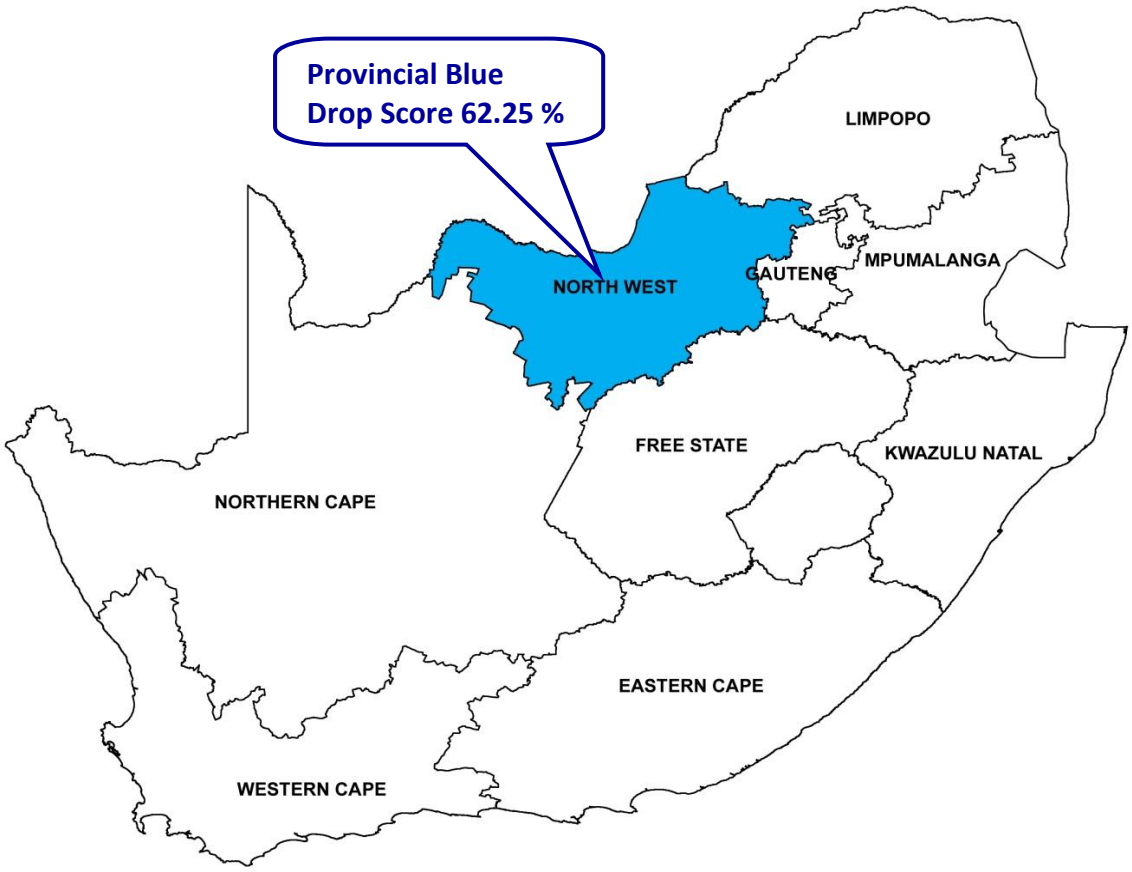
CHAPTER 9 – NORTH WEST PROVINCE



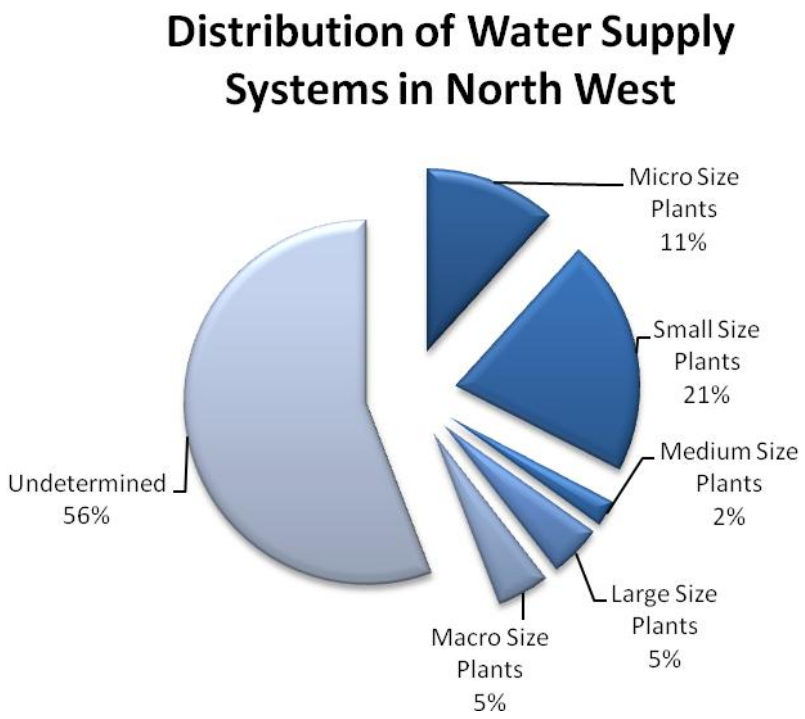
Provincial Best Performer

Tlokwe Local Municipality is the best performing municipality in North West Province:

- ✓ 96.87% Municipal Blue Drop Score

Introduction

Water services delivery is performed by eleven (11) Water Services Authorities in North West via 43 drinking water supply systems.



A total design capacity of 170.9 is available for drinking water supply in North West Province, distributed over 43 supply systems. Operational data is not available for all systems, however the existing data indicates operating capacities between 55 and 87%. This result in an average output volume (final water) of 122 Ml/day.

	MICRO SIZE <0.5 Mℓ/day	SMALL SIZE 0.5-2 Mℓ/day	MEDIUM SIZE 2-10 Mℓ/day	LARGE SIZE <10-25 Mℓ/day	MACRO SIZE >25 Mℓ/day	Undeter-mined	Total
No of Water Supply Systems	5	9	1	2	2	24	43
System Design Volume (Mℓ/day)	1.5	9.4	2.4	24.0	133.6	NI	170.9
Average Operating Capacity (%)	54.8	69.8	87.5	73.0	70.9	NI	71.2
Output volume (Mℓ/day)	0.8	6.5	2.1	17.5	93.5	NI	121.7

N/A = Not Applicable
NI = No Information

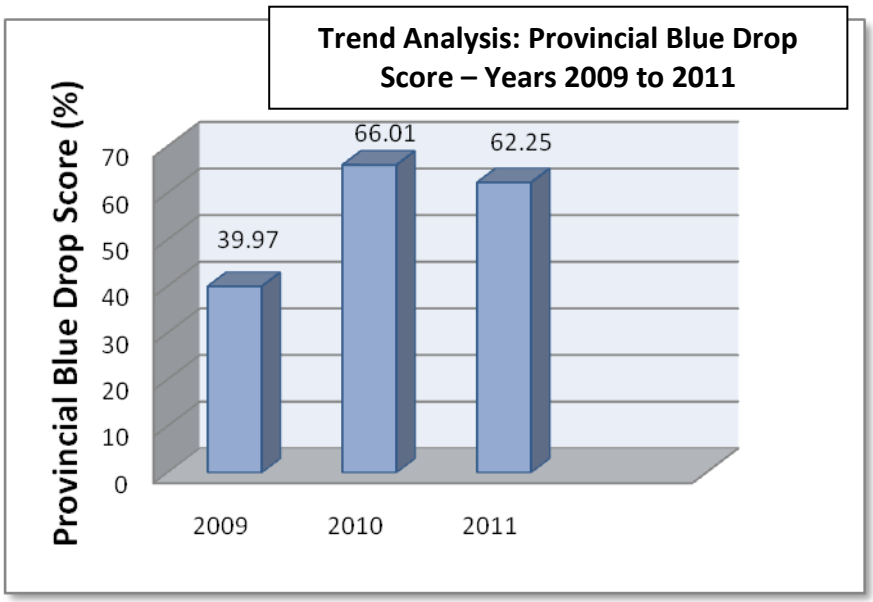
Provincial Blue Drop Analysis

Analysis of the Blue Drop assessments and site inspection results indicate that performance vary from excellent to unsatisfactory. A total of **100% municipalities** were assessed during the 2010/11 Blue Drop Certification.

BLUE DROP COMPARATIVE ANALYSIS				
Performance Category	**2009**	**2010**	**2011**	**Performance trend**
Incentive-based indicators				
Number of municipalities assessed	8 (of 13) (61.54%)	11 (of 11) (100%)	11 (of 11) (100%)	→
Number of water systems assessed	27	28	43	↑
Number of Blue Drop scores ≥50%	10 (37.03%)	7 (25.92%)	11 (25.58%)	→
Number of Blue Drop scores <50%	17 (62.95%)	21 (75%)	32 (74.42%)	→
Number of Blue Drop awards	1	2	4	↑
PROVINCIAL BLUE DROP SCORE	39.97%	66.01%	62.25%	N/A

N/A = Not applied *↑ = improvement, ↓ = digress, → = no change*

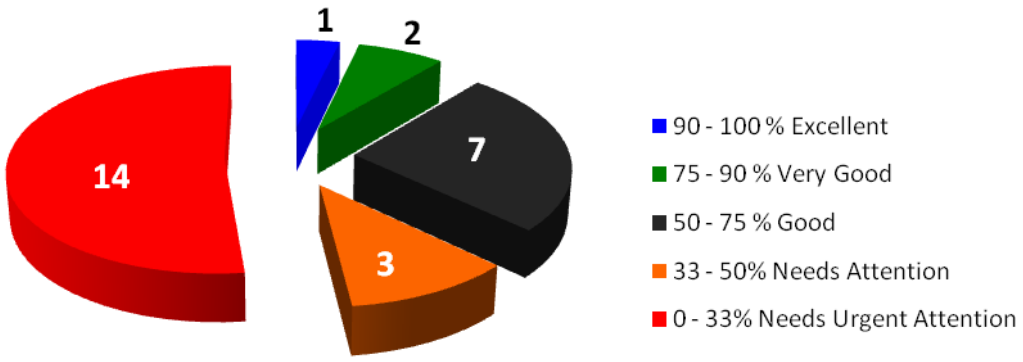
The 100% assessment coverage serves to affirmation the continued commitment by North West municipalities to provide reliable and uninterrupted water supply to consumers. Unfortunately, the province disappointed by not maintaining a positive (improved) trend, as can be observed in the decline in Provincial Blue Drop score from 66 to 62.3%.

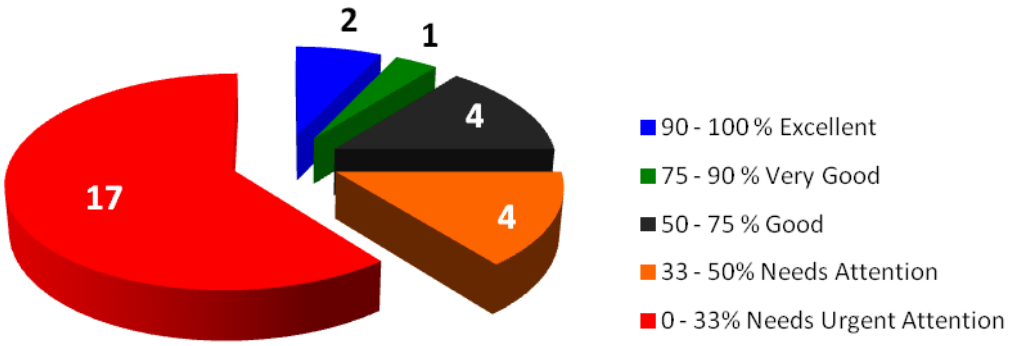


The Department trust the lower scoring municipalities will use the incentive-based regulatory approach as a positive stimulus to facilitate improved performance and public accountability, whilst establishing essential systems and processes to sustain and measure gradual improvement.

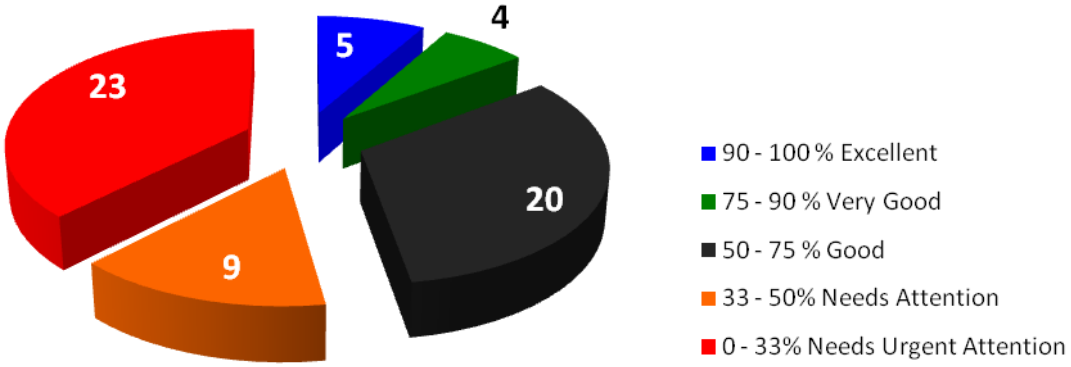
Analysis of the results indicate that the number of systems achieving >50% has also not improved markedly, which is in contrast with most provinces that shows pertinent areas of improvement. The most significant statistic is the Provincial Blue Drop Score of 92.25%, which place North West amongst the lower performers nationally.

Blue Drop Assessment Results 2009





Blue Drop Assessment Resutlts 2011



When comparing 2011 Blue Drop results with 2009 and 2010, the following trends are observed:

- ✓ 43 systems are assessed in 2011 compare to only 27 (2009) and 28 (2010)
- ✓ 4 systems achieved Blue Drop Certification, compared to 2 (2010) and 1 (2009)
- ✓ 67% systems scored between 50 and 100% in 2011, which compares well with the 39% in 2010
- ✓ 74% of all systems are still in critical condition, which compares well with the 75% in 2010.

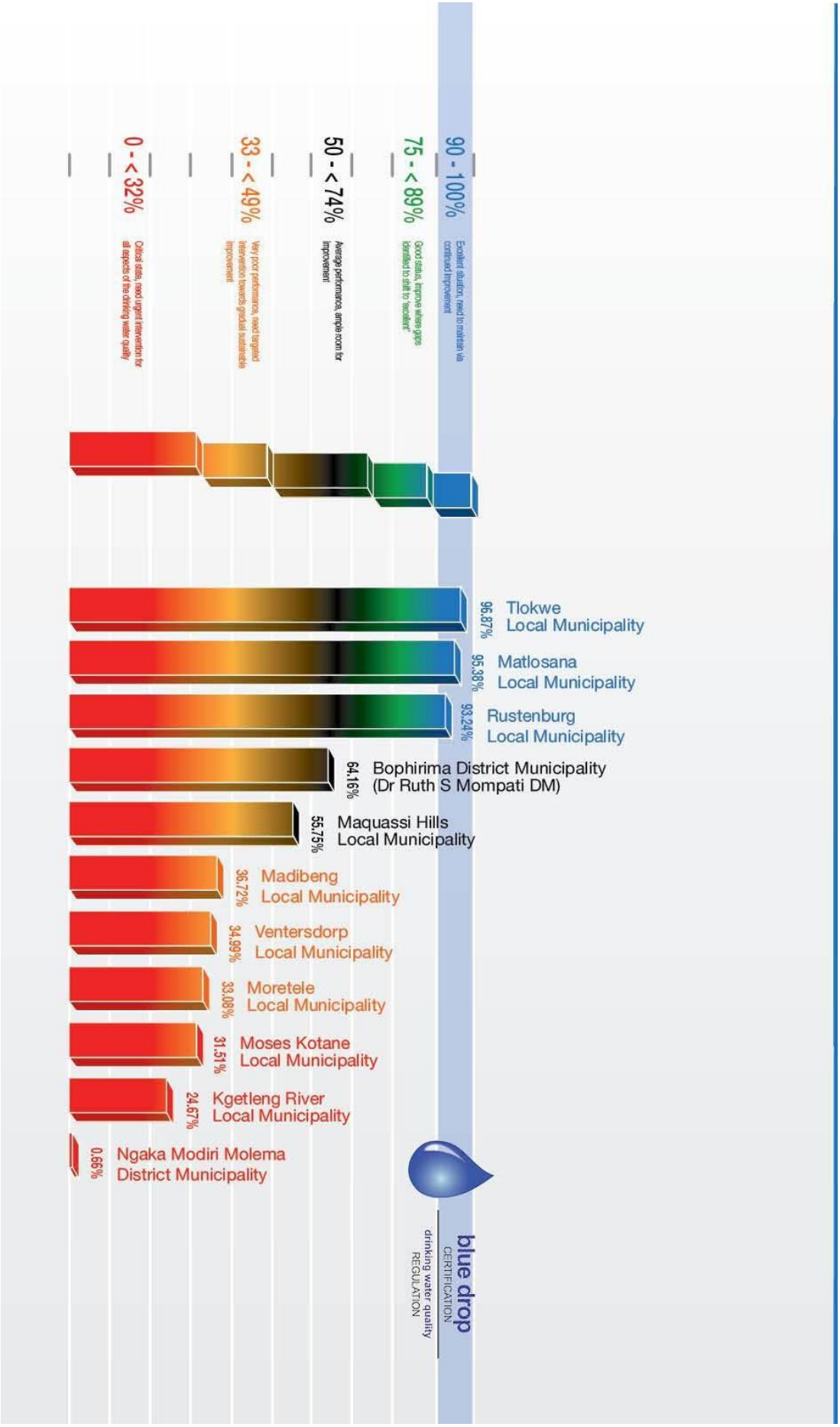
Readers need to be mindful that Blue Drop Certification follows a regulation strategy that facilitates **gradual and sustainable improvement**.... Thereby, Blue Drop requirements become more stringent with every assessment cycle. Municipalities who merely 'maintained' their water on same levels year in and out, is likely to achieve reduced Blue Drop scores, whilst municipalities that drive 'continuous' improvement, are likely to be awarded with improved Blue Drop scores with each assessment cycle.

Conclusion

The Blue Drop results for 2011 indicate that municipal drinking water quality management in North West vary from excellent to good, with 4 systems that need attention, as indicated in the Provincial Performance Log. The overall business of drinking water supply and quality management is satisfactory, however areas of concern are raised where improvement is required. North West is taking a position amongst the lower performing provinces in the country.

Three Blue Drop Certificate is awarded in North West:

- **1 Blue Drop** : Matlosana Local Municipality / Midvaal Water Company
- **1 Blue Drop** : Rustenburg Local Municipality / Rand Water
- **1 Blue Drop** : Tlokwe Local Municipality


90 - 100%
Excellent situation, need to maintain via continued improvement
75 - < 89%
Good status, improve where gaps identified to shift to "excellent"
50 - < 74%
Average performance, ample room for improvement
33 - < 49%
Very poor performance, need targeted intervention towards gradual sustainable improvement
0 - < 32%
Critical state, need urgent intervention for all aspects of the drinking water quality
Tlokwe Local Municipality
96.87%
Matlosana Local Municipality
95.38%
Rustenburg Local Municipality
93.24%
Bophirima District Municipality (Dr Ruth S Mompati DM)
64.16%
Maquassi Hills Local Municipality
55.75%
Madibeng Local Municipality
36.72%
Ventersdorp Local Municipality
34.99%
Moretele Local Municipality
33.08%
Moses Kotane Local Municipality
31.51%
Kgetleng River Local Municipality
24.67%
Ngaka Modiri Molema District Municipality
0.66%
blue drop
CERTIFICATION
drinking water quality
REGULATION

Water Services Authority:	**Dr. Ruth Segomotsi Mompati District Municipality**
Water Services Providers:	**Sedibeng Water [a]; Botshelo Water [b]**

Municipal Blue Drop Score 2011: **64.16%**

Performance Area	*Systems*	**Bogosing [a]**	**Bophirima [a]**	**Ganyesa [b]** Kagisano LM	**Mmagabue [b]** Kagisano LM
Water Safety Planning Process & Incident Response Management		82	32	0	0
Process Control, Maintenance & Management Skills		60	40	0	0
Monitoring Programme		93	11	0	0
Credibility of Sample Analyses		88	53	0	0
Submission of Results		100	0	0	0
Drinking Water Quality Compliance		85	10	0	0
Performance Publication		100	100	0	0
Asset Management		12	0	0	0
Bonus Scores		*1.9*	*0*	*0*	*0*
Penalties		*0.2*	*0*	*0*	*0*
Blue Drop Score (2011)		**76.23% (↑)**	**25.48% (→)**	**0.00% (→)**	**0.00% (→)**
Blue Drop Score (2010)		49.38%	NA	NA	NA
System Design Supply Capacity (Ml/d)		1.8	1.2	0.43 (yield)	0.09 (yield)
System Operational Capacity		46%	NI	60%	50%
Population Served by System		**24 405**	**NI**	**15 693**	**28 291**
Ave. Daily Consumption per Capita (l)		<50	-	<50	<50
Microbiological Compliance (12 months)		**99.15%**	**75.44% (5 months)**	**No data**	**No data**
Chemical Compliance (12 months)		**94.61%**	**No data**	**No data**	**No data**

Performance Area	*Systems*	**Morokeng [b]** Kagisano LM	**Tlakgameng [b]** Kagisano LM	**Kgomotso [a]**	**Majeakgoro [a]**
Water Safety Planning Process & Incident Response Management		0	0	82	35
Process Control, Maintenance & Management Skills		0	0	80	30
Monitoring Programme		0	0	100	59
Credibility of Sample Analyses		0	0	53	100
Submission of Results		0	0	100	100
Drinking Water Quality Compliance		0	0	100	100
Performance Publication		0	0	100	100
Asset Management		0	0	12	5
Bonus Scores		*0*	*0*	*2.9*	*2.6*
Penalties		*0*	*0*	*0*	*0*
Blue Drop Score (2011)		**0.00% (→)**	**0.00% (→)**	**82.61% (↑)**	**67.44% (↑)**
Blue Drop Score (2010)		NA	NA	49.38%	NA
System Design Supply Capacity (Ml/d)		0.43(yield)	0.61 (yield)	1.2	NI
System Operational Capacity		60%	71%	73%	NI
Population Served by System		**24 044**	**NI**	**28 291**	**24 044**
Ave. Daily Consumption per Capita (l)		<50	-	<50	-
Microbiological Compliance (12 months)		**No data**	**No data**	**100.00%**	**100.00%**
Chemical Compliance (12 months)		**No data**	**No data**	**100.00%**	**98.98%**

Performance Area	*Systems*	Naledi Edwin Frylink [a]	Pudimore [a]	Taung East Boreholes [a]	Taung West Boreholes [a]
Water Safety Planning Process & Incident Response Management		0	82	82	82
Process Control, Maintenance & Management Skills		0	80	30	30
Monitoring Programme		0	100	70	70
Credibility of Sample Analyses		0	75	75	75
Submission of Results		0	100	100	100
Drinking Water Quality Compliance		0	80	13	13
Performance Publication		0	100	80	80
Asset Management		0	15	5	5
Bonus Scores		*0*	*1.9*	*0*	*0*
Penalties		*0*	*0*	*0.2*	*0*
Blue Drop Score (2011)		**0.00% (↓)**	**77.15% (↑)**	**43.48% (↑)**	**43.48% (↑)**
Blue Drop Score (2010)		30.28%	30.28%	30.28%	30.28%
System Design Supply Capacity (Ml/d)		1.04 (yield)	14	0.17(yield)	0.52(yield)
System Operational Capacity		75%	36%	24%	25%
Population Served by System		**63 840**	**45 826**	**50 840**	**63 840**
Ave. Daily Consumption per Capita (l)		<50	109	<50	<50
Microbiological Compliance (12 months)		**No data**	**96.50%**	**86.81%**	**87.75%**
Chemical Compliance (12 months)		**No data**	**99.06%**	**99.87% (8 months)**	**99.87% (10 months)**

Regulatory Impression:

The Ruth Segomotsi Mompati District Municipality previously known as Bophirima District Municipality showed remarkable improvement since the 2009 assessment in some of the supply systems. The Blue Drop requirements are relatively being met resulting in an overall municipal score of 64.16% compared to the 2010 Blue Drop Score of 17.5%.

Dr Ruth Segomotsi Mompati District Municipality is supported by two Water Service Providers, namely: Sedibeng Water and Boshielo Water. According to the Inspectors, Sedibeng Water responded very well to the assessment findings and addressed most of the gaps identified during the virtual assessment. The same cannot be said about Boshielo Water and Naledi Local Municipality, which despite their enthusiasm, still require continuous support to maintain momentum.

NB: The Regulator is not satisfied with the performance of drinking water quality management by Boshielo Water for the following systems: Ganyesa, Mmagabue, Morokeng, Tlakgameng, Naledi Edwin Frylink. The WSA is requested to submit a Corrective Action Plan to the Department within 60 days of release of the Blue Drop Report.

Findings

1. The continued functioning of these systems in the absence of registered skilled personnel working with appropriate resources indicates that with proper planning and availing of appropriate staff, the robust basic technology could still be optimised to deliver safe drinking water.

2. None of the 12 systems presented operational monitoring records.

3. It is concerning that no appropriate operational and maintenance manuals are in place, the WSA will not have the means to operate the systems effectively.

4. The lack of asset management and planning of collection and treatment infrastructure is a major shortcoming for all systems in Dr Ruth S. Mompati DM.

5. From a regulatory perspective, the initiation of the water safety plan process is encouraging. The municipality is commended for taking the first step to present all systems for assessment (even though little information was available on the latter).

6. The Department wishes to encourage the Municipality to continuously improve its efforts in order to ensure that certification is achieved during the next assessment period.

Water Services Authority:	**Kgetleng River Local Municipality**
Water Services Providers:	**Kgetleng River Local Municipality**

Municipal Blue Drop Score 2011: **24.67%**

Performance Area	*Systems*	**Derby Boreholes**	**Koster**	**Swartruggens**
Water Safety Planning Process & Incident Response Management		**20**	**20**	**20**
Process Control, Maintenance & Management Skills		**3**	**13**	**3**
Monitoring Programme		**0**	**25**	**0**
Credibility of Sample Analyses		**91**	**96**	**89**
Submission of Results		**0**	**0**	**100**
Drinking Water Quality Compliance		**0**	**80**	**60**
Performance Publication		**0**	**0**	**0**
Asset Management		**0**	**0**	**0**
Bonus Scores		*0*	*0*	*0*
Penalties		*0*	*0*	*0.3*
Blue Drop Score (2011)		**07.80% (→)**	**35.53% (↑)**	**30.68% (↑)**
Blue Drop Score (2010)		NA	29.44%	29.44%
System Design Supply Capacity (Ml/d)		NI	NI	NI
System Operational Capacity		NI	NI	NI
Population Served by System		**40 000**	**NI**	**NI**
Ave. Daily Consumption per Capita (l)		**-**	**-**	**-**
Microbiological Compliance (12 months)		**88.89% (9 months)**	**100.00% (10 months)**	**97.56%**
Chemical Compliance (12 months)		**No data**	**No data**	**No data**

Regulatory Impression:

The Kgetleng River Local Municipality performed unsatisfactory during the Blue Drop assessments, DWA noted minimum increase in the municipal score from previous assessments. The 2011 overall municipal score (16.67%) clearly indicates that water services are not being managed according to the expectations of the Drinking Water Quality (DWQ) regulation programme.

Although support was provided by the Department, the Blue Drop requirements are largely not being met. The Department has no confidence in the municipality's ability to render safe and sustainable DWQ management services in the Derby Borehole system since DWQ confirms a risk of infection from microbiological contaminants.

From a regulatory perspective, the initiation of the water safety plan and the improved DWQ Compliance in the Koster and Swartruggens systems is encouraging.

Findings

1. The WSA presented no flow information on any of the systems, DWA cannot therefore measure if the plant capacities is sufficient.

2. None of the 2 plants presented sufficient proof of process control, maintenance & management skills, water safety plans & incident response management, adequate monitoring programmes or asset management.

3. The lack of a Drinking Water Incident Management Protocol & Water Quality Incident Register from the Municipality is a significant concern to the Department. In the event that any of the plants faces a disaster or emergency situation, the municipality would not be in a position to deal with such disaster since procedures are not in place.

4. The municipality is required to give urgent attention to the implementation of adequate monitoring and to adjust process control according to the findings of continuous compliance and operational monitoring.

5. It is crucial that the Municipality pursues the completion of the Risk Assessments of catchment, treatment works and reticulation. The Risk Assessment must indicate that the treatment facility has the ability to adequately treat the water from raw water quality to DWQ complying with SANS 241.

NB: The Regulator is not satisfied with the overall performance of drinking water quality management in Kgetleng River LM. The WSA is requested to submit a Corrective Action Plan to the Department within 30 days of release of the Blue Drop Report.

Water Services Authority:	**Madibeng Local Municipality**
Water Services Providers:	**Madibeng Local Municipality**

Municipal Blue Drop Score 2011: **36.72%**

Performance Area	*Systems*	**Brits**	**Schoemansville**
Water Safety Planning Process & Incident Response Management		**38**	**38**
Process Control, Maintenance & Management Skills		**35**	**45**
Monitoring Programme		**28**	**43**
Credibility of Sample Analyses		**65**	**65**
Submission of Results		**20**	**20**
Drinking Water Quality Compliance		**45**	**45**
Performance Publication		**0**	**0**
Asset Management		**51**	**10**
Bonus Scores		*0*	*0*
Penalties		*0.5*	*0.5*
Blue Drop Score (2011)		**37.24% (↑)**	**33.66% (↑)**
Blue Drop Score (2010)		03.88%	04.13%
System Design Supply Capacity (Ml/d)		60	10
System Operational Capacity		92%	110%
Population Served by System		**NI**	**NI**
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		**97.33% (10 months)**	**97.33% (10 months)**
Chemical Compliance (12 months)		**100.00% (5 months)**	**100.00% (5 months)**

Regulatory Impression:

The Department acknowledges the work that commenced to develop water safety plans, the Municipality is encouraged to continue with implementation of findings. Outcomes of the risk assessment should be used to improve holistic drinking water quality (DWQ) management. The Department further wishes to see improvement in DWQ compliance. Management support is needed for implementation of the water safety plan as well as for securing funds.

Despite numerous communiqué between the WSA and the Inspectors, as well as an attempt to advise the WSA to upload the data on the Blue Drop System (BDS), no data was uploaded on the Blue Drop System at time of the confirmation assessment. The lack of cooperation by Madibeng Local Municipality towards the National programme intent to inform the public on local municipal drinking water services cannot be entertained by the Department.

It is crucial for the municipality to note that even though the Blue Drop certification process is part of incentive-based regulation, assessments are compulsory. Water Service Authorities and Water Service Providers are compelled under law to provide the necessary information required to do a proper analysis on the quality of the water services. Please refer to the following Sections of the Water Services Act (Act 109 or 1997) for clarity:

- Section 19: Institutional arrangements
- Section 23: responsibility to reveal information
- Section 62: Right to regulate
- Section 82: Offence to withhold information

On conclusion of the assessments, DWA was encouraged to note that the municipality could explain the current situation and what they plan to do, are doing to improve DWQ. DWA also noted that funding has been availed to turn around the situation, support from Municipal Management, DWA North West and Magalies Water acknowledged.

Findings

1. Areas of improvement are noted (water safety plan, skills, monitoring programme, planning) this is substantiated by the Municipal Blue Drop score of 04.0% in 2010 to 36.72% - it is hoped that these positive patterns will affect other areas of operations.

2. The Municipality is advised to publish their drinking water quality management performance against the requirements of SANS 241, this will improve the confidence of the public in the ability of the municipality to provide safe water.

Water Services Authority:	**Maquassi Hills Local Municipality**
Water Services Providers:	**Sedibeng Water** [a]

Municipal Blue Drop Score 2011: **56.75%**

Performance Area	*Systems*	**Maquasi distribution** [a]	**Maquasi bulk** [a]
Water Safety Planning Process & Incident Response Management		**0**	**91**
Process Control, Maintenance & Management Skills		**75**	**100**
Monitoring Programme		**30**	**75**
Credibility of Sample Analyses		**50**	**100**
Submission of Results		**0**	**100**
Drinking Water Quality Compliance		**0**	**60**
Performance Publication		**0**	**100**
Asset Management		**30**	**85**
Bonus Scores		*6.8*	*5.5*
Penalties		*0*	*0*
Blue Drop Score (2011)		**24.25% (↓)**	**87.27% (↑)**
Blue Drop Score (2010)		64.88%	64.88%
System Design Supply Capacity (Ml/d)		360	360
System Operational Capacity		46%	46%
Population Served by System		**NI**	**NI**
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		**87.96% (6 months); WSP: 97.06%**	**87.96% (6 months); WSP: 97.06%**
Chemical Compliance (12 months)		**100% (6 months); WSP: 100% (2 months)**	**100% (6 months); WSP: 100% (2 months)**

Regulatory Impression:

DWA is seriously concerned about the quality of drinking water within Maquassi Hills Local Municipality. The two water supply systems operated by Maquassi Hills Local Municipality, scored less than 90% for microbiological compliance. This represents a serious health risk to residents, disinfection should improve as a matter of urgency.

On a positive note, performance for the Bulk supply showed improvement against all criteria, this is encouraging to the Department.

Water Services Authority:	**Matlosana Local Municipality**
Water Services Providers:	**Midvaal Water Company** [a]

Municipal Blue Drop Score 2011: **95.38%**

Performance Area	*Systems*	**Matlosana** [a]
Water Safety Planning Process & Incident Response Management		**96**
Process Control, Maintenance & Management Skills		**100**
Monitoring Programme		**100**
Credibility of Sample Analyses		**100**
Submission of Results		**100**
Drinking Water Quality Compliance		**80**
Performance Publication		**100**
Asset Management		**100**
Bonus Scores		*2.3*
Penalties		*0*
Blue Drop Score (2011)		**95.38% (↑)**
Blue Drop Score (2010)		59.63%
System Design Supply Capacity (Ml/d)		320
System Operational Capacity		39%
Population Served by System		**408 375**
Ave. Daily Consumption per Capita (l)		305
Microbiological Compliance (12 months)		**96.43%; WSP: 99.88%**
Chemical Compliance (12 months)		**100.00% (1 month); WSP: 100.00%**

Regulatory Impression:

The Department wishes to congratulate the shared team effort displayed by the municipality to lift the Blue Drop score to Blue Drop certification status.

The regulator is most optimistic regarding the continuous improvement of the DWQ management performance of the municipality. Comparing the Municipal Blue Drop Score since 2009, when the municipality presented no information for assessment, DWA noted continued improvement - from 59.63% (2010) to 95.38 in 2011. This is exceptional performance by the LM, supported by Midvaal Water. The Department is very impressed with the improved submission of DWQ data (from 1 month submission in 2010 to 12 months submission in 2011).

The municipality is encouraged to maintain the Blue Drop certification status in the future Blue Drop assessments.

Water Services Authority:	**Moses Kotane Local Municipality**
Water Services Providers:	**Moses Kotane LM; Magalies Water** [a]

Municipal Blue Drop Score 2011: **31.51%**

Performance Area	*Systems*	**Vaalkop** [a]	**Madikwe**	**Molatedi**
Water Safety Planning Process & Incident Response Management		**0**	**0**	**0**
Process Control, Maintenance & Management Skills		**0**	**53**	**33**
Monitoring Programme		**13**	**56**	**59**
Credibility of Sample Analyses		**31**	**38**	**34**
Submission of Results		**100**	**0**	**50**
Drinking Water Quality Compliance		**80**	**45**	**50**
Performance Publication		**0**	**0**	**0**
Asset Management		**0**	**0**	**0**
Bonus Scores		*0*	*0*	*0*
Penalties		*0*	*0.6*	*0*
Blue Drop Score (2011)		**31.78% (↓)**	**26.29% (↓)**	**28.34% (↓)**
Blue Drop Score (2010)		56.85%	47.88%	36.75%
System Design Supply Capacity (Ml/d)		200	2.4	0.6
System Operational Capacity		100%	87.5%	108%
Population Served by System		**21 500**	**24 292**	**1 419**
Ave. Daily Consumption per Capita (l)		>500	85	456
Microbiological Compliance (12 months)		**98.66%; WSP: No data**	**100.00% (8 months)**	**95.45% (11 months)**
Chemical Compliance (12 months)		**99.26% (10 months); WSP: No data**	**No data**	**100.00% (1 month)**

Performance Area	*Systems*	**Pella**	**Matau**
Water Safety Planning Process & Incident Response Management		**0**	**0**
Process Control, Maintenance & Management Skills		**33**	**23**
Monitoring Programme		**70**	**37**
Credibility of Sample Analyses		**37**	**24**
Submission of Results		**50**	**0**
Drinking Water Quality Compliance		**30**	**0**
Performance Publication		**0**	**0**
Asset Management		**0**	**0**
Bonus Scores		*0*	*0*
Penalties		*0.3*	*0*
Blue Drop Score (2011)		**23.62% (↓)**	**07.17% (→)**
Blue Drop Score (2010)		50.63%	NA
System Design Supply Capacity (Ml/d)		1.2	1.2
System Operational Capacity		75%	75%
Population Served by System		**13 776**	**7 713**
Ave. Daily Consumption per Capita (l)		65	116
Microbiological Compliance (12 months)		**96.77% (11 months)**	**91.67% (7 months)**
Chemical Compliance (12 months)		**100.00% (1 month)**	**100.00% (1month)**

Regulatory Impression:

The WSA showed no improvement since 2009, a pattern of digresses is however noted against all requirements of drinking water quality management performance. The lack of a water safety plan compromises the institution's ability to effectively implement a proactive management approach.

The lack of a Drinking Water Incident Management Protocol & Water Quality Incident Register concerns the Department. In the event that the plants face a disaster or emergency situation, the municipality would not be in a position to deal with such disaster since the procedures are not in place.

The Department has no confidence in the ability of Moses Kotane to render a safe and sustainable Drinking Water Quality (DWQ) management services from all the supply systems since DWQ compliance is poor.

It is crucial for the municipality to note that even though the Blue Drop certification process is part of incentive-based regulation, assessments are compulsory. Water Service Authorities and Water Service Providers are compelled under law to provide the necessary information required to do a proper analysis on the quality of the water services. Please refer to the following Sections of the Water Services Act (Act 109 or 1997) for clarity:

- Section 19: Institutional arrangements
- Section 23: responsibility to reveal information
- Section 62: Right to regulate
- Section 82: Offence to withhold information.

NB: In light of the above, the Regulator is not satisfied with the overall performance of drinking water quality management in Moses Kotane. The WSA is requested to submit a Corrective Action Plan to the Department within 30 days of release of the Blue Drop Report.

Findings

1. Process control and operation needs to receive urgent attention to ensure compliance to the regulated drinking water quality standards.

2. All five systems do not monitor flow and are unable to measure if the system capacity is still sufficient for the daily operational flow.

3. None of the 5 plants presented sufficient proof of process control, maintenance & management skills, water safety plans & incident response management, adequate monitoring programmes or asset management.

4. The lack of a Drinking Water Incident Management Protocol & Water Quality Incident Register from the Municipality is a significant concern to the Department. In the event that any of the plants faces a disaster or emergency situation, the municipality would not be in a position to deal with such disaster since procedures are not in place.

5. The municipality is required to give urgent attention to the implementation of adequate monitoring and to adjust process control according to the findings of continuous compliance and operational monitoring.

6. It is crucial that the Municipality pursues the completion of the Risk Assessments of catchment, treatment works and reticulation. The Risk Assessment must indicate that the treatment facility has the ability to adequately treat the water from raw water quality to DWQ complying with SANS 241.

Water Services Authority:	**Moretele Local Municipality**
Water Services Providers:	**Magalies Water [a]; City of Tshwane [b]**

Municipal Blue Drop Score 2011: **33.08%**

Performance Area	*Systems*	**Moretele [a;b]**
Water Safety Planning Process & Incident Response Management		**13**
Process Control, Maintenance & Management Skills		**90**
Monitoring Programme		**34**
Credibility of Sample Analyses		**58**
Submission of Results		**100**
Drinking Water Quality Compliance		**5**
Performance Publication		**0**
Asset Management		**18**
Bonus Scores		*6.8*
Penalties		*0.8*
Blue Drop Score (2011)		**33.08% (→)**
Blue Drop Score (2010)		NA
System Design Supply Capacity (Ml/d)		60
System Operational Capacity		NI
Population Served by System		**186 283**
Ave. Daily Consumption per Capita (l)		-
Microbiological Compliance (12 months)		**96.77%; WSP: 97.81%**
Chemical Compliance (12 months)		**No data; WSP: 100.00%**

Regulatory Impression:

The Department commends the performance of Magalies water during this Blue Drop assessment period. The Officials were justly prepared and placed the required value to monitoring, this ensured the continuous improvement still being witnessed towards achieving the Blue Drop Certification.

The Regulator is impressed by the WSA who submitted 12 months data of Microbiological compliance.

Findings

1. The Department notes that this is the first Blue Drop assessment for Moretele LM, DWA is therefore encouraged by the performance of Moretele LM even though the standard is still far from what is expected. However, with the support of Magalies Water, the WSA and WSP is encouraged to improve on their performance.
2. The Department advises the WSA to pursue a full SANS 241 analyses on the raw water source, the WSA / WSP must then monitor the risks in the compliance monitoring programmes.
3. There remains a need to commence effective and relevant chemical monitoring.
4. The following areas require drastic intervention by the Municipality: planning, amending the monitoring programme, Drinking water quality compliance, publication for the results as well as the asset management.

Water Services Authority:	**Ngaka Modiri Molema District Municipality**
Water Services Providers:	**Ditsobotla LM [a]; Ramotsere Moiloa LM [b]; Mafikeng LM [c]**

Municipal Blue Drop Score 2011: **0.66%**

Performance Area	*Systems*	**Itsoseng Boreholes / Lichtenburg [a]**	**Motswedi [b]**	**Mafikeng town & Boreholes [c]**
Water Safety Planning Process & Incident Response Management		**0**	**0**	**0**
Process Control, Maintenance & Management Skills		**0**	**0**	**0**
Monitoring Programme		**18**	**14**	**8**
Credibility of Sample Analyses		**38**	**10**	**23**
Submission of Results		**0**	**20**	**20**
Drinking Water Quality Compliance		**5**	**20**	**20**
Performance Publication		**0**	**0**	**0**
Asset Management		**0**	**0**	**0**
Bonus Scores		*0*	*0*	*0*
Penalties		*0*	*0*	*0*
Blue Drop Score (2011)		**05.14% (→)**	**08.85% (↓)**	**08.89% (↓)**
Blue Drop Score (2010)		NA	30.00%	31.88%
System Design Supply Capacity (Ml/d)		NI	NI	NI
System Operational Capacity		NI	NI	NI
Population Served by System		**NI**	**NI**	**NI**
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		**92.59% (5 months)**	**83.78% (3 months)**	**76.92% (6 months)**
Chemical Compliance (12 months)		**100.00% (10 months)**	**99.82% (11 months)**	**99.82%**

Regulatory Impression:

The Ngaka Modiri Local Municipality has performed unsatisfactorily during the Blue Drop assessments. The Municipality did not attend the Confirmation session even after numerous communications. It is clear that the Municipality does not take cognisance of the need to provide the community with good water quality as the quality of water being served to the public is not up to standard.

The overall municipal score of 31.40% (2010 BD assessment) to 0.66% (2011 BD assessment) clearly indicates that the water services are not being managed properly according to the expectations of the Drinking Water Quality regulation programme. What makes this challenge worse is the poor submission of the water quality compliance to the Department (BDS).

The Municipality is instructed to inform the communities regarding the water quality they are serving them and provide alternative good drinking water quality to the public. This Municipality will be targeted for a more focussed DWQ performance monitoring verification audit during 2011.

Findings

1. The WSA presented no flow information on any of the systems, DWA cannot therefore measure if the plant capacities is sufficient.

2. None of the 3 plants presented sufficient proof of process control, maintenance & management skills, water safety plans & incident response management, adequate monitoring programmes or asset management.

3. The lack of a Drinking Water Incident Management Protocol & Water Quality Incident Register from the Municipality is a significant concern to the Department. In the event that any of the plants faces a disaster or emergency situation, the municipality would not be in a position to deal with such disaster since procedures are not in place.

4. The municipality is required to give urgent attention to the implementation of adequate monitoring and to adjust process control according to the findings of continuous compliance and operational monitoring.

5. It is crucial that the Municipality pursues the completion of the Risk Assessments of catchment, treatment works and reticulation. The Risk Assessment must indicate that the treatment facility has the ability to adequately treat the water from raw water quality to DWQ complying with SANS 241.

NB: The Ngaka Modiri Molemar is requested to submit a Corrective Action Plan regarding the performance of drinking water quality management to the Department within 30 days of release of the Blue Drop Report.

Water Services Authority:	**Rustenburg Local Municipality**
Water Services Providers:	**Rustenburg LM; Magalies Water [a]; Rand Water [b]**

Municipal Blue Drop Score 2011: **93.24%**

Performance Area	*Systems*	**Rustenburg Town [a;b]**	**Vaalkop [a]**	**Marikana [b]**	**Rustenburg Borehole**
Water Safety Planning Process & Incident Response Management		**96**	**82**	**95**	**78**
Process Control, Maintenance & Management Skills		**100**	**98**	**94**	**18**
Monitoring Programme		**85**	**89**	**91**	**49**
Credibility of Sample Analyses		**90**	**64**	**93**	**100**
Submission of Results		**95**	**100**	**100**	**0**
Drinking Water Quality Compliance		**75**	**100**	**90**	**85**
Performance Publication		**95**	**100**	**100**	**100**
Asset Management		**90**	**85**	**98**	**0**
Bonus Scores		*3.3*	*1.7*	*1.7*	*6.8*
Penalties		*0.1*	*0*	*0*	*0.3*
Blue Drop Score (2011)		**90.97% (↓)**	**93.60% (↓)**	**95.69% (→)**	**65.62% (↓)**
Blue Drop Score (2010)		95.10%	95.10%	95.10%	95.10%
System Design Supply Capacity (Ml/d)		Magalies=134 Rand Water=1400	210	1400	0.4(Yield)
System Operational Capacity		Magalies=25% Rand Water=3.21%	14%	0.2%	NI
Population Served by System		**315 000**	**100 000**	**15 000**	**5 000**
Ave. Daily Consumption per Capita (l)		Magalies water=26 Rand water =4.3	<50	<50	-
Microbiological Compliance (12 months)		**98.79%**	**97.90%**	**100% (7 months)**	**100% (2 months)**
Chemical Compliance (12 months)		**100.00%**	**100.00%**	**100.00%**	**100% (2 months)**

Regulatory Impression:

The Department wishes to applaud the Rustenburg Municipality for the shared team effort displayed by the municipality together with the two Water Services Authorities (Rand Water Magalies Water) in achieving the Blue Drop certification status.

It must be noted that Rustenburg LM was previously assessed as one and during the 2011 Blue Drop Assessment the LM separated their supplying stem into four systems. Out of four systems, one system managed to achieve the Blue Drop Certification.

According to the inspectors, the team from Rustenburg interviewed were prepared for the assessment, cooperative, enthusiastic and showed commitment throughout the entire assessment. The WSA and Magalies Water responded most positively and addressed all the gaps that were identified at the assessment session. This was really a remarkable achievement and shows Rustenburg's commitment towards complying with the Blue Drop Certification Programme. Based on the Blue Drop score from the other systems it is clear that they are not far from achieving the expected results.

Findings

1. It is noted that there is no regular submission of Drinking water quality by the Municipality to the Department and that needs to be rectified as soon as possible.

2. Immediate intervention is required at the Rustenburg Boreholes with regards to the process control, monitoring programme, submission of results and asset management.

The Vaalkop Water Treatment System was inspected to verify the Blue Drop findings and the following refers:

3. Plant classification certificate not displayed, however it was presented during the actual assessment.

4. Some documents like logbook and job cards were not on site at time of inspection since they are kept, Magalies water.

5. The garden well maintained and is neat.

6. Entrance signage in place, well displayed, fences good condition.

7. On-site monitoring equipment in place, staff has good knowledge of use.

8. Chlorination and final sampling point adequate.

Water Services Authority:	**Tlowe Local Municipality**
Water Services Providers:	**Tlowe Local Municipality**

Municipal Blue Drop Score 2011: **96.87%**

Performance Area	*Systems*	**Tlokwe**
Water Safety Planning Process & Incident Response Management		**100**
Process Control, Maintenance & Management Skills		**100**
Monitoring Programme		**100**
Credibility of Sample Analyses		**100**
Submission of Results		**100**
Drinking Water Quality Compliance		**100**
Performance Publication		**100**
Asset Management		**75**
Bonus Scores		*1.0*
Penalties		*0*
Blue Drop Score (2011)		**96.87% (↑)**
Blue Drop Score (2010)		95.11%
System Design Supply Capacity (Ml/d)		73.6
System Operational Capacity		49.73%
Population Served by System		**138 872**
Ave. Daily Consumption per Capita (l)		259
Microbiological Compliance (12 months)		**100.00%**
Chemical Compliance (12 months)		**100.00%**

Regulatory Impression:

The Tlokwe Local Municipality performed exceptionally well during the Blue Drop assessments and managed to uphold their Blue Drop certification status. The management at Tlokwe as well as their technical team are enthusiastic and should be applauded for their passion and commitment.

Findings

It is noted from the Score card that the Tlokwe LM still has room for improvement with regards to the Drinking Water Asset Management.

The Tlokwe Water Treatment System was inspected to verify the Blue Drop findings and the following refers:

1. The WTW is classified as a Class A plant and all process controllers registration status are clearly displayed in the office.
2. All relevant manuals, logbooks, flow data and failure response management protocol were evident on site. Even though the flow meters are available at the works, history of calibration must still be established.
3. The works and the building are well maintained.
4. Gardens, lawns and safety signs are generally good and need some maintenance.
5. All Staff at the works are optimistic, hands-on technical and scientific managers, pleasant and healthy workplace environment.
6. There is a need of the replacement of some pumps since they appear to be ageing. Primary and secondary settling tanks shows good flow distribution, good settling takes place.

7. Chlorination is well controlled with proper sampling point and contact time.
8. A little bit of work must be done at the sludge dams.

Water Services Authority:	**Ventersdorp Local Municipality**
Water Services Providers:	**Ventersdorp Local Municipality**

Municipal Blue Drop Score 2011: **34.99%**

Performance Area	*Systems*	**Boikhutso**	**Goedgevonden**	**Tsese**
Water Safety Planning Process & Incident Response Management		**0**	**0**	**0**
Process Control, Maintenance & Management Skills		**3**	**3**	**3**
Monitoring Programme		**25**	**23**	**0**
Credibility of Sample Analyses		**53**	**53**	**53**
Submission of Results		**100**	**50**	**0**
Drinking Water Quality Compliance		**53**	**53**	**45**
Performance Publication		**80**	**80**	**80**
Asset Management		**0**	**0**	**0**
Bonus Scores		*4.5*	*4.5*	*4.5*
Penalties		*0*	*0*	*0*
Blue Drop Score (2011)		**38.63% (↑)**	**35.90% (↑)**	**28.88% (↑)**
Blue Drop Score (2010)		19.25%	19.25%	19.25%
System Design Supply Capacity (Ml/d)		NI	NI	NI
System Operational Capacity		NI	NI	NI
Population Served by System		**NI**	**NI**	**NI**
Ave. Daily Consumption per Capita (l)		-	-	-
Microbiological Compliance (12 months)		**100.00%**	**100.00% (11 months)**	**100.00% (2 months)**
Chemical Compliance (12 months)		**No data**	**No data**	**No data**

Performance Area	*Systems*	**Ventersdorp**	**Welgevonden**
Water Safety Planning Process & Incident Response Management		**0**	**0**
Process Control, Maintenance & Management Skills		**13**	**3**
Monitoring Programme		**25**	**8**
Credibility of Sample Analyses		**53**	**53**
Submission of Results		**50**	**100**
Drinking Water Quality Compliance		**53**	**53**
Performance Publication		**80**	**80**
Asset Management		**0**	**0**
Bonus Scores		*4.5*	*4.5*
Penalties		*0*	*0*
Blue Drop Score (2011)		**34.50% (↑)**	**36.88% (↑)**
Blue Drop Score (2010)		18.50%	19.25%
System Design Supply Capacity (Ml/d)		NI	NI
System Operational Capacity		NI	NI
Population Served by System		**10 000**	**30 000**
Ave. Daily Consumption per Capita (l)		-	-
Microbiological Compliance (12 months)		**96.47%**	**100.00% (11 months)**
Chemical Compliance (12 months)		**No data**	**No data**

Regulatory Impression:

The performance of Ventersdorp Local Municipality remains unsatisfactory. However it is encouraging to note that the Municipality has shown improvement in the drinking water quality management.

During the previous cycle 2010 of Blue Drop Certification 8 supply systems were assessed and during the 2011 Blue Drop Certification only 5 supply systems were assessed.

Findings

1. The Department urges the Municipality to commence the development of the water safety plans and the risk assessment should be used to improve holistic DWQ management. Management support is needed for implementation of the water safety plan as well as securing funds.

2. Areas of improvement are noted (water safety plan, skills, monitoring programme, planning) and are substantiated by the Municipal Blue Drop score of 19% in 2010 to 34.99%. It is hoped that these positive patterns will affect other areas of operations as well.

3. The Municipality is advised to publish the drinking water quality management performance against the requirements of SANS 241 as this will allow the public know and have much confidence to the Municipality in terms of the DWQ supplied to them.