	7,064	4,405
Breede Valley	Rural	Worcester	Inland Town	South Western	15,389	15,075	2,299	2,285	12,790	20	58	71
Buffalo City	Urban	East London	Coastal City	Eastern Coastal	129,453	119,748	48,030	47,877	71,871	20	234	1,498
Cape Agulhas	Rural	Bredasdorp, Waenhuiskrans, Struisbaai, Suidstrand, Napier, Klipdale, Lagulhas	Coastal Town	South Western	8,588	8,576	1,869	1,867	6,709	20	5	5
Cederberg	Rural	Clanwilliam, Citrusdal, Lamberts Bay, Graafwater, Elands Bay, Leipoldtville	Inland Town	South Western	7,158	6,881	2,308	2,307	4,574	20	39	96
Drakenstein	Urban	Wellington, Paarl, Gouda, Bainskloof, Hermon, Mbekweni	Inland Town	South Western	40,772	37,076	11,110	11,046	26,030	50	297	2,090
Ekurhuleni	Urban	Alberton	Inland Metro	Northern	41,365	40,065	6,925	6,879	33,186	20	151	541
Ekurhuleni	Urban	Germiston	Inland Metro	Northern	122,569	117,846	42,378	42,094	75,752	20	420	1,322
Ekurhuleni	Urban	Kempton Park	Inland Metro	Northern	90,163	87,779	33,753	33,532	54,247	20	233	619
Ekurhuleni	Urban	Lethabong	Inland Metro	Northern	25,843	25,150	9,374	9,345	15,805	20	90	169
Ekurhuleni	Urban	Nigel	Inland Metro	Northern	29,662	27,420	6,435	5,829	21,591	20	42	494
Ekurhuleni	Urban	Springs	Inland Metro	Northern	46,884	45,461	12,497	12,461	33,000	20	85	259
Ekurhuleni	Urban	Benoni	Inland Metro	Northern	104,407	100,921	46,503	46,448	54,473	20	141	474

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Ekurhuleni	Urban	Boksburg	Inland Metro	Northern	82,503	72,334	22,267	14,040	58,294	20	194	784
Ekurhuleni	Urban	Brakpan	Inland Metro	Northern	64,776	63,812	49,400	49,327	14,485	20	56	220
George	Rural	George, Heroldsbay, Wildernis, Twee Rivieren	Coastal Town	Southern Coastal	33,292	33,229	8,155	8,151	25,078	20		48
Helderberg	Urban	Gordons Bay, Strand, Somerset West, Maccassar	Coastal Town	South Western	38,420	37,830	4,755	4,656	33,174	50	26	44
Johannesburg Water	Urban	Lethabong	Inland Metro	Northern	6,594	6,398	2,923	2,914	3,484	20	3	84
Johannesburg Water	Urban	Midrand	Inland Metro	Northern	41,086	39,699	23,134	23,044	16,655	20	91	224
Johannesburg Water	Urban	Northern Johannesburg (Sandton, Randburg, Bryanston, Sunninghill, Morningside)	Inland Metro	Northern	132,061	123,262	67,218	64,847	58,415	20	490	1,736
Johannesburg Water	Urban	Southern Johannesburg 1	Inland Metro	Northern	106,225	96,235	48,743	46,198	50,037	20	528	3,633
Johannesburg Water	Urban	Southern Johannesburg (Soweto)	Inland Metro	Northern	165,967	160,076	149,650	146,682	13,394	20	154	1,005
Johannesburg Water	Urban	Eastern Johannesburg	Inland Metro	Northern	128,483	118,315	53,668	52,324	65,991	20	1,376	3,276
Johannesburg Water	Urban	Western Johannesburg	Inland Metro	Northern	118,793	105,494	78,386	69,016	36,478	20	258	1,448
Langeberg	Rural	Albertina, Gouritsmond, Heidelberg, Jongensfontein, Riversdale, Slangrivier, Stilbaai, Theronville, Witsand	Coastal and Inland Town	Southern Coastal	18,682	16,008	7,091	6,999	9,009	10	154	1,565
Matzikama	Rural	Klawer, Lutzville, Vanrhynsdorp, Vredendal	Inland Town	South Western	8,706	8,317	1,637	1,545	6,772	10	41	103
Mossel Bay	Rural	Mossel Bay, Dana Bay, Klein Brak, Hartenbos	Coastal Town	Southern Coastal	34,439	32,157	15,963	15,804	16,353	20	45	385
Oostenberg	Urban	Brackenfell, Blue Downs, Kuilsrivier	Coastal Metro	South Western	62,076	61,300	5,461	4,923	56,377	20	99	104
Oudtshoorn	Rural	Oudtshoorn	Inland Town	Southern Coastal	23,366	14,335	12,000					

Municipality	Development Characteristic	Towns and Cities	Economic and Development Attribute	Water Region (DWAF)	Number of records	Total Number of Stands	Number of Vacant records	Number of Vacant Stands	Number of Occupied Stands	Large User Definition (kl./day)	Number of Large Users (Stands)	Number of Large Users (meters)
Overstrand	Rural	Gansbaai, Hermanus, Kleinmond, Stanford	Coastal and Inland Town	South Western	30,515	30,307	9,236	9,185	21,122	20	28	32
Plettenberg Bay	Rural	Plettenberg Bay	Coastal Town	Southern Coastal	9,299	9,155	1,696	1,688	7,467	10	39	112
Randfontein	Urban	Randfontein, Mofokeng	Inland Town	Northern	19,304	17,979	174	139	17,840	15	47	238
Saldanha Bay	Rural	Langebaan, Paternoster, Jacobsbaai, Vredenburg, St Helena Bay, Hopefield, Ongegund, Louwville	Coastal Town	South Western	23,750	23,481	6,589	6,565	16,916	20	73	119
Sedibeng	Urban	Sharpville, Sebokeng, Boipatong, Evaton, Streford, Vereeniging, Meyerton, Kanana, Hartbeesfontein, Klipwater, Walkerville	Inland Town	Central	172,383	170,126	129,554	129,357	40,769	20	213	773
Stellenbosch	Urban	Stellenbosch	Inland Town	South Western	15,250	14,335	3,249	3,162	11,173	20	98	131
Swartland	Rural	Abbotsdale, Chatsworth, Grootbaai, Darling, Malmesbury, Morreesburg, Koringberg, Riebeeck Wes, Riebeeck	Inland Town	South Western	23,652	22,763	9,018	9,014	13,749	10	62	382
Theewaterskloof	Rural	Kasteel, Yzerfontein	Inland Town	South Western	16,852	16,305	6,230	6,180	10,125	20	19	124
Tshwane	Urban	Caledon, Grabouw, Genadedal, Greyton, Riversoenderend, Villiersdorp	Inland Metro	Northern	18,063	17,753	2,899	2,839	14,914	20	30	98
Tshwane	Urban	Centurion	Inland Metro	Northern	37,253	35,652	1,742	1,703	33,949	20	139	318
Tshwane	Urban	Mamelodi	inland metro	Northern	38,642	38,493	7,184	7,168	31,325	20	48	78
Tshwane	Urban	NPMSS - Akasia, Rosslyn, Shoshanguve	Inland Metro	Northern	88,102	84,900	19,958	19,814	65,086	20	131	319

APPENDIX A: SUMMARY OF DATA CHARACTERISTICS

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Municipality	Development Characteristic	Towns and Cities	Economic and Development Attribute	Water Region (DWAF)	Number of records	Total Number of Stands	Number of Vacant records	Number of Vacant Stands	Number of Vacant Stands	Number of Occupied Stands	Large User Definition (kL/day)	Number of Large Users (Stands)	Number of Large Users (meters)
Tshwane	Urban	Odi (Garankua)	Inland Metro	Northern	59,171	45,793	1,263	1,217	44,576	20	103	2,516	
Tshwane	Urban	Pretoria	Inland Metro	Northern	174,000	146,691	43,546	38,917	107,774	20	974	3,703	
Tshwane	Urban	Temba (Hammanskraal)	Inland Metro	Northern	12,231	12,108	933	929	11,179	20	42	111	
Tygerberg	Urban	Belville, Cape Town, Delft, Durbanville, Goodwood, Mfuleni, Khayelitsha, Parow	Coastal Metro	South Western	224,878	196,036	71,139	62,385	133,651	20	423	4,362	
TOTAL					2,784,496	2,589,006	1,118,978	1,065,577	1,509,094	985	14,907	45,467	

Summary of Available Data: Characteristics Table 2

Municipality	Towns and Cities	Number of domestic stands	% domestic stands of all stands	% of all records with zero stand area	Number of Records with Zero Stand Area	% of all records with zero stand value	Number of Records with Zero Stand Value	% of all stands with unknown land use assigned	Number of Stands with unknown landuse assigned
Beaufort West	Beaufort West	6,227	89.71%	31.66%	2,356	26.39%	1,964	6.21%	431
BergRiver	Veldrif, Porterville, Pikeberg, Laapplek, Aurora, Eendekuil, Dwarskersbos, Redelingshuys			10.03%	1,004	17.36%	1,738	37.09%	
Blaauwberg	Blaauwberg, Milnerton, Mamre, Atlantis, Melkbos	40,815	82.73%	0.37%	205	18.14%	10,043	10.75%	5,300
Breede River	Robertson, Bonnievale, Ashton, Montagu, McGregor	7,408	36.89%	25.21%	5,196	44.10%	9,090	0.03%	6
Breede Valley	Worcester	13,902	92.22%	4.78%	736	2.48%	382	0.03%	5
Buffalo City	East London	102,665	85.73%	0.17%	220	11.72%	15,165	9.85%	11,795
Cape Agulhas	Bredasdorp, Waenhuiskrans, Struisbaai, Suiderstrand, Napier, Klipdale, Lagulhas	8,136	94.87%	1.79%	154	6.25%	537	0.00%	0
Cederberg	Clanwilliam, Citrusdal, Lamberts Bay, Graafwater, Elands Bay, Leipoldtville	6,838	99.38%	3.20%	229	18.51%	1,325	0.00%	0
Drakenstein	Wellington, Paarl, Gouda, Bainskloof, Hermon, Mbekweni	15,647	42.20%	0.11%	45	11.27%	4,595	30.08%	11,152
Ekuhuleni	Alberton	34,055	85.00%	0.00%	0	1.03%	426	2.85%	1,142
Ekuhuleni	Germiston	107,602	91.31%	0.37%	454	14.37%	17,613	2.42%	2,852
Ekuhuleni	Kempton Park	82,262	93.71%	0.13%	117	20.73%	18,691	0.36%	316
Ekuhuleni	Lethabong	19,217	76.41%	13.61%	3,517	20.50%	5,298	16.74%	4,210
Ekuhuleni	Nigel	24,142	88.05%	3.24%	961	12.54%	3,720	1.88%	515
Ekuhuleni	Springs	40,267	88.57%	0.00%	0	4.82%	2,260	1.92%	873
Ekuhuleni	Benoni	95,160	94.29%	0.00%	4	0.26%	271	0.36%	363
Ekuhuleni	Boksburg	65,672	90.79%	0.00%	0	20.90%	17,243	1.62%	1,172
Ekuhuleni	Brakpan	60,988	95.57%	0.01%	7	8.43%	5,461	0.51%	325
George	George, Heroldsbay, Wildermis, Twee Rivieren	13,596	54.09%	3.15%	1,049	4.11%	1,368	41.66%	13,843

Municipality	Towns and Cities	Number of domestic stands	% domestic stands of all stands	% of all records with zero stand area	Number of Records with Zero Stand Area	% of all records with zero stand value	Number of Records with Zero Stand Value	% of all stands with unknown land use assigned	Number of Stands with unknown landuse assigned
Helderberg	Gordons Bay, Strand, Somerset West, Maccassar	31,948	84.45%	9.41%	3,615	9.34%	3,588	11.04%	4,176
Johannesburg Water	Lethabong	2,889	45.15%	34.05%	2,245	46.07%	3,038	50.23%	3,214
Johannesburg Water	Midrand	31,593	79.58%	0.05%	21	7.69%	3,160	3.81%	1,513
Johannesburg Water	Northern Johannesburg (Sandton, Randburg, Bryanston, Summinghill, Morningside)	89,714	72.78%	12.40%	16,376	17.06%	22,530	12.94%	15,950
Johannesburg Water	Southern Johannesburg 1	65,375	67.93%	0.08%	85	24.02%	25,517	22.34%	21,499
Johannesburg Water	Southern Johannesburg (Soweto)	136,348	85.18%	0.86%	1,421	19.44%	32,264	11.47%	18,361
Johannesburg Water	Eastern Johannesburg	95,515	80.73%	7.14%	9,174	29.11%	37,401	8.80%	10,412
Johannesburg Water	Western Johannesburg	89,696	85.02%	0.05%	65	15.24%	18,104	9.47%	9,990
Langeberg	Albertina, Gouritsmond, Heidelberg, Jongsfontein, Riversdale, Slangrivier, Stilbaai, Theronville, Witsand	15,170	94.77%	0.08%	15	35.00%	6,539	1.21%	194
Matzikama	Klawer, Lutzville, Vanrhynsdorp, Vredendal	7,833	94.18%	35.55%	3,095	21.84%	1,901	0.00%	0
Mossel Bay	Mossel Bay, Dana Bay, Klein Brak, Hartenbos	26,387	82.06%	17.54%	6,041	29.26%	10,078	0.43%	138
Oostenberg	Brackenfell, Blue Downs, Kuilsrivier	57,849	94.37%	25.00%	15,519	12.75%	7,915	2.36%	1,447
Oudshoorn	Oudshoorn			42.58%	9,949	46.52%	10,870	100.00%	
Overstrand	Gansbaai, Hermanus, Kleinmond, Stamford	21,805	71.95%	4.57%	1,395	7.60%	2,319	17.79%	5,392
Plettenberg Bay	Plettenberg Bay	7,305	79.79%	7.23%	672	6.10%	567	14.08%	1,289
Randfontein	Randfontein, Mohlakeng	16,055	89.30%	1.93%	373	1.85%	357	5.26%	946
Saldanha Bay	Langebaan, Paternoster, Jacobsbaai, Vredenburg, St Helena Bay, Hopefield, Ongegund, Louwville	21,564	91.84%	2.05%	487	10.08%	2,394	1.25%	294

Municipality	Towns and Cities	Number of domestic stands	% domestic stands of all stands	% of all records with zero stand area	Number of Records with Zero Stand Area	% of all records with zero stand value	Number of Records with Zero Stand Value	% of all stands with unknown land use assigned	Number of Stands with unknown landuse assigned
Sedibeng	Sharpville, Sebokeng, Boipatong, Evaton, Stretford, Vereeniging, Meyerton, Kanana, Hartbeesfontein, Klipwater, Walkerville	144,135	84.72%	0.95%	1,638	4.88%	8,412	4.75%	8,081
Stellenbosch		11,551	80.58%	4.38%	668	8.21%	1,252	16.13%	2,312
Swartland	Abbotsdale, Chatsworth, Grottoabaai, Darling, Malmesbury, Morreesburg, Koringberg, Riebeeck Wes, Riebeeck Kasteel, Yzerfontein	17,038	74.85%	19.46%	4,603	16.21%	3,834	10.92%	2,486
Theewaterskloof	Caledon, Grabouw, Genadedal, Greyton, RIVERSONDEREND, Villiersdorp	10,186	62.47%	9.74%	1,641	12.84%	2,164	33.58%	5,475
Tshwane	Atteridgeville	17,257	97.21%	12.77%	2,306	12.75%	2,303	1.97%	350
Tshwane	Centurion	30,696	86.10%	6.07%	2,261	5.98%	2,228	5.04%	1,797
Tshwane	Mamelodi	31,151	80.93%	12.14%	4,691	12.18%	4,707	18.63%	7,171
Tshwane	NPMSS - Akasia, Rosslyn, Shoshanguhe	79,925	94.14%	0.00%	0	8.25%	7,268	18.36%	15,588
Tshwane	Odi (Garankua)	45,023	98.32%	100.00%	59,171	0.00%	2	0.02%	9
Tshwane	Pretoria	105,101	71.65%	20.21%	35,165	20.41%	35,513	25.37%	37,216
Tshwane	Temba (Hammankraal)	11,754	97.08%	100.00%	12,231	100.00%	12,231	0.00%	0
Tygerberg	Belville, CapeTown, Delft, Durbanville, Goodwood, Mfuleni, Khayelitsha, Parow	185,093	94.42%	8.35%	18,777	23.45%	52,734	0.43%	843
TOTAL		2,150,555	83.06%	8.26%	229,954	15.74%	438,380	8.90%	230,443

Summary of Available Data: Characteristics Table 3

Municipality	Towns and Cities	Number of monthly readings	Period of Readings (more or less)	Total Water Demand per Year (kL/yr)	AADD (kL/Day)	Unit Demand per Stand (kL/Day)	Unit Demand per Meter (kL/Day)	Comment
Beaufort West	Beaufort West Veldrif, Porterville, Piketberg, Laaiplek, Aurora, Eendekuil, Dwarskroersbos, Redelingshuys	13 13 (majority) range of 1 - 13	Dec 02 - Jan /Feb 04 Feb 03 - Mar 04	1552374.25 2018794	4368.915039 5531	0.71 1.05	0.66 1.78	 Inaccurate dataset ito user classifications
Blaauwberg	Blaauwberg, Milnerton, Mamre, Atlantis, Melkbos	24	Jun 2000 - Jul 2002	17658818	51789	1.05	0.94	Old format Swift data - cannot export monthly readings, no suburb codes or zoning codes or tariff data in Swift
Breedre River	Robertson, Bonnievale, Ashton, Montagu, McGregor	24 60 (majority) range of 12- 60	Oct 2002 - Oct 2004	2784882	7717	1.91	1.75	Could not export monthly readings, large number of records no readings, large number of vacant stands, high percentage non domestic users (farms)
Breedre Valley	Worcester	25	Nov 1999 - Jan 04	8507058	23852	1.87	1.82	
Buffalo City	East London Bredasdorp, Waenhuiskrans, Struisbaai, Suiderstrand, Napier, Klipdale, Lagulhas	25 60 (majority) range of 1 - 60	Jan 2003 - Feb 2005 Mar 1999 - Feb 04	25466982 1494697	73713 4143	1.03 0.62	0.91 0.62	
Cape Agulhas	Clanwilliam, Citrusdal, Lamberts Bay, Graafwater, Elands Bay, Leipoldtville	13	Dec 02 - Dec 03	2253426	6284	1.37	8.20	
Drakenstein	Wellington, Paarl, Gouda, Bainskloof, Hermon, Mbekweni	25 (majority) range of 1 - 70	Nov/Dec01 - Nov/Dec 03	13412065	38471	1.48	1.30	

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Municipality	Towns and Cities	Number of monthly readings	Period of Readings (more or less)	Total Water Demand per Year (kL/Yr)	AADD (kL/Day)	Unit Demand per Stand (kL/Day)	Unit Demand per Meter (kL/Day)	Comment
Ekurhuleni	Alberton	25 (majority) range 1 -36	Aug 02 - Sep 04	18378994	56392	1.70	1.64	
Ekurhuleni	Germiston	25 (majority)	Aug 02 - Sep 04	39374500	112446	1.48	1.40	
Ekurhuleni	Kempton Park	25 (majority)	Aug 02 - Sep 04	24072152	68561	1.26	1.22	
Ekurhuleni	Lethabong	25 (majority)	Aug 02 - Sep 04	8228412	23549	1.49	1.43	
Ekurhuleni	Nigel	25 (majority)	Sep 02 - Oct 04	9500665	26387	1.22	1.14	
Ekurhuleni	Springs	25 (majority)	Sep 02 - Oct 04	21963518	61379	1.86	1.79	
Ekurhuleni	Benoni	25 (majority)	Sep 02 - Oct 04	20878052	60891	1.12	1.05	
Ekurhuleni	Boksburg	25 (majority)	Aug 02 - Sep 04	24136060	68898	1.18	1.14	
Ekurhuleni	Brakpan	25 majority	Sep 02 - Oct 04	6537073	19164	1.32	1.25	
George	George, Heroldsbay, Wildermis, Twee Rivieren	48 (majority) range 12 -48)	jul 1999 - jul 2003	5852239	16817	0.67	0.67	Users identified in SWIFT as large users incorrect --re-ran the query to id them
Helderberg	Godons Bay, Strand, Somerset West, Maccasar	60	Apr 1998 - Apr 2003	12616328	35164	1.06	1.05	Old format SWIFT, cannot extract monthly readings or exception reports
Johannesburg Water	Lethabong	25	Feb 2002 - Mar 2004	803689	2332	0.67	0.64	2737 records no readings
Johannesburg Water	Midrand	25	Feb 2002 - Mar 2004	8308707	23806	1.43	1.33	Large number of 'domestic' users on small holdings, categorised as Farms
Johannesburg Water	Northern Johannesburg (Sandton, Randburg, Bryanston, Sunninghill, Morningside)	25	Jan 2002 - Feb 2004	47344048	135363	2.32	2.09	more than 50 000 records have no readings
Johannesburg Water	Southern Johannesburg 1	25	Feb 2002 - Mar 2004	35949232	103278	2.06	1.80	
Johannesburg Water	Southern Johannesburg (Soweto)	25 (148 057 (89% records have no readings)	Feb 2002 - Mar 2004	10238229	30722	2.29	1.88	Data indicates a large number of vacant stands

Municipality	Towns and Cities	Number of monthly readings	Period of Readings (more or less)	Total Water Demand per Year (kL/Yr)	AADD (kL/Day)	Unit Demand per Stand (kL/Day)	Unit Demand per Meter (kL/Day)	Comment
Johannesburg Water	Eastern Johannesburg	25	Feb 2002 -Mar 2004	76233480	287743	4.36	3.85	large number of vacant stands with no meter readings (
Johannesburg Water	Western Johannesburg Albertina, Gouritsmond, Heidelberg, Jongensfontein, Riversdale, Slangrivier, Stilbaai, Theronsville, Witsand	25	Feb 2002-Mar 2004	21685446	61570	1.69	1.52	Large number of vacant stands (more than 65%)
Langeberg	Klawer, Lutzville, Vamrhynsdorp, Vredendal	25 (majority) range 1-42	Dec02-Jan 04	4316426	12453	1.38	1.07	
Matzikama	Mossel Bay, Dana Bay, Klein Brak, Hartenbos	25 (majority) range of 1 - 31	Jan 02 - Feb 04	4199155	11505	1.70	1.63	
Mossel Bay	Brackenfell, Blue Downs, Kuilsrivier	24	Oct 2001 - Oct 2003	5219693	14801	0.91	0.58	Large number of vacant stands
Oostenberg		25	Nov 99 - Dec 01	18026358	54577	0.97	0.97	
Oudshoorn	Oudshoorn	24	Nov 2001 - Nov 2003	5014013	13803			No landuse assigned in SWIFT data, large and vacant records not identified, large number of data set no meter readings (more than 47% of records)
Overstrand	Gansbaai, Hermanus, Kleinmond, Stansford	48 (majority)	Feb 00 -Feb 04	5382502	14747	0.70	0.69	
Plettenberg Bay	Plettenberg Bay	60 (majority) range of 1-60	Dec 1999 - Nov 04	2015392	5537	0.74	0.73	
Randfontein	Randfontein, Mohlakeng	25	Apr 2001 - May 2003	5602136	15696	0.88	0.83	
Saldanha Bay	Langebaan, Paternoster, Jacobsbaai, Vredenburg, St Helena Bay, Hopefield, Ongegesund, Louwville	60 (majority) range of 1-60	Apr 1999 - Mar 04	7917047	22601	1.34	1.32	

Municipality	Towns and Cities	Number of monthly readings	Period of Readings (more or less)	Total Water Demand per Year (kL/Yr)	AADD (kL/Day)	Unit Demand per Stand (kL/Day)	Unit Demand per Meter (kL/Day)	Comment
Sedibeng	Sharpville, Sebokeng, Boipatong, Evaton, Stretford, Vereeniging, Meyerton, Kanana, Hartbeesfontein, Klipwater, Walkerville	25 (majority) range 1 -42	June 02 - Jul 04	24441034	66962	1.64	1.56	
	Stellenbosch	24	Oct 1999 - Oct 2001	6382174	18301	1.64	1.53	Old format Swift
Swartland	Abbotsdale, Chatsworth, Grottoabaai, Darling, Malmesbury, Morreesburg, Koringberg, Riebeeck Wes, Riebeeck Kasteel, Yzerfontein	24 (majority) range of 1-24	Oct 01 - Oct 03	3632927	10080	0.73	0.89	
	Caledon, Girabouw, Genadedal, Greyton, Riversonderend, Villiersdorp	13 (majority)	Sep 03 -Oct 04	3138804	8930	0.88	1.63	
Tshwane	Atteridgeville	36	Feb 2002 - Feb 2005	5460691	15011	1.01	0.99	bulk meter data available, only extracted the last 36 months of data-more data available
Tshwane	Centurion	25	Dec 2002 -Jan 2005	26605304	73138	2.15	2.06	bulk meter data available, only extracted the last 24 months of data-more data available
Tshwane	Mamelodi	36	Feb 2002 - Feb 2005	8576809	23836	0.76	0.76	bulk meter data available, only extracted the last 36 months of data-more data available
Tshwane	NPMSS - Akasia, Rosslyn, Shoshanghuve	25	Feb 2003 -Mar 2005	18259324	53234	0.82	0.78	bulk meter data available, only extracted the last 24 months of data-more data available

Municipality	Towns and Cities	Number of monthly readings	Period of Readings (more or less)	Total Water Demand per Year (kL/Yr)	AADD (kL/Day)	Unit Demand per Stand (kL/Day)	Unit Demand per Meter (kL/Day)	Comment
Tshwane	Odi (Garankua)	27	Dec 2002 - Mar 2005	13887147	38440	0.86	0.66	bulk meter data available, only extracted the last 24 months of data more data available, no stand area data available, accuracy of stand values questionable
Tshwane	Pretoria	36	Feb 2002 -Feb 2005	98195992	271560	2.52	2.08	bulk meter data available, only extracted the last 36 months of data more data available
Tshwane	Temba (Hamanskraal) Belville, Cape Town, Delft, Durbanville, Goodwood, Mfuleni, Khayelitsha, Parow	13	Jan 2004 - Feb 2005	3404962	9330	0.84	0.83	bulk meter data available, only extracted the last 13 months of data more data available.No data on stand areas or stand values
Tygerberg		24	Jul/Aug 2001 - Jul/Aug 2003	50582972	143210	1.07	0.94	
TOTAL				787510782.3	2308082.915			

