

# 2012

## Blue Drop Report



02R\_2012



**water affairs**

Department:  
Water Affairs  
REPUBLIC OF SOUTH AFRICA



**blue drop**  
CERTIFICATION  
drinking water quality  
REGULATION

## *Foreword*

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This is the fourth Blue Drop Report. It is most remarkable to note the impact this programme had on the water sector over the past four years. The positive impression made on the municipal fraternity is evident of the passion and commitment rekindled within those responsible for drinking water quality management. These attributes were found to be the key to reshaping the sector and restoring public confidence in the quality of our tap water.

This report is prompted by the desire to be transparent and ensure that credible information is communicated. This is also the reason why the Department strives to get municipalities to implement incident management protocols and by so doing thereby become more risk averse in their commitment to safe-guard public health in a precautionary manner.

The risk management principle became increasingly prominent since the inception of the Blue Drop certification programme, with water safety planning as the key performance factor. The World Health Organisation (WHO) is advocating the implementation of water safety planning across the world, in both the developed and developing countries. The Blue Drop programme is reason why South Africa is widely regarded as one of the countries where this concept is taking root quite fast.

I would like to express my appreciation to all municipal and water board officials, the private sector and researchers who embraced this concept and made it the success what it is. We share in the success which forms the core of our endeavour to ensure safe tap water throughout the breadth and width of South Africa.

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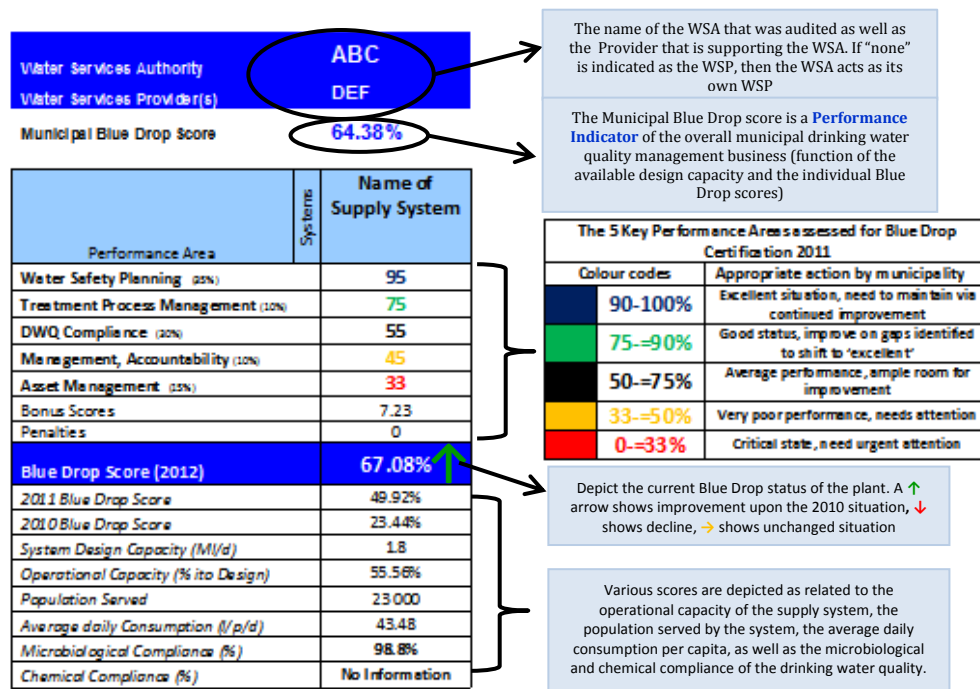
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## Chapter 1 Introduction to the 2012 Blue Drop Report

### How to read the Report Card

The following is an example of a typical municipal Blue Drop report card. Results are provided in colour-coded format – each colour has a specific meaning and performance reference.



| Quality of Drinking Water                                                           |                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Colour Drop                                                                         | Indication of Drop                                                                                                                                                                                                                                     |
|  | Blue Drop Certified, water safe to drink; complied excellently with national standards throughout the reporting period; Must have scored 95% on adherence to Blue Drop Requirements; Water must comply excellently with SABS 241; Water safe to drink. |
|  | Water complied excellently with standard; safe to drink<br>Micro > 97%<br>Chemical > 95%                                                                                                                                                               |
|  | Water safe to drink but some chemical parameter compliance requires improvement<br>Micro > 97%<br>Chemical < 95% (or no Information)                                                                                                                   |
|  | Water generally safe to drink but with recorded some microbiological failures<br>Micro < 97%<br>Chemical > 95%                                                                                                                                         |
|  | Water did not comply according to expected standard targets<br>Micro > 90% < 95%<br>Chemical > 90% < 95%                                                                                                                                               |
|  | Compliance levels too low; there were extended periods when the water did not comply with standard / or no monitoring to confirm actual quality of tap water<br>Micro < 90%<br>Chemical < 90%                                                          |

## **The Blue Drop Report Card and Scoring Criteria**

Assessments are conducted by a panel consisting of a qualified drinking water quality professional as Lead Inspector, 2-4 Inspectors (Assessors) and a Learner Assessor who also coordinates the logistical arrangements of the assessments. The team selection is done based on the outcomes of a Blue Drop Examination which tests the assessor's knowledge and competence in the subject field. Virtual assessments were done in cases where municipalities uploaded their Portfolio of Evidence (or parts of) onto the Blue Drop System.

The following scorecard outlines the key requirements of the Blue Drop assessment and indicates the Portfolio of Evidence that was required by each municipality to calculate a Blue Drop score per water supply system.

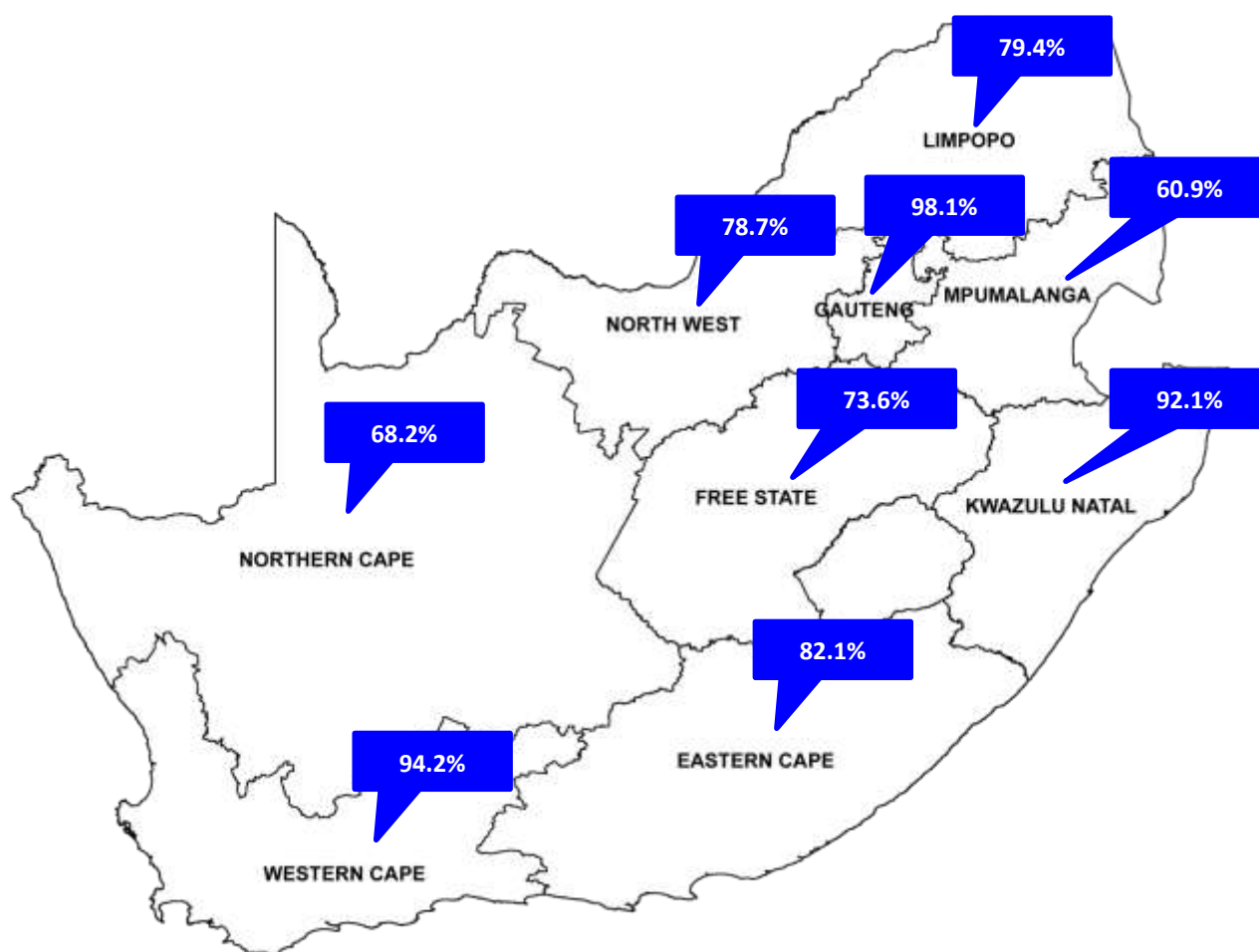


| Blue Drop Requirements 2012                                                        |                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(1)</b><br><b>WATER SAFETY PLANNING</b><br><br><b>35%</b><br><b>(weighting)</b> | <b>(1.1)</b><br><br><b>WATER SAFETY PLANNING PROCESS</b><br><i>(10%)</i> | <b>a.)</b> The Water Safety Planning Process is steered by a group of people which includes the technical, financial and management staff of the municipality. Where a WSP arrangement exists the WSA and WSP should participate in this process.<br><b>b.)</b> There should be clear indication that the water services institution conducted a water safety planning process and not only drafted the document.<br><b>c.)</b> There should be clear reference to the specific water supply system at hand and not only global risk management measurements put in place.                                                                                                                                                                                                          |
|                                                                                    | <b>(1.2)</b><br><br><b>RISK ASSESSMENT</b><br><i>(30%)</i>               | <b>a.)</b> The Risk Assessment must cover catchment, treatment and reticulation .<br><b>b.)</b> The Water Services Institution (WSI) must provide information on findings of the Risk Assessment (and detail Risk Prioritisation method followed) for the specific water supply system, including water resource quality. Format not important but it should not to be a desktop study.<br><b>c.)</b> The Water Safety Planning process must include adequate Control Measures for each significant hazard or hazardous event identified.<br><b>d.)</b> A Water Quality Risk Assessment conducted for at least 80% of the SANS 241 list of determinands. This is to verify whether treatment technology is adequate to treat the raw water to comply with national standard limits. |
|                                                                                    | <b>(1.3)</b><br><br><b>RISK-BASED MONITORING PROGRAMME</b> <i>(25%)</i>  | <b>a.) Operational Monitoring</b> is:<br>i) Informed by Risk Assessment<br>ii) Required sites to monitor: Raw water, after filtration (per process unit) and final water.<br>iii) Determinants (minimum): pH, turbidity and disinfectant residual<br>iv) Frequency of analyses: at least once per shift<br>v) Equipment used + calibration records                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                    |                                                                          | <b>b.) Compliance Monitoring</b> is:<br>i) Informed by Risk Assessment.<br>ii) Monitoring programme is registered on BDS.<br>iii) Actual monitoring occur according to registered BDS monitoring programme (80%).<br>iv) Required sites monitored: Water works final & distribution network + Frequency of analyses: Water works final according SANS 241; distribution monthly.<br>v) Coverage of population served must at least be 80%                                                                                                                                                                                                                                                                                                                                           |
|                                                                                    | <b>(1.4)</b><br><br><b>CREDIBILITY OF DWQ DATA</b> <i>(20%)</i>          | <b>a)</b> Certificate of Accreditation for applicable methods OR Z-scores results ( z-scores must be $\geq -2$ & $\leq 2$ are acceptable) in a recognised Proficiency Testing Scheme.<br><b>b)</b> DWQ Data credibility on the BDS (Blue Drop Certified Data)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                    | <b>(1.5)</b><br><br><b>INCIDENT MANAGEMENT</b> <i>(15%)</i>              | <b>Protocol to specify:</b><br>(1) alert levels,<br>(2) response times,<br>(3) required actions,<br>(4) roles & responsibilities,<br>(5) communication vehicles/methods and<br>(6) must include response on possible risks identified in the Risk Assessment of the Water Safety Planning process<br><b>Incident Register to include :</b><br>(7) Date, location and description of incident<br>(8) Action taken and date of resolution<br>(9) Outcome of cause investigation                                                                                                                                                                                                                                                                                                       |
|                                                                                    | <b>SAMPLER'S BONUS:</b>                                                  | To be eligible for this bonus, WSI's must provide proof of training of samplers or Sampling Quality Control measures (Name the Sampling Training Course, Duration, Service Provider, and detail of Attendees)<br>1) Evidence of relevant sampling training that will ensure credibility of the sampling process; or<br>2) Evidence of control measures to ensure sampling credibility                                                                                                                                                                                                                                                                                                                                                                                               |

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|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(2)</b><br><b>DWQ PROCESS MANAGEMENT &amp; CONTROL</b><br><br><b>10% (weighting)</b> | <b>(2.1)</b><br><b>WORKS CLASSIFICATION COMPLIANCE (15%)</b>               | Works classified according to Regulation 2834 requirements. Evidence uploaded on BDS or Copy presented at the assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                         | <b>(2.2)</b><br><b>PROCESS CONTROL REGISTRATION COMPLIANCE (50%)</b>       | <b>a)</b> Process Controllers must be Registered according to Regulation 2834.<br><b>b)</b> The Process Controllers' Classification must comply with legislative requirements i.t.o.:<br>i) Number of Process Controllers<br>ii) Complying with the required Classification levels.<br><b>c)</b> The Supervisor complying with legislative requirements.                                                                                                                                                                                                                                                |
|                                                                                         | <b>(2.3)</b><br><b>AVAILABILITY OF WATER TREATMENT WORKS LOGBOOK (35%)</b> | <b>a)</b> A logbook is in place to record all incidents at the water treatment works.<br><b>b)</b> Evidence is presented that the logbook process is being implemented. (It is NOT required to be implemented for the entire assessment period)                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                         | <b>PROCESS CONTROL BONUS</b>                                               | <b>BONUS:</b> Proof of Process Controller staff being subjected to relevant training the past 12 months                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>(3)</b><br><b>DRINKING WATER QUALITY COMPLIANCE</b><br><br><b>30 % (weighting)</b>   | <b>(3.1.1)</b><br><b>DWQ COMPLIANCE (MICROBIOLOGICAL) (50%)</b>            | The Microbiological Quality of water supply must comply with the South African National Standard (SANS241) as per the Excellent Requirements set by the Blue Drop Programme.                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                         | <b>(3.1.2)</b><br><b>DWQ COMPLIANCE (CHEMICAL) (40%)</b>                   | The Chemical Quality of water supply must comply with the South African National Standard (SANS241) as per the Excellent Requirements set by the Blue Drop Programme.<br><br><b>a)</b> Chemical - Acute Health:<br>- Excellent Comp. (97% for <100 000 population) & (99% for >100 000 population)<br>- Good Compliance (95% for 100 000 population) & (97% for >100 000 population)<br><br><b>b)</b> Chemical - Chronic Health:<br>-Excellent Compliance (95% for <100 000 population) & (97% for 100 000 population)<br>-Good Compliance (93% for <100 000 population) & (95% for 100 000 population) |
|                                                                                         | <b>(3.2)</b><br><b>RISK REFINED COMPLIANCE (5%)</b>                        | The Compliance of all Determinants identified during the Risk Assessment Process to be included in the risk-defined monitoring programme, must comply with the requirements set in the SANS 241.<br><b>a)</b> Excellent Compliance (95% for <100 000 population & 97% for >100 000 population)<br><b>b)</b> Good Compliance (93% for <100 000 population & 95% for >100 000 population)                                                                                                                                                                                                                 |
|                                                                                         | <b>(3.3)</b><br><b>OPERATIONAL EFFICIENCY INDEX (5%)</b>                   | The compliance of operational determinants as monitored at the Final Water sampling point must comply with the SANS 241 Requirements.<br><br><b>a)</b> Excellent Compliance (93% for <100 000 & 95% for >100 000)<br><b>b)</b> Good Compliance (90% for <100 000 & 93% for >100 000)                                                                                                                                                                                                                                                                                                                    |
|                                                                                         | <b>PENALTY (1):</b><br>Data Difference                                     | Should there be a <b>difference between data</b> available on BDS and that which is presented in hardcopy for verification the penalty will apply.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                         | <b>PENALTY (2):</b><br><11 Months' Data                                    | <b>Less than 11 months data</b> available to assess Microbiological and Chemical compliance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                                         | <b>PENALTY (3)</b><br>Notification Failure                                 | If there is any <b>significant (sustained) failure</b> with no evidence of a Water Quality Alert Notice (Boil Water Notice) being issued, this penalty will apply. NB! This may have an implication on qualification for certification.                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                         |                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(4)</b><br><b>MANAGEMENT, ACCOUNTABILITY, &amp; LOCAL REGULATION</b><br><b>10%</b><br><b>(weighting)</b> | <b>(4.1)</b><br><b>MANAGEMENT COMMITMENT (40%)</b>                          | Management's commitment to effective Drinking Water Quality Operations and Management should be portrayed by Proof of signature approval of the:<br><b>a)</b> Water Safety Plan;<br><b>b)</b> DWQ Monitoring Programme<br><b>c)</b> Water Treatment Plant Logbook<br><b>d)</b> Operations and Maintenance Budget<br><b>e)</b> Water Services Development Plan                                                                                                                                                                                                                                                     |
|                                                                                                             | <b>(4.2)</b><br><b>PUBLICATION OF PERFORMANCE (30%)</b>                     | Evidence should be provided on the various means of drinking water quality information made public to the constituencies supplied with drinking water from this specific water supply system.<br><br>Forms of Publication:<br>>Newspaper publication<br>>Municipal Billing<br>>Annual Report<br>>Posters & Pamphlets<br>>Population and Promotion of "My Water"<br>>Electronic Webpage<br><br>The Water Services Authority must ensure that evidence of adequate marketing of Existing Blue Drop Certified water supply systems are presented during the audit.                                                   |
|                                                                                                             | <b>(4.3)</b><br><b>SERVICE LEVEL AGREEMENT/ PERFORMANCE AGREEMENT (15%)</b> | Should there be an institutional arrangement between Water Services Authority and Water Services Provider, it is essential that the legislatively (Section 19 of the Water Services Act) required Service Level Agreements between the two entities. A copy of this document is required.<br><br><b>OR</b><br><br>Should the Water Services Authority fulfil the function of Water Services Provider as per Section 78 arrangements, it is required that the responsible manager (official) have a Performance Agreement (Workplan) in place which stipulates Drinking Water Quality Management Responsibilities. |
|                                                                                                             | <b>(4.4)</b><br><b>SUBMISSION OF DWQ DATA (15%)</b>                         | <b>a)</b> 12 months of data submitted on the Blue Drop System (BDS). WSI's must ensure that 12 months' sets of results are recorded on the BDS (DWA will only consider data available on the BDS)<br><b>b)</b> Note: <b>All</b> Compliance Monitoring test results are required to be submitted.                                                                                                                                                                                                                                                                                                                  |
|                                                                                                             | <b>Bonus:</b><br>Publication of Performance                                 | Availing information on Drinking Water to relevant public in 3 or more forms listed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                             | <b>Bonus:</b><br>Performance Agreement                                      | Workplans of Process Controllers aligned to Operations and Maintenance Manual.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                             | <b>Penalty:</b><br>Submission of DWQ Data                                   | Penalty will apply should the Department find proof during or post assessment that the WSI are guilty of an offence as per Section 82 of the Water Services Act, by only submitting partial information in order to present a false impression of DWQ Performance and/or compliance.                                                                                                                                                                                                                                                                                                                              |
| <b>(5)</b><br><b>ASSET MANAGEMENT</b><br><b>15%</b>                                                         | <b>(5.1)</b><br><b>ANNUAL PROCESS AUDIT (20%)</b>                           | Process Audit Report on technical inspection/assessment of treatment facility and evidence of implementation of findings<br>This process assessment should've been done within the 12-month assessment period                                                                                                                                                                                                                                                                                                                                                                                                     |

|                    |                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(weighting)</b> | <b>(5.2)</b><br><br><b>ASSET REGISTER</b><br><i>(15%)</i>                                    | The Institution must present a complete Asset Register. The asset register must :<br><b>a)</b> detail relevant equipment and infrastructure<br><b>b)</b> indicate asset description<br><b>c)</b> indicate location<br><b>d)</b> indicate condition (remaining life), and<br><b>e)</b> indicate replacement value                                                                                                                         |
|                    | <b>(5.3)</b><br><br><b>AVAILABILITY &amp; COMPETENCE OF MAINTENANCE TEAM</b><br><i>(15%)</i> | <b>a)</b> The Institution must present evidence of a competent Maintenance Team (in the form of Organogram; Contract or Invoice). Logbook with maintenance entries will serve as adequate evidence.<br><b>b)</b> Additional proof required on team competency (e.g. Qualification & Experience & Trade-test)                                                                                                                             |
|                    | <b>(5.4)</b><br><br><b>OPERATIONS &amp; MAINTENANCE MANUAL</b> <i>(15%)</i>                  | O&M manual to contain:<br><b>a)</b> civil, mechanical, electrical detail of plant,<br><b>b)</b> design capacity of plant,<br><b>c)</b> reference to drawings,<br><b>d)</b> operational schedules, maintenance schedules,<br><b>e)</b> process detail and control,<br><b>f)</b> instrumentation specification/type,<br><b>g)</b> fault finding,<br><b>h)</b> monitoring,<br><b>i)</b> pump curves, and<br><b>g)</b> supportive appendices |
|                    | <b>(5.5)</b><br><br><b>OPERATIONS &amp; MAINTENANCE BUDGET AND EXPENDITURE</b> <i>(20%)</i>  | The Institution must present credible evidence of:<br><b>a)</b> Maintenance Budget (as part of Operations Budget)<br><b>b)</b> Maintenance Expenditure (as part of the Operations Expenditure), and<br><b>c)</b> Maintenance Expenditure should be more than 5% of the Operations Expenditure in Total for the preceding Financial Year.                                                                                                 |
|                    | <b>(5.6)</b><br><br><b>DESIGN CAPACITY vs.. OPERATIONAL CAPACITY</b> <i>(15%)</i>            | Proof to be submitted of the documented design capacity and documented daily operating capacity over the past 12 months. Groundwater dependant systems must have an acceptable plan which stipulates abstraction patterns that will prevent aquifer damage. Flow meters must be calibrated at least annually.                                                                                                                            |



### *Propelling South Africa's Drinking Water Quality Management Towards EXCELLENCE!*



The Blue Drop Certification Programme is an innovative means to regulation which was designed and implemented with the core objective of safeguarding the tap water quality management. This objective stems from the fact that the livelihood of mankind depends on

the availability of clean drinking water. People participate as process controllers, laboratory staff, samplers, engineering staff, scientists, environmental health practitioners, maintenance staff, management and general workers motivated to ensure sustainable supply of safe drinking water.

During the latest assessment cycle the Blue Drop programme attempted to re-emphasise the following on the aspect of the importance of people:

- This incentive-based regulation programme acknowledges the importance of people participating in the management of all risks that would be a threat in health.
- Blue Drop Certification also strives to re-establish the importance of process controllers who are

responsible for treatment process operations and management. Special attention is required to enhance their skills and ability to manage all risks.

- The programme provides the general public with transparent reporting on the ability of the responsible authority to manage drinking water quality according to the risk management principles enshrined by the World Health Organisation. This would imply that not only would the department reflect on actual quality of the tap water but also the ability of responsible institutions to sustain the quality, as well as preparedness to deal with any incident that may pose a health risk to the public.
- Municipal and water board officials are provided with a target of excellence (95% adherence to the set Blue Drop Requirements) towards which they should aspire. This is done to motivate and refocus the people working in the South African water sector to aspire towards targets well beyond the usual minimum requirements.

### **Some Important Notes:**

**Since it was noted that there were some misunderstanding in the past regarding the Blue Drop Certification Programme, please note the following clarifications:**

1. The Department wishes to emphasise that Blue Drop Certification goes beyond the quality of drinking water alone but ventures into the sphere of Risk Management, Operations and Asset Management.
- 2. This implies that a town without Blue Drop Certification does not automatically mean that its water is unsafe for human consumption.**
3. Certification is obtained as an acknowledgement of Excellent Drinking Water Quality Management, this surpasses the requirements of the national norms and standards by some reasonable margin. There are therefore many towns/systems where the water complies very well with expected standards but that there might be some shortcomings identified with the overall risk management.
4. This programme is not a voluntary programme but indeed an incentive-based regulatory initiative which requires water services institutions to provide information in line with the legislative requirements of Section 62 of the Water Services Act (Act 108 of 1997).

In lieu of the above-mentioned, it must also be noted that the regulatory approach of the Department does not necessarily criminalise a drinking water quality incident, but such incidents require sufficient proof (justification) that the authority (and provider) acted according to their incident management protocol. This protocol must guide towards speedy rectification whilst safe-guarding the public health.



*Minister Edna Molewa receiving the AAEEE award from the IWA president for Africa, Prof Kasan*

The American Academy for Environmental Engineering (affiliate of the International Water Association) recognised the importance of this programme together with the Green Drop Certification programme by awarding the Department the Environmental Engineering Excellence Award.

This recognition serves as further motivation for the Department and water sector to proceed with innovative means to stimulate all towards excellence. The Department commends the Water Institute of Southern Africa (WISA) for providing a forum for international recognition of local effort. Municipalities and Water Boards are equally commended for embracing the opportunity for international recognition.

This award was handed over to the Minister of Water and Environmental Affairs by the International Water Association (IWA) at the 3<sup>rd</sup> Municipal Water Quality Conference in June 2011.

## *Blue Drop Certification 2012*

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**This report provides information on the Drinking Water Quality Management performance of all South African water services authorities for the period of January to December 2011.**

The Department followed a process of conducting consultative audits at all water services authorities (municipalities) and water boards to assess drinking water quality operations and management performance in line with the set Blue Drop Requirement. This was followed by reporting shortcomings to these institutions after which all had an opportunity to appeal findings at the provincial confirmation sessions. This report contains the final regulatory impressions.

The report indicates significant improvements which serve as evidence of the positive impact this incentive-based regulation approach has on the South African water sector. The first ever Blue Drop report in 2009 indicated that the national microbiological compliance for South African tap water was measured at 93.3% against the National Standard (SANS 241). This increased to 97.3% in the 2012 reporting cycle in spite of a significant increase in data sets being available on analyses done on tap water by various laboratories.

The overall national drinking water compliance figure is recorded at 98.93% (based upon microbiological, chemical, physical and organoleptic data).



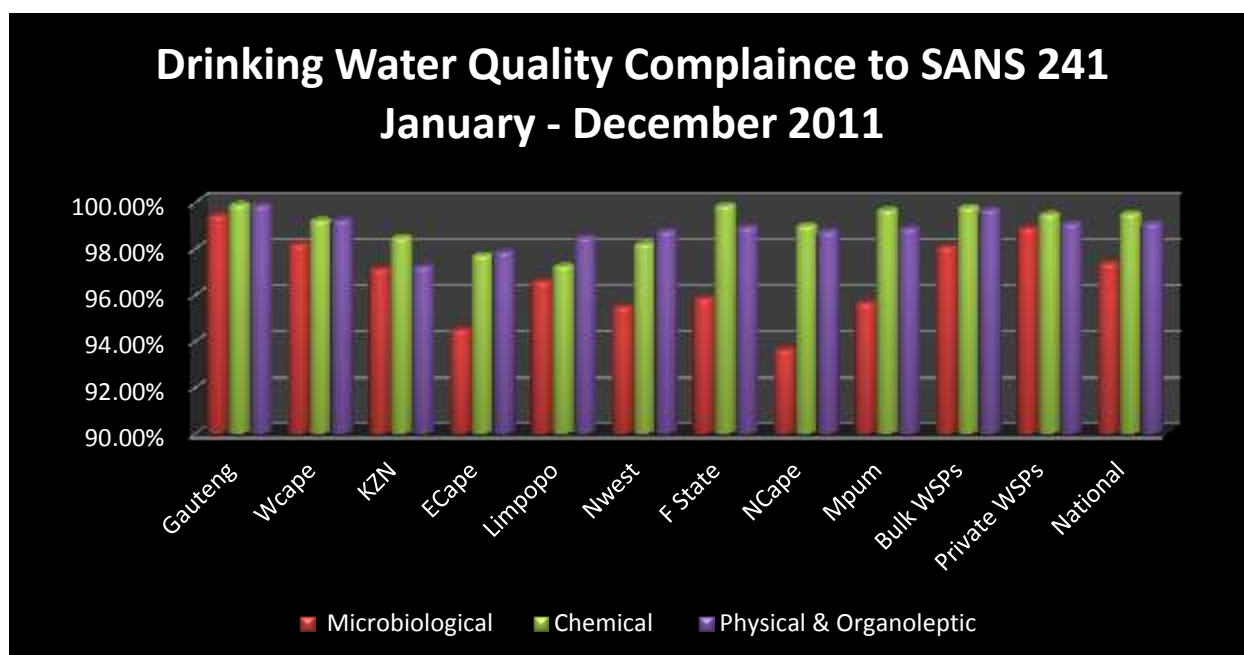


Figure 1: Compliance records as per water quality analyses on the BDS, for all water services authorities per province, as well as water boards (bulk providers) and other smaller private providers.

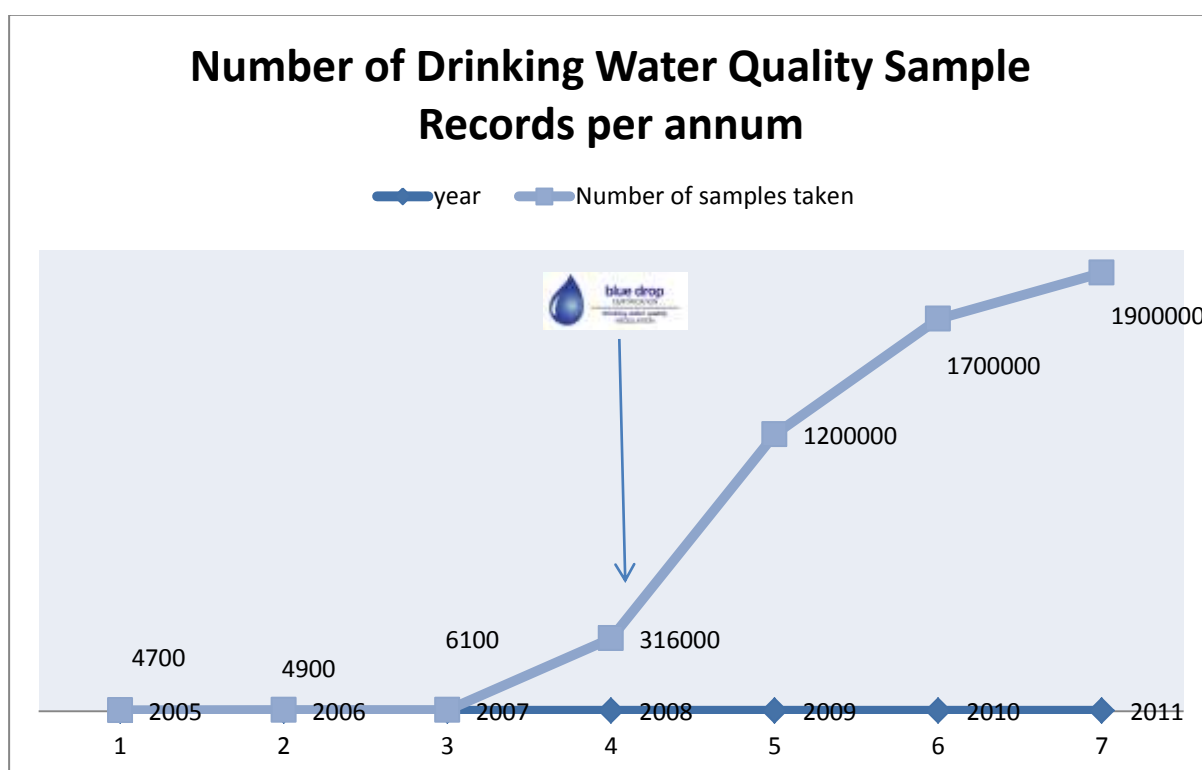
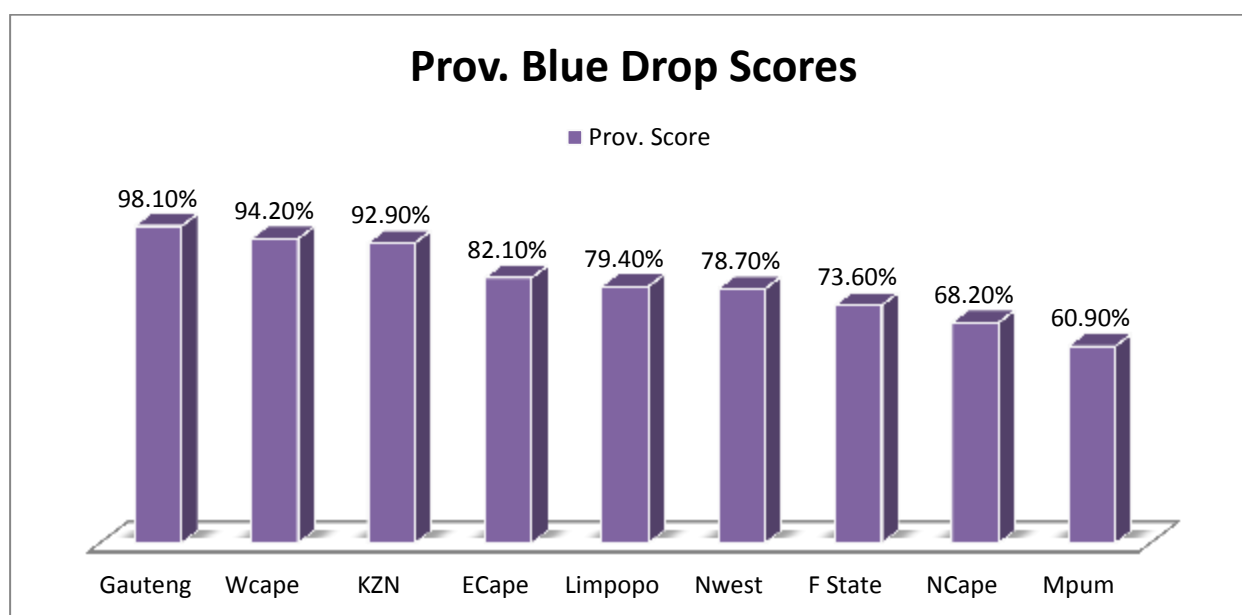


Figure 2 Graph Indicating increase in number of samples as from introduction of Blue Drop Certification

The Department of Cooperative Governance (DCoG) amended institutional authorisation for some District Municipalities in the Gauteng, Northern Cape, Eastern Cape and Western Cape provinces. This led to a reduction in the number of water services authorities and also affected the number of water supply systems assessed during this assessment year. This has an impact on the number of assessments done as can be seen in the table below:



| BLUE DROP ASSESSMENT ANALYSIS (NATIONAL) |       |       |       |       |       |
|------------------------------------------|-------|-------|-------|-------|-------|
| Category                                 | 2009  | 2010  | 2011  | 2012  | Trend |
| Number of Municipalities audited         | 107   | 153   | 162   | 153   | (↓)   |
| Number of water systems audited          | 402   | 787   | 914   | 931   | (↑)   |
| Number of Blue Drop Awards               | 25    | 38    | 66    | 98    | (↑)   |
| National Blue Drop score                 | 51.4% | 67.2% | 72.9% | 87.6% | (↑)   |

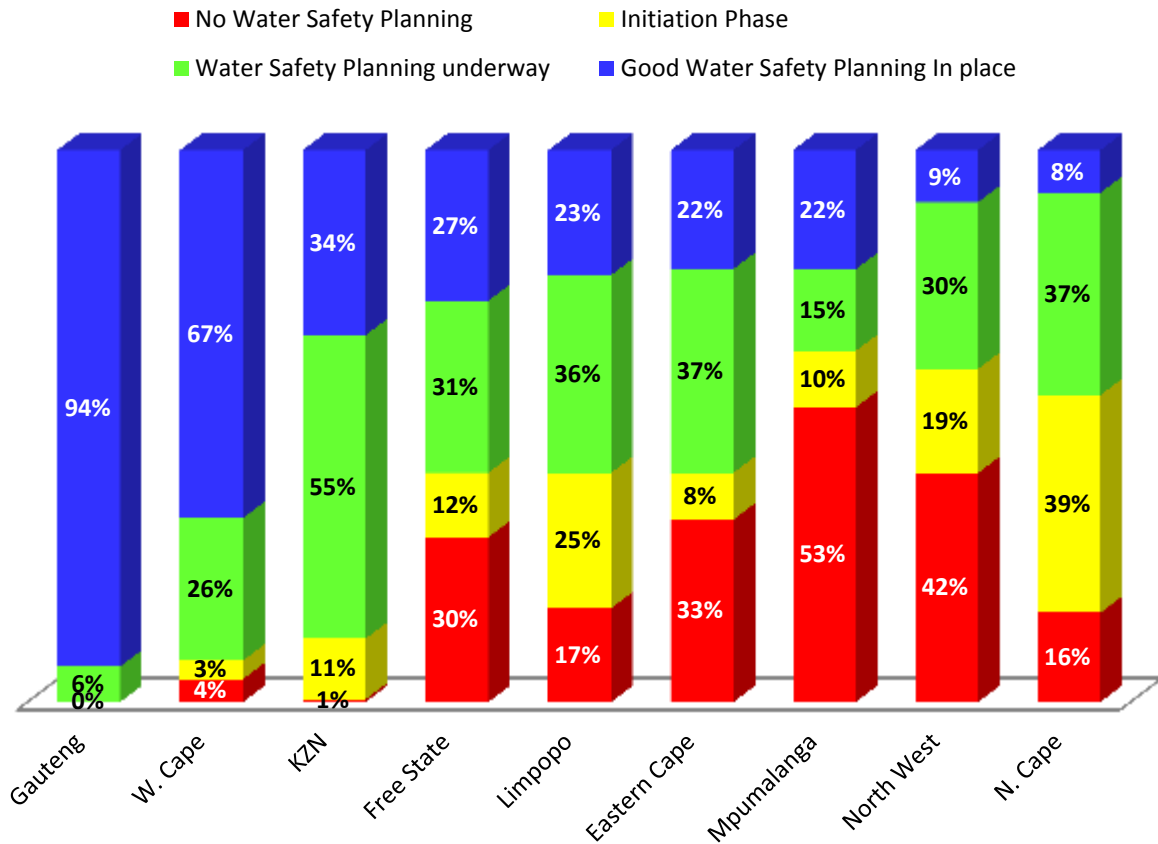


**Figure 3.** This chart depicts the provincial Blue Drop performances based upon the scores of the water services institutions within the respective provinces.

An interesting point to observe from these graphs would be that even though provinces like Mpumalanga and Northern Cape would record (microbiological) compliance figures much higher than Eastern Cape, their Blue Drop performances are lower than the latter. This can be ascribed to the finding that the Blue Drop programmes set requirements for risk management which stipulates that monitoring programmes must be risk informed. It can therefore be accepted that most of Eastern Cape municipal drinking water quality programmes are more aligned to the risk-based models as set by the national regulatory programme.

Water safety planning is a fundamental component of the Blue Drop Certification programme. This implies that water supply systems without risk management processes, as prescribed by water safety planning principles, will not qualify for recognition from this incentive-based regulation initiative. Significant progress can be reported on this World Health Organisation (WHO) programme. In preparation for the 2010 FIFA World Cup, South Africa prepared by commencing with water safety planning processes for the supply systems of the 9 host cities. In 2011 it was reported that 154 systems have water safety plans in place while it was found during the 2012 audits that there are 579 water supply systems where there are water safety planning in place of which 269 were found to be complying well with international standards. The next graph portrays the status of water safety planning in the various provinces.

## Provincial Status of Water Safety Planning



## 2012 National Blue Drop Performance Log

The table below indicate the Performance Log of the Municipal Blue Drop Scores for 2012 and 2011.

| Water Services Authority | Province | 2012 National Log Position | Blue Drop Score 2012 | 2011 National Log Position | Blue Drop Score 2011 |
|--------------------------|----------|----------------------------|----------------------|----------------------------|----------------------|
| Ekurhuleni Metro         | GP       | 1                          | 98.95                | 4                          | 97.44                |
| City of Johannesburg     | GP       | 2                          | 98.92                | 1                          | 97.69                |
| Mogale City LM           | GP       | 3                          | 98.79                | 8                          | 96.19                |
| eThekweni Metro          | KZN      | 4                          | 98.77                | 13                         | 95.71                |
| Tlokwe LM                | NW       | 5                          | 98.45                | 5                          | 96.87                |
| City of Cape Town Metro  | WC       | 6                          | 98.14                | 2                          | 97.61                |
| Bitou LM                 | WC       | 7                          | 97.74                | 9                          | 96.12                |
| Witzenberg LM            | WC       | 8                          | 97.63                | 3                          | 97.56                |
| Randfontein LM           | GP       | 9                          | 97.54                | 17                         | 95.24                |
| George LM                | WC       | 10                         | 97.41                | 7                          | 96.26                |
| Steve Tshwete LM         | MP       | 11                         | 97.35                | 6                          | 96.51                |

| Water Services Authority | Province | 2012 National Log Position | Blue Drop Score 2012 | 2011 National Log Position | Blue Drop Score 2011 |
|--------------------------|----------|----------------------------|----------------------|----------------------------|----------------------|
| Overstrand LM            | WC       | 12                         | 96.82                | 24                         | 90.56                |
| Emfuleni LM              | GP       | 13                         | 96.80                | 10                         | 95.75                |
| Newcastle LM             | KZN      | 14                         | 96.50                | 53                         | 75.61                |
| Drakenstein LM           | WC       | 15                         | 96.29                | 12                         | 95.72                |
| City of Tshwane Metro    | GP       | 16                         | 95.76                | 25                         | 90.41                |
| Mossel Bay LM            | WC       | 17                         | 95.68                | 16                         | 95.27                |
| Stellenbosch LM          | WC       | 18                         | 95.56                | 11                         | 95.74                |
| Saldanha Bay LM          | WC       | 19                         | 95.40                | 31                         | 87.69                |
| Msundusi LM              | KZN      | 20                         | 95.38                | 14                         | 95.60                |
| Matlosana LM             | NW       | 21                         | 95.35                | 15                         | 95.38                |
| Swartland LM             | WC       | 22                         | 95.24                | 19                         | 92.89                |
| Westonaria LM            | GP       | 23                         | 95.18                | 41                         | 84.34                |
| Beaufort West LM         | WC       | 24                         | 94.91                | 22                         | 92.01                |
| Matjhabeng LM            | FS       | 25                         | 94.72                | 50                         | 79.91                |
| uMzinyathi DM            | KZN      | 26                         | 93.45                | 64                         | 70.01                |
| uMhlathuze LM            | KZN      | 27                         | 92.94                | 28                         | 89.26                |
| Lesedi LM                | GP       | 28                         | 92.92                | 32                         | 87.41                |
| Lephalale LM             | LP       | 29                         | 92.84                | 45                         | 82.63                |
| Buffalo City Metro       | EC       | 30                         | 92.55                | 23                         | 91.28                |
| Ugu DM                   | KZN      | 31                         | 92.55                | 20                         | 92.82                |
| Dr JS Moroka LM          | MP       | 32                         | 92.46                | 40                         | 84.42                |
| Tswelopele LM            | FS       | 33                         | 92.42                | 87                         | 54.71                |
| uMgungundlovu DM         | KZN      | 34                         | 92.42                | 82                         | 56.22                |
| Merafong LM              | GP       | 35                         | 92.21                | 34                         | 86.46                |
| Bergvliet LM             | WC       | 36                         | 92.15                | 37                         | 85.20                |
| Knysna LM                | WC       | 37                         | 92.00                | 27                         | 89.76                |
| Rustenburg LM            | NW       | 38                         | 91.55                | 18                         | 93.24                |
| Nelson Mandela Metro     | EC       | 39                         | 90.04                | 26                         | 90.11                |
| Metsimaholo LM           | FS       | 40                         | 89.49                | 96                         | 48.86                |
| Breede Valley LM         | WC       | 41                         | 89.02                | 35                         | 85.93                |
| Setsotho LM              | FS       | 42                         | 89.00                | 30                         | 88.64                |
| iLembe DM                | KZN      | 43                         | 88.26                | 36                         | 85.54                |
| Mbombela LM              | MP       | 44                         | 87.68                | 56                         | 74.99                |
| Cape Agulhas LM          | WC       | 45                         | 86.64                | 59                         | 73.01                |
| Polokwane LM             | LP       | 46                         | 86.52                | 21                         | 92.61                |
| Maluti-A-Phufong LM      | FS       | 47                         | 86.00                | 29                         | 88.94                |
| Joe Gqabi DM             | EC       | 48                         | 85.18                | 44                         | 83.49                |
| Swellendam LM            | WC       | 49                         | 85.16                | 48                         | 80.50                |
| Mangaung LM              | FS       | 50                         | 84.45                | 38                         | 84.69                |
| Midvaal LM               | GP       | 51                         | 84.10                | 65                         | 67.94                |
| Amajuba DM               | KZN      | 52                         | 83.31                | 39                         | 84.43                |
| Zululand DM              | KZN      | 53                         | 83.05                | 60                         | 72.13                |
| Hantam LM                | NC       | 54                         | 81.64                | 55                         | 75.07                |

| Water Services Authority | Province | 2012 National Log Position | Blue Drop Score 2012 | 2011 National Log Position | Blue Drop Score 2011 |
|--------------------------|----------|----------------------------|----------------------|----------------------------|----------------------|
| Cederberg LM             | WC       | 55                         | 80.39                | 92                         | 51.05                |
| Victor Khanye LM         | MP       | 56                         | 80.07                | 139                        | 18.26                |
| Emakhazeni LM            | MP       | 57                         | 79.83                | 43                         | 83.72                |
| Mopani DM                | LP       | 58                         | 79.21                | 71                         | 63.87                |
| Thembisile LM            | MP       | 59                         | 78.30                | 129                        | 27.77                |
| uMkhanyakude DM          | KZN      | 60                         | 77.77                | 123                        | 32.45                |
| Govan Mbeki LM           | MP       | 61                         | 77.50                | 52                         | 77.59                |
| Mohokare LM              | FS       | 62                         | 77.04                | 49                         | 80.10                |
| Umjindi LM               | MP       | 63                         | 75.54                | 74                         | 60.05                |
| Chris Hani DM            | EC       | 64                         | 75.23                | 58                         | 73.47                |
| Maquassi Hills LM        | NW       | 65                         | 75.11                | 81                         | 56.75                |
| Vhembe DM                | LP       | 67                         | 74.85                | 103                        | 45.06                |
| Amatole DM               | EC       | 68                         | 74.62                | 69                         | 65.21                |
| Thembelihle LM           | NC       | 69                         | 72.82                | 101                        | 45.87                |
| Magareng LM              | NC       | 70                         | 72.66                | 68                         | 65.56                |
| Ubuntu LM                | NC       | 71                         | 72.63                | 67                         | 67.15                |
| Uthungulu DM             | KZN      | 72                         | 72.51                | 61                         | 71.31                |
| Ga-Segonyana LM          | NC       | 73                         | 72.27                | 113                        | 37.32                |
| Sol Plaatje LM           | NC       | 74                         | 72.10                | 42                         | 84.23                |
| Capricorn DM             | LP       | 75                         | 71.99                | 33                         | 86.85                |
| Makana LM                | EC       | 76                         | 71.90                | 84                         | 55.07                |
| Khara Hais LM            | NC       | 77                         | 71.70                | 106                        | 43.57                |
| Theewaterskloof LM       | WC       | 78                         | 71.50                | 54                         | 75.41                |
| Bela Bela LM             | LP       | 79                         | 71.21                | 62                         | 71.07                |
| Laingsburg LM            | WC       | 80                         | 71.16                | 47                         | 80.54                |
| Matzikama LM             | WC       | 81                         | 70.29                | 119                        | 32.98                |
| Modimolle LM             | LP       | 82                         | 70.1                 | 46                         | 81.7                 |
| Prins Albert LM          | WC       | 83                         | 70.09                | 63                         | 70.72                |
| Sisonke DM               | KZN      | 84                         | 69.35                | 108                        | 40.09                |
| Kai !Garib LM            | NC       | 85                         | 68.99                | 97                         | 47.08                |
| Kopanong LM              | FS       | 86                         | 68.70                | 104                        | 43.81                |
| Dihlabeng LM             | FS       | 87                         | 68.59                | 126                        | 30.76                |
| Moses Kotane LM          | NW       | 88                         | 68.59                | 125                        | 31.51                |
| Nala LM                  | FS       | 89                         | 67.23                | 79                         | 58.90                |
| Tsatsabane LM            | NC       | 90                         | 66.18                | 76                         | 59.47                |
| Kgatelopele LM           | NC       | 91                         | 66.03                | 85                         | 54.21                |
| Oudtshoorn LM            | WC       | 92                         | 64.58                | 110                        | 36.88                |
| Alfred Nzo DM            | EC       | 93                         | 64.37                | 91                         | 52.54                |
| Nama Khoi LM             | NC       | 94                         | 63.47                | 80                         | 57.96                |
| Emthanjeni LM            | NC       | 95                         | 63.18                | 72                         | 60.42                |
| Siyathemba LM            | NC       | 96                         | 62.40                | 107                        | 40.94                |
| Kouga LM                 | EC       | 97                         | 60.69                | 57                         | 74.93                |
| Mogalakwena LM           | LP       | 98                         | 60.5                 | 51                         | 77.86                |

| Water Services Authority     | Province | 2012 National Log Position | Blue Drop Score 2012 | 2011 National Log Position | Blue Drop Score 2011 |
|------------------------------|----------|----------------------------|----------------------|----------------------------|----------------------|
| Phokwane LM                  | NC       | 99                         | 60.16                | 95                         | 49.44                |
| Greater Sekhukhune DM        | LP       | 100                        | 59.93                | 78                         | 59.05                |
| Moretele LM                  | NW       | 101                        | 59.72                | 121                        | 33.08                |
| Blue Crane Route LM          | EC       | 102                        | 59.05                | 109                        | 39.51                |
| Madibeng LM                  | NW       | 103                        | 57.93                | 114                        | 36.72                |
| uThukela DM                  | KZN      | 104                        | 57.39                | 83                         | 55.29                |
| Ventersdorp LM               | NW       | 105                        | 55.60                | 120                        | 34.99                |
| Dikgatlong                   | NC       | 106                        | 55.32                | 66                         | 67.48                |
| Moqhaka LM                   | FS       | 107                        | 54.93                | 136                        | 21.76                |
| Thabazimbi LM                | LP       | 108                        | 54.33                | 142                        | 14.32                |
| Khai Ma LM                   | NC       | 109                        | 53.11                | 99                         | 46.62                |
| Dr Ruth Segomotsi Mompati DM | NW       | 110                        | 52.94                | 70                         | 64.16                |
| Camdeboo LM                  | EC       | 111                        | 51.65                | 122                        | 32.95                |
| Langeberg LM                 | WC       | 112                        | 51.62                | 124                        | 32.39                |
| Naledi LM                    | FS       | 113                        | 51.03                | 111                        | 38.69                |
| !Kheis LM                    | NC       | 114                        | 50.33                | 89                         | 53.43                |
| Letsemeng LM                 | FS       | 115                        | 49.98                | 88                         | 54.69                |
| Kgetlengrivier LM            | NW       | 116                        | 48.25                | 134                        | 24.67                |
| Mantsopa LM                  | FS       | 117                        | 47.09                | 112                        | 38.48                |
| Ndlambe LM                   | EC       | 118                        | 42.37                | 137                        | 20.93                |
| Ngaka Modiri Molema DM       | NW       | 119                        | 40.72                | 152                        | 0.66                 |
| Pixley ka Seme LM            | MP       | 120                        | 40.70                | 100                        | 46.09                |
| Gamagara LM                  | NC       | 121                        | 40.00                | 94                         | 49.87                |
| Karoo Hoogland LM            | NC       | 122                        | 39.96                | 93                         | 50.53                |
| Kareeberg LM                 | NC       | 123                        | 39.35                | 118                        | 35.06                |
| Emalahleni LM                | MP       | 124                        | 37.50                | 98                         | 46.90                |
| Richtersveld LM              | NC       | 125                        | 36.77                | 115                        | 36.44                |
| Kamiesberg LM                | NC       | 126                        | 35.63                | 90                         | 53.18                |
| Hessequa LM                  | WC       | 127                        | 35.59                | 143                        | 14.10                |
| Baviaans LM                  | EC       | 128                        | 35.09                | 135                        | 24.18                |
| Lekwa LM                     | MP       | 129                        | 34.74                | 146                        | 10.48                |
| Joe Morolong LM              | NC       | 130                        | 33.42                | 73                         | 60.08                |
| Mookgopong LM                | LP       | 131                        | 31.73                | 133                        | 24.79                |
| Bushbuckridge LM             | MP       | 132                        | 30.80                | 127                        | 29.89                |
| Kannaland LM                 | WC       | 133                        | 28.47                | 86                         | 55.05                |
| Tokologo LM                  | FS       | 134                        | 25.46                | 138                        | 20.35                |
| Sundays River Valley LM      | EC       | 135                        | 25.37                | 116                        | 35.55                |
| Mier LM                      | NC       | 136                        | 25.03                | 131                        | 25.56                |
| OR Tambo DM                  | EC       | 137                        | 22.70                | 105                        | 43.69                |
| Dipaleseng LM                | MP       | 138                        | 21.70                | 147                        | 6.95                 |
| Msukaligwa LM                | MP       | 139                        | 21.20                | 144                        | 10.59                |
| Ngwathe LM                   | FS       | 140                        | 20.59                | 102                        | 45.37                |
| Siyancuma LM                 | NC       | 141                        | 19.66                | 128                        | 29.49                |

| Water Services Authority | Province | 2012 National Log Position | Blue Drop Score 2012 | 2011 National Log Position | Blue Drop Score 2011 |
|--------------------------|----------|----------------------------|----------------------|----------------------------|----------------------|
| Thaba Chweu LM           | MP       | <b>142</b>                 | <b>19.03</b>         | 77                         | 59.40                |
| Nketoane LM              | FS       | <b>143</b>                 | <b>18.57</b>         | 149                        | 6.33                 |
| Albert Luthuli LM        | MP       | <b>144</b>                 | <b>18.40</b>         | 145                        | 9.78                 |
| Mafube LM                | FS       | <b>145</b>                 | <b>18.16</b>         | 140                        | 15.25                |
| Phumelela LM             | FS       | <b>146</b>                 | <b>17.90</b>         | 151                        | 3.82                 |
| Renosterberg LM          | NC       | <b>147</b>                 | <b>17.60</b>         | 132                        | 25.36                |
| Nkomazi LM               | MP       | <b>148</b>                 | <b>17.20</b>         | 75                         | 59.48                |
| Umsobomvu LM             | NC       | <b>149</b>                 | <b>15.76</b>         | 117                        | 35.18                |
| Masilonyana LM           | FS       | <b>150</b>                 | <b>11.40</b>         | 148                        | 6.49                 |
| Mkhondo LM               | MP       | <b>151</b>                 | <b>11.30</b>         | 150                        | 5.05                 |
| Ikwezi LM                | EC       | <b>152</b>                 | <b>7.91</b>          | 130                        | 26.55                |
| Koukamma LM              | EC       | <b>153</b>                 | <b>5.60</b>          | 141                        | 14.36                |

The following systems obtained Blue Drop Certification for the 2012 reporting cycle:

| Log Status | Blue Drop Certified System                   | Blue Drop Score | Water Services Authority                       | Water Services Provider                                     |
|------------|----------------------------------------------|-----------------|------------------------------------------------|-------------------------------------------------------------|
| 1          | Tshwane Central and South                    | 99.20%          | City of Tshwane Metropolitan Municipality      | Rand Water                                                  |
| 2          | Nelspruit                                    | 99.15%          | Mbombela Local Municipality                    | Sembcorp Silulumanzi                                        |
| 3          | Ekurhuleni                                   | 98.95%          | Ekurhuleni Metropolitan Municipality           | Rand Water                                                  |
| 4          | City of Johannesburg                         | 98.92%          | City of Johannesburg Metropolitan Municipality | Rand Water & Johannesburg Water                             |
| 5          | eThekweni Main                               | 98.79%          | eThekweni Metropolitan Municipality            | Umgeni Water                                                |
| 6          | Mogale City                                  | 98.79%          | Mogale City Local Municipality                 | Rand Water & City of Johannesburg Metropolitan Municipality |
| 7          | Howick, Camperdown & Mshwathi                | 98.78%          | Umgungundlovu District Municipality            | Umgeni Water                                                |
| 8          | George                                       | 98.56%          | George Local Municipality                      |                                                             |
| 9          | Hermon                                       | 98.55%          | Drakenstein Local Municipality                 | City of Cape Town Metropolitan Municipality                 |
| 10         | Tlokwe                                       | 98.45%          | Tlokwe Local Municipality                      |                                                             |
| 11         | Ceres                                        | 98.44%          | Witzenberg Local Municipality                  |                                                             |
| 12         | Nsezi                                        | 98.39%          | City of uMhlathuze Local Municipality          | uMhlathuze Water                                            |
| 13         | Dolphin Coast                                | 98.30%          | iLembe District Municipality                   | Umgeni Water                                                |
| 14         | Stellenbosch                                 | 98.25%          | Stellenbosch Local Municipality                |                                                             |
| 15         | Middelburg Mhluzi                            | 98.25%          | Steve Tshwete Local Municipality               | Eskom                                                       |
| 16         | Hendrina                                     | 98.25%          | Steve Tshwete Local Municipality               | Eskom                                                       |
| 17         | City of Cape Town Metro                      | 98.14%          | City of Cape Town Metropolitan Municipality    |                                                             |
| 18         | Primkop/Tekwane                              | 97.97%          | Mbombela Local Municipality                    | Sembcorp Silulumanzi                                        |
| 19         | Karatara                                     | 97.95%          | Knysna Local Municipality                      |                                                             |
| 20         | Greater Hermanus                             | 97.93%          | Overstrand Local Municipality                  |                                                             |
| 21         | Plettenberg Bay                              | 97.76%          | Bitou Local Municipality                       |                                                             |
| 22         | Natures Valley                               | 97.76%          | Bitou Local Municipality                       |                                                             |
| 23         | Doornkop 1&2                                 | 97.66%          | Steve Tshwete Local Municipality               | Eskom                                                       |
| 24         | Velddrif                                     | 97.57%          | Bergvriervier Local Municipality               |                                                             |
| 25         | Randfontein                                  | 97.54%          | Randfontein Local Municipality                 | Rand Water                                                  |
| 26         | Kurland                                      | 97.38%          | Bitou Local Municipality                       |                                                             |
| 27         | Qwa-Qwa: Phahameng, Cornet, Makwane & Lusaka | 97.20%          | Maluti-a-Phofung Local Municipality            | Map Water                                                   |
| 28         | Greater Gansbaai                             | 97.12%          | Overstrand Local Municipality                  |                                                             |
| 29         | Ugie                                         | 97.10%          | Joe Gqabi District Municipality                | Sintec                                                      |
| 30         | Biggarsberg                                  | 97.04%          | Umzinyathi District Municipality               | uThukela Water                                              |
| 31         | Tshwane CBD                                  | 97.02%          | City of Tshwane Metropolitan Municipality      |                                                             |
| 32         | Newcastle, Madadeni, Sizweni & Blauwbosch    | 97.00%          | Newcastle Local Municipality                   | uThukela Water                                              |
| 33         | Komati Power Station                         | 97.00%          | Steve Tshwete Local Municipality               | Eskom                                                       |
| 34         | Wolseley                                     | 96.99%          | Witzenberg Local Municipality                  |                                                             |
| 35         | Tshwane North                                | 96.88%          | City of Tshwane Metropolitan Municipality      | Magalies Water                                              |

|    |                                      |        |                                              |                                             |
|----|--------------------------------------|--------|----------------------------------------------|---------------------------------------------|
| 36 | Emfuleni                             | 96.87% | Emfuleni Local Municipality                  | Rand Water                                  |
| 37 | Ndwedwe                              | 96.72% | iLembe District Municipality                 | Umgeni Water                                |
| 38 | Waterpan                             | 96.57% | Westonaria Local Municipality                | Rand Water                                  |
| 39 | Prince Alfred Hamlet                 | 96.51% | Witzenberg Local Municipality                |                                             |
| 40 | Ngwelezane                           | 96.37% | City of uMhlathuze Local Municipality        | uMhlathuze Water                            |
| 41 | Op die berg                          | 96.36% | Witzenberg Local Municipality                |                                             |
| 42 | Drakenstein/Paarl                    | 96.33% | Drakenstein Local Municipality               | City of Cape Town Metropolitan Municipality |
| 43 | Harrismith                           | 96.32% | Maluti-a-Phofung Local Municipality          | Map Water                                   |
| 44 | Gouda                                | 96.30% | Drakenstein Local Municipality               | West Coast District Municipality            |
| 45 | Beaufort West                        | 96.27% | Beaufort West Local Municipality             |                                             |
| 46 | Umzinto & Pennington - Scottsborough | 96.27% | Ugu District Municipality                    | Umgeni Water                                |
| 47 | Hendrina Power Station               | 96.26% | Steve Tshwete Local Municipality             | Eskom                                       |
| 48 | Matsulu                              | 96.22% | Mbombela Local Municipality                  | Sembcorp Silulumanzi                        |
| 49 | Karino                               | 96.05% | Mbombela Local Municipality                  | Sembcorp Silulumanzi                        |
| 50 | Groutville                           | 95.94% | iLembe District Municipality                 | Umgeni Water                                |
| 51 | Arnot Power Station                  | 95.92% | Steve Tshwete Local Municipality             | Eskom                                       |
| 52 | Sterkspruit                          | 95.90% | Joe Gqabi District Municipality              | Amatola Water                               |
| 53 | Mossel Bay                           | 95.77% | Mossel Bay Local Municipality                |                                             |
| 54 | Groendal                             | 95.76% | Nelson Mandela Bay Metropolitan Municipality |                                             |
| 55 | Suurbekom                            | 95.76% | Westonaria Local Municipality                | Rand Water                                  |
| 56 | Springs                              | 95.66% | Nelson Mandela Bay Metropolitan Municipality |                                             |
| 57 | Tulbagh                              | 95.64% | Witzenberg Local Municipality                |                                             |
| 58 | Wagterskop                           | 95.60% | Westonaria Local Municipality                | Rand Water                                  |
| 59 | Westonaria                           | 95.60% | Westonaria Local Municipality                | Rand Water                                  |
| 60 | Alcockspruit                         | 95.43% | Amajuba Local Municipality                   | uThukela Water                              |
| 61 | Saldanha Bay                         | 95.40% | Saldanha Bay Local Municipality              | West Coast District Municipality            |
| 62 | Mdantsane (Nahoon)                   | 95.38% | Buffalo City Metropolitan Municipality       | Amatola Water                               |
| 63 | Msunduzi                             | 95.38% | Msunduzi Local Municipality                  | Umgeni Water                                |
| 64 | Matlosana                            | 95.35% | Matlosana Local Municipality                 | Midvaal Water Company                       |
| 65 | Bronkhorstspuit                      | 95.33% | City of Tshwane Metropolitan Municipality    |                                             |
| 66 | Friemersheim                         | 95.31% | Mossel Bay Local Municipality                |                                             |
| 67 | Bekkersdal                           | 95.29% | Westonaria Local Municipality                | Rand Water                                  |
| 68 | Glenharvie                           | 95.29% | Westonaria Local Municipality                | Rand Water                                  |
| 69 | Blackheath                           | 95.28% | Stellenbosch Local Municipality              | City of Cape Town Metropolitan Municipality |
| 70 | Faure                                | 95.28% | Stellenbosch Local Municipality              | City of Cape Town Metropolitan Municipality |
| 71 | Wemmershoek                          | 95.28% | Stellenbosch Local Municipality              | City of Cape Town Metropolitan Municipality |
| 72 | Kleinmond                            | 95.27% | Overstrand Local Municipality                |                                             |
| 73 | Carltonville                         | 95.26% | Merafong City Local Municipality             | Rand Water                                  |
| 74 | Allanridge                           | 95.24% | Matjhabeng Local Municipality                | Sedibeng Water                              |
| 75 | Henneman                             | 95.24% | Matjhabeng Local Municipality                | Sedibeng Water                              |
| 76 | Ventersburg                          | 95.24% | Matjhabeng Local Municipality                | Sedibeng Water                              |



|    |                                   |        |                                        |                                    |
|----|-----------------------------------|--------|----------------------------------------|------------------------------------|
| 77 | Virginia                          | 95.24% | Matjhabeng Local Municipality          | Sedibeng Water                     |
| 78 | Welkom                            | 95.24% | Matjhabeng Local Municipality          | Sedibeng Water                     |
| 79 | Malmesbury                        | 95.24% | Swartland Local Municipality           | West Coast District Municipality   |
| 80 | Moorreesburg                      | 95.24% | Swartland Local Municipality           | West Coast District Municipality   |
| 81 | Molteno                           | 95.22% | Chris Hani District Municipality       | Inkwanca Local Municipality        |
| 82 | Pearly Beach                      | 95.22% | Overstrand Local Municipality          |                                    |
| 83 | Mathulini, Mthwalume & Qoloqolo   | 95.22% | Ugu District Municipality              | Umgeni Water                       |
| 84 | Bainskloof                        | 95.14% | Drakenstein Local Municipality         |                                    |
| 85 | Greater Tzaneen                   | 95.14% | Mopani District Municipality           | Greater Tzaneen Local Municipality |
| 86 | Marikana                          | 95.14% | Rustenburg Local Municipality          | Rand Water; Magalies Water         |
| 87 | Laing                             | 95.13% | Buffalo City Metropolitan Municipality | Amatola Water                      |
| 88 | Ixopo                             | 95.13% | Sisonke District Municipality          | Umgeni Water                       |
| 89 | Umzinyana (East London)           | 95.06% | Buffalo City Metropolitan Municipality |                                    |
| 90 | Hattingspruit                     | 95.04% | Amajuba Local Municipality             | uThukela Water                     |
| 91 | Zeeland                           | 95.02% | Lephalale Local Municipality           | Exxaro                             |
| 92 | Letsitele                         | 95.02% | Mopani District Municipality           | Lepelle Northern Water             |
| 93 | Porterville                       | 95.00% | Bergvriervier Local Municipality       |                                    |
| 94 | King Williams Town                | 95.00% | Buffalo City Metropolitan Municipality | Amatola Water                      |
| 95 | Saron                             | 95.00% | Drakenstein Local Municipality         |                                    |
| 96 | Danielskuil                       | 95.00% | Kgatelopele Local Municipality         |                                    |
| 97 | Buffels River                     | 95.00% | Overstrand Local Municipality          |                                    |
| 98 | Southbroom - Port Edward & Inland | 95.00% | Ugu District Municipality              | Umgeni Water                       |

