



**MINISTRY:  
HUMAN SETTLEMENTS, WATER AND SANITATION  
REPUBLIC OF SOUTH AFRICA**

**NATIONAL ASSEMBLY**

**FOR WRITTEN REPLY**

**QUESTION NO 1391**

**DATE OF PUBLICATION IN INTERNAL QUESTION PAPER: 1 NOVEMBER 2019**  
**(INTERNAL QUESTION PAPER NO. 22)**

**1391. Mr P A van Staden (FF Plus) to ask the Minister of Human Settlements, Water and Sanitation:**

- (1) What was the total amount of litres of water lost due to leaking reservoirs and pipes in the 2018-19 financial year in each municipality in the Republic;
- (2) does her department have strategies and action plans in place to ensure that municipalities keep their water infrastructure intact; if not, why not; if so, what are the relevant details;
- (3) whether her department will take action against a municipality that does not keep its water infrastructure intact; if not, why not; if so, what are the relevant details;
- (4) whether she will make a statement on the matter? NW2605E

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**MINISTER OF HUMAN SETTLEMENTS, WATER AND SANITATION**

- (1) The latest report on water losses and Non-Revenue Water (NRW) in South Africa (Includes 2017/18 data) estimates the real losses at 1 150 079 000 m<sup>3</sup>/a refer to **Annexure A**. Real losses are defined as physical losses from a pressurised system, up to a point of measurement of customer use. This includes losses from reservoirs and pipe leakages. Refer to **Annexure B** for water losses per Water Services Authority (WSA). Monitoring and reporting on water losses is a mandate of a WSA as per Water Services Act, (Act No 106 of 1997), and hence the response refers to Water Services Authorities and not per municipality.
- (2) The National Water and Sanitation Master Plan provides the schedule of interventions, programs, plans, and projects (including but not limited to infrastructure) that will be implemented to elevate the current situation in the sector to

its desired future state. This schedule contains, for each action, specific deliverables, execution times, responsible parties and required budgets. The plan allocates responsibilities to the various tiers of government and other stakeholders for implementation to achieve efficiencies in investment planning, implementation of actions and evaluation of achievements.

Furthermore, the Department is in the process of implementing 5 (five) year water and sanitation reliability implementation plans that will ensure a pipeline of projects that will provide services that are sustainable and keep the municipal infrastructure functional. The Department is also conducting annual municipal business health checks which include the management of municipal infrastructure. Based on the outcome of the business health check the Department assists municipalities to develop 5 year municipal actions plans to address areas that require attention, including assets management, operation and maintenance of assets.

The Department is continuously monitoring and analysing the progress made with the implementation of Water Conservation and Water Demand Management and targets set during the updating of Reconciliation Strategies, at Water Services Authority level, within the eight large water supply systems. All the relevant stakeholders meet twice a year to report progress on the implementation of various strategies which will ensure the sustainability of water resources.

The No Drop Programme, which is an incentive based regulatory tool, entails a comprehensive assessment and audit of planning, finance, technical skills and performance criteria which gives an inclusive view of the Water Demand Management business of the Water Services Authority. The No Drop Programme enables the Department to measure the performance of Water Services Authority and subsequently to reward (or penalise) the institution based upon evidence of their excellence (or failures) according to the minimum standards or requirements that have been defined.

- (3) The Department regulates the municipal performance on Water Conservation and Water Demand Management, which includes asset management (as key criteria) as part of the No Drop Programme. The results of the No Drop assessments will indicate whether the WSA should be penalised or rewarded for performance.

Through both the National Water Act (Act 36 of 1998) and Water Services Act (Act 106 of 1997), the Minister may issue Letters, Notices, Directives and enforcement letters for non-compliance to the set regulatory tools (e.g. water use authorizations and Regulations).

- (4) The Department is continuously assessing Non-Revenue Water and water losses in South Africa. Therefore, The Minister, from time to time, at particular place, in any prevailing condition may make statement regarding Water Conservation and Water Demand Management in general.

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## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA

### Annexure A

**Table 1: Municipal water loss trends and Comparison per Key Performance Area**

|              | 2012 State of NRW in SA (2009/10) |              |                      |            |            | 2015 Benchmarks (2012/13) |              |                        |            |            | 2017 Nat Benchmark (2015/16) |              |                       |            |            |
|--------------|-----------------------------------|--------------|----------------------|------------|------------|---------------------------|--------------|------------------------|------------|------------|------------------------------|--------------|-----------------------|------------|------------|
| Category     | No                                | % NRW        | Rand Value           | ILI        | I/c/d      | No                        | % NRW        | Rand Value             | ILI        | I/c/d      | No                           | % NRW        | Rand Value            | ILI        | I/c/d      |
| <b>A</b>     | 8                                 | 34.3%        |                      | 8.2        | 291        | 8                         | 32.3%        |                        | 5.4        | 280        | 8                            | 34.4%        |                       | 5.3        | 283        |
| <b>B1</b>    | 18                                | 41.3%        |                      | 7.4        | 241        | 15                        | 41.5%        |                        | 6.5        | 261        | 19                           | 48.1%        |                       | 5.9        | 260        |
| <b>B2</b>    | 26                                | 30.5%        |                      | 5.7        | 230        | 15                        | 26.2%        |                        | 4.8        | 321        | 25                           | 44.3%        |                       | 4.4        | 204        |
| <b>B3</b>    | 55                                | 37.0%        |                      | 4.7        | 164        | 49                        | 37.1%        |                        | 4.2        | 217        | 100                          | 52.7%        |                       | 4.2        | 172        |
| <b>B4</b>    | 25                                | 72.5%        |                      | 7.8        | 65         | 14                        | 49.5%        |                        | 4.0        | 90         | 61                           | 49.6%        |                       | 3.4        | 158        |
| <b>Total</b> | <b>132</b>                        | <b>36.8%</b> | <b>R7.2 billion*</b> | <b>6.8</b> | <b>235</b> | <b>101</b>                | <b>34.6%</b> | <b>R 6.2 Billion**</b> | <b>6.2</b> | <b>252</b> | <b>213</b>                   | <b>41.0%</b> | <b>R9.9 Billion**</b> | <b>5.3</b> | <b>233</b> |

\* calculated financial value on Non-Revenue Water (NRW) at different production rates per municipal category

\*\*calculated at an average of R6/m<sup>3</sup>



## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA

### ANNEXURE B

#### WATER LOSSES PER WATER SERVICES AUTHORITY

##### 1. Eastern Cape

| Province     | District Municipality    | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |                  |
|--------------|--------------------------|-------------------------------|---|----------------------------------|------------------|
| Eastern Cape | Nelson Mandela Bay Metro | Nelson Mandela Bay Metro      | 46 026 091.55                             | 46 026 091 552.53                |                  |
|              | Buffalo City             | Buffalo City Metro            | 19 618 069.91                             | 19 618 069 907.20                |                  |
|              | Sarah Baartman           | Dr Beyers Naudé LM            |   | 1 709 774.95                     | 1 709 774 952.21 |
|              |                          | Blue Crane Route LM           |   | 847 372.04                       | 847 372 040.39   |
|              |                          | Makana LM                     |   | 1 829 992.31                     | 1 829 992 312.97 |
|              |                          | Ndlambe LM                    |   | 1 833 289.64                     | 1 833 289 638.01 |
|              |                          | Sunday's River Valley LM      |   | 1 422 494.16                     | 1 422 494 161.73 |
|              |                          | Kouga LM                      |   | 2 864 393.18                     | 2 864 393 178.49 |
|              |                          | Kou-kamma LM                  |   | 620 563.07                       | 620 563 067.35   |
|              | Amatole                  | Amatole DM                    | 10 479 562.67                             | 10 479 562 671.30                |                  |
|              | Chris Hani               | Chris Hani DM                 | 11 461 038.81                             | 11 461 038 809.79                |                  |
|              | Joe Gqabi                | Joe Gqabi DM                  | 4 153 217.93                              | 4 153 217 925.97                 |                  |
|              | OR Tambo                 | O R Tambo DM                  | 15 408 020.34                             | 15 408 020 339.55                |                  |
| Alfred Nzo   | Alfred Nzo DM            | 6 551 815.84                  | 6 551 815 835.13                          |                                  |                  |

##### 2. Free State

| Province       | District Municipality | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |                   |
|----------------|-----------------------|-------------------------------|---|----------------------------------|-------------------|
| Free State     | Mangaung              | Mangaung Metro                | 14 943 099.35                             | 14 943 099 351.27                |                   |
|                | Xhariep               | Letsemeng LM                  |   | 1 001 898.07                     | 1 001 898 069.10  |
|                |                       | Kopanong LM                   |   | 1 315 371.95                     | 1 315 371 945.42  |
|                |                       | Mohokare LM                   |   | 853 953.48                       | 853 953 480.55    |
|                | Lejweleputswa         | Masilonyana LM                |   | 1 595 080.01                     | 1 595 080 013.29  |
|                |                       | Tokoloko LM                   |   | 673 691.49                       | 673 691 490.69    |
|                |                       | Tswelopele LM                 |   | 915 821.37                       | 915 821 374.81    |
|                |                       | Matjhabeng LM                 |   | 14 233 456.58                    | 14 233 456 581.76 |
|                |                       | Nala LM                       |   | 1 589 497.21                     | 1 589 497 211.29  |
|                | Thabo Mofutsanyane    | Setsoto LM                    |   | 3 797 701.77                     | 3 797 701 767.53  |
|                |                       | Dihlabeng LM                  |   | 3 991 758.74                     | 3 991 758 735.69  |
|                |                       | Nketoana LM                   |   | 1 330 624.00                     | 1 330 624 003.67  |
|                |                       | Maluti a Phofung LM           |   | 10 684 431.66                    | 10 684 431 664.56 |
|                |                       | Phumelela LM                  |   | 967 784.38                       | 967 784 383.15    |
|                |                       | Mantsopa LM                   |   | 1 163 753.20                     | 1 163 753 201.00  |
|                | Fezile Dabi           | Moqhaka LM                    |   | 4 778 645.54                     | 4 778 645 541.94  |
|                |                       | Ngwathe LM                    |   | 4 195 644.43                     | 4 195 644 426.53  |
| Metsimaholo LM |                       |                               | 6 909 080.48                              | 6 909 080 483.13                 |                   |
| Mafube LM      |                       |                               | 1 285 325.83                              | 1 285 325 832.89                 |                   |

### 3. Gauteng Province

| Province    | District Municipality      | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|-------------|----------------------------|-------------------------------|---|----------------------------------|
| Gauteng     | City of Johannesburg Metro | City of Johannesburg Metro    | 111 129 595.20                            | 111 129 595 200.00               |
|             | City of Tshwane Metro      | City of Tshwane Metro         | 70 777 420.00                             | 70 777 420 000.00                |
|             | Ekurhuleni Metro           | Ekurhuleni Metro              | 46 356 124.50                             | 46 356 124 500.00                |
|             | Sedibeng                   | Emfuleni LM                   | 40 640 031.19                             | 40 640 031 190.00                |
|             |                            | Midvaal LM                    | 2 968 475.91                              | 2 968 475 910.00                 |
|             |                            | Lesedi LM                     | 1 098 169.97                              | 1 098 169 968.00                 |
|             | West Rand                  | Mogale City LM                | 7 704 543.62                              | 7 704 543 619.18                 |
|             |                            | Randwest City LM              | 3 466 944.44                              | 3 466 944 441.67                 |
| Merafong LM |                            | 5 728 944.00                  | 5 728 944 000.00                          |                                  |

### 4. Limpopo Province

| Province | District Municipality | Water Services Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|----------|-----------------------|--------------------------------|---|----------------------------------|
| Limpopo  | Mopani                | Mopani DM                      | 50 861 004.62                             | 50 861 004 615.11                |
|          | Vhembe                | Vhembe DM                      | 20 663 579.20                             | 20 663 579 200.02                |
|          | Capricorn             | Capricorn DM                   | 27 412 750.68                             | 27 412 750 681.19                |
|          |                       | Polokwane LM                   | 17 704 993.54                             | 17 704 993 542.58                |
|          | Waterberg             | Thabazimbi LM                  | 1 623 636.03                              | 1 623 636 027.90                 |
|          |                       | Lephalale LM                   | 2 904 731.85                              | 2 904 731 851.22                 |
|          |                       | Modimolle-Mookgophong LM       | 1 894 185.57                              | 1 894 185 569.69                 |
|          |                       | Bela Bela LM                   | 1 270 808.25                              | 1 270 808 249.79                 |
|          |                       | Mogalakwena LM                 | 4 559 248.74                              | 4 559 248 742.95                 |
|          | Greater Sekhukhune    | Greater Sekhukhune DM          | 12 823 398.16                             | 12 823 398 155.03                |

### 5. KwaZulu Natal

| Province     | District Municipality | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|--------------|-----------------------|-------------------------------|---|----------------------------------|
| KwaZuluNatal | eThekweni Metro       | eThekweni Metro               | 93 680 471.30                             | 93 680 471 298.30                |
|              | Ugu                   | Ugu DM                        | 18 647 466.04                             | 18 647 466 042.31                |
|              | Umgungundhlovu        | Umgungundhlovu DM             | 8 256 004.76                              | 8 256 004 756.89                 |
|              |                       | The Msunduzi LM               | 18 911 572.73                             | 18 911 572 730.69                |
|              | Uthukela              | Uthukela DM                   | 27 640 601.79                             | 27 640 601 793.02                |
|              | Umzinyathi            | Umzinyathi DM                 | 4 015 748.53                              | 4 015 748 527.24                 |
|              | Amajuba               | Newcastle LM                  | 11 112 646.13                             | 11 112 646 125.38                |
|              |                       | Amajuba DM                    | 1 481 530.07                              | 1 481 530 070.18                 |
|              | Zululand              | Zululand DM                   | 18 099 060.02                             | 18 099 060 024.96                |
|              | Umkhanyakude          | Umkhanyakude DM               | 6 368 706.59                              | 6 368 706 585.56                 |
|              | King Cetshwayo        | uMhlathuze LM                 | 14 708 428.85                             | 14 708 428 854.08                |
|              |                       | King Cetshwayo DM             | 3 288 690.98                              | 3 288 690 980.61                 |
|              | Ilembe                | Ilembe DM                     | 5 641 254.44                              | 5 641 254 438.60                 |
|              | Sisonke               | Harry Gwala DM                | 5 462 314.47                              | 5 462 314 469.94                 |

## 6. Mpumalanga Province

| Province   | District Municipality | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|------------|-----------------------|-------------------------------|---|----------------------------------|
| Mpumalanga | Gert Sibande          | Albert Luthuli                | 1 626 104.76                              | 1 626 104 755.98                 |
|            |                       | Msukaligwa                    | 4 122 939.20                              | 4 122 939 201.06                 |
|            |                       | Mkhondo                       | 4 203 676.59                              | 4 203 676 590.65                 |
|            |                       | Pixley Ka Seme                | 1 464 400.38                              | 1 464 400 376.26                 |
|            |                       | Lekwa                         | 3 725 044.36                              | 3 725 044 358.45                 |
|            |                       | Dipaleseng                    | 1 020 031.48                              | 1 020 031 480.76                 |
|            | Nkangala              | Govan Mbeki                   | 7 785 596.80                              | 7 785 596 800.00                 |
|            |                       | Victor Khanye                 | 954 363.07                                | 954 363 070.92                   |
|            |                       | Emalahleni                    | 21 871 547.88                             | 21 871 547 876.71                |
|            |                       | Steve Tshwete                 | 3 114 958.10                              | 3 114 958 102.03                 |
|            |                       | Emakhazeni                    | 736 254.65                                | 736 254 648.80                   |
|            |                       | Thembisile                    | 4 692 912.00                              | 4 692 911 999.77                 |
|            | Ehlanzeni             | Dr J S Moroka                 | 1 154 789.00                              | 1 154 789 000.00                 |
|            |                       | Thaba Chweu                   | 2 426 114.36                              | 2 426 114 359.41                 |
|            |                       | Mbombela                      | 22 440 726.88                             | 22 440 726 875.66                |
|            |                       | Nkomazi                       | 5 734 774.09                              | 5 734 774 090.23                 |
|            |                       | Bushbuckridge                 | 7 223 532.96                              | 7 223 532 959.42                 |

## 7. Northern Cape

| Province      | District Municipality | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|---------------|-----------------------|-------------------------------|---|----------------------------------|
| Northern Cape | Namakwa               | Richtersveld                  | 197 279.94                                | 197 279 937.08                   |
|               |                       | Nama Khoi                     | 638 303.55                                | 638 303 550.00                   |
|               |                       | Kamiesberg                    | 156 906.72                                | 156 906 720.04                   |
|               |                       | Hantam                        | 79 314.87                                 | 79 314 872.73                    |
|               |                       | Karoo Hoogland                | 225 318.52                                | 225 318 521.55                   |
|               |                       | Khai-Ma                       | 246 171.86                                | 246 171 859.52                   |
|               | Pixley Ka Seme        | Ubuntu                        | 270 372.40                                | 270 372 397.11                   |
|               |                       | Umsobomvu                     | 1 084 771.05                              | 1 084 771 048.52                 |
|               |                       | Enthanjeni                    | 1 333 668.80                              | 1 333 668 800.00                 |
|               |                       | Kareeberg                     | 117 889.15                                | 117 889 146.62                   |
|               |                       | Renosterberg                  | 234 421.87                                | 234 421 869.14                   |
|               |                       | Thembellhle                   | 778 218.40                                | 778 218 400.00                   |
|               |                       | Siyathemba                    | 1 136 794.73                              | 1 136 794 734.55                 |
|               |                       | Siyancuma                     | 794 019.17                                | 794 019 170.65                   |
|               | ZF Mgcawu             | !Kai! Garib                   | 1 351 512.32                              | 1 351 512 315.77                 |
|               |                       | !Kheis                        | 274 458.26                                | 274 458 258.42                   |
|               |                       | Tsantsabane                   | 633 552.53                                | 633 552 529.91                   |
|               |                       | Kgatelopele                   | 333 848.78                                | 333 848 780.00                   |
|               |                       | Dawid Kruiper                 | 3 682 096.32                              | 3 682 096 315.99                 |
|               | Frances Baard         | Sol Plaatje                   | 12 345 009.82                             | 12 345 009 818.18                |
|               |                       | Dikgatlong                    | 660 069.03                                | 660 069 034.31                   |
|               |                       | Magareng                      | 377 810.08                                | 377 810 075.63                   |
|               |                       | Phokwane                      | 1 954 341.74                              | 1 954 341 741.24                 |
|               | John Taolo            | Joe Morolong                  | 2 195 532.53                              | 2 195 532 532.39                 |
|               |                       | Ga-Segonyana                  | 1 843 380.00                              | 1 843 380 000.00                 |
|               |                       | Gamagara                      | 1 517 217.93                              | 1 517 217 926.63                 |

## 8. North West

| Province   | District Municipality | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|------------|-----------------------|-------------------------------|---|----------------------------------|
| North West | Bojana Platinum       | Moretele LM                   | 1 780 041.89                              | 1 780 041 889.92                 |
|            |                       | Madibeng LM                   | 8 592 302.31                              | 8 592 302 306.84                 |
|            |                       | Rustenburg LM                 | 19 693 457.54                             | 19 693 457 539.86                |
|            |                       | Kgetlengrivier LM             | 1 743 900.36                              | 1 743 900 360.92                 |
|            |                       | Moses Kotane LM               | 3 253 999.67                              | 3 253 999 674.75                 |
|            | Ngaka Modiri Molema   | Ngaka Modiri Molema DM        | 18 778 897.08                             | 18 778 897 081.53                |
|            | Dr RS Mompoti         | Dr RS Mompoti DM              | 6 429 975.08                              | 6 429 975 077.74                 |
|            | Dr Kenneth Kaunda     | J B Marks LM                  | 7 130 603.83                              | 7 130 603 825.87                 |
|            |                       | City of Matlosana LM          | 15 506 609.17                             | 15 506 609 174.56                |
|            |                       | Maquassi Hills                | 1 552 531.73                              | 1 552 531 734.14                 |

## 9. Western Cape

| Province     | District Municipality | Water Service Authority (WSA) | Volume of real losses (m <sup>3</sup> /a) | Volume of real losses (litres/a) |
|--------------|-----------------------|-------------------------------|---|----------------------------------|
| Western Cape | City of Cape Town     | City of Cape Town Metro       | 42 176 759.81                             | 42 176 759 807.91                |
|              | West Coast            | Matzikama                     | 1 065 527.20                              | 1 065 527 200.00                 |
|              |                       | Cederberg                     | 548 274.61                                | 548 274 608.00                   |
|              |                       | Bergrivier                    | 215 823.21                                | 215 823 212.80                   |
|              |                       | Saldanha Bay                  | 834 816.00                                | 834 816 000.00                   |
|              |                       | Swartland                     | 786 903.78                                | 786 903 784.00                   |
|              | Cape Winelands        | Wizenberg                     | 773 240.80                                | 773 240 800.00                   |
|              |                       | Drakenstein                   | 1 889 881.51                              | 1 889 881 512.00                 |
|              |                       | Stellenbosch                  | 2 080 915.20                              | 2 080 915 200.00                 |
|              |                       | Breede Valley                 | 2 037 467.89                              | 2 037 467 892.02                 |
|              |                       | Langeberg (Breede River)      | 756 958.82                                | 756 958 819.20                   |
|              | Overberg              | Theewaterskloof               | 1 044 805.32                              | 1 044 805 322.56                 |
|              |                       | Overstrand                    | 1 133 375.21                              | 1 133 375 206.40                 |
|              |                       | Cape Agulhas                  | 334 107.49                                | 334 107 492.56                   |
|              |                       | Swellendam                    | 514 457.39                                | 514 457 393.60                   |
|              | Eden                  | Kannaland                     | 495 176.80                                | 495 176 800.00                   |
|              |                       | Hessequa                      | 479 874.40                                | 479 874 400.00                   |
|              |                       | Mossel Bay                    | 1 014 391.88                              | 1 014 391 878.38                 |
|              |                       | George                        | 2 454 228.91                              | 2 454 228 912.00                 |
|              |                       | Oudtshoorn                    | 1 173 638.94                              | 1 173 638 944.00                 |
|              |                       | Bitou                         | 511 347.20                                | 511 347 200.00                   |
|              | Central Karoo         | Knysna                        | 805 664.80                                | 805 664 800.00                   |
|              |                       | Laingsburg                    | 284 314.27                                | 284 314 273.60                   |
|              |                       | Prince Albert                 | 240 890.72                                | 240 890 721.68                   |
|              |                       | Beaufort West                 | 1 191 563.30                              | 1 191 563 304.00                 |