





### **EXECUTIVE SUMMARY**

## 1. Background

- 1.1 Access to sufficient water is a right as enshrined in the Constitution. However, it cannot be said that this right is realized if the quality of that water poses health risks for human consumption. This is the premise from which the incentive- based regulation Blue Drop (BD) Certification Programme was developed in 2008. The BD Certification Programmeallows for proactive management and regulation of drinking water quality management based upon legislated norms and standards, as well as international best practice. This involves auditing of municipal water supply systems based on defined assessment criteria per audit cycle. The assessment criteria include drinking water quality compliance as prescribed through SANS 241, water safety planning which focuses on risk management amongst others.
- 1.2 Immense improvement in drinking water management has been observed since the inception of the Blue Drop Certification Programme with 98 systems achieving Blue Drop status in 2012 compared to 25 systems in 2009. This improvement was also noted in the national average Blue Drop score which increased from 51.4% in 2009 to 87.6% in 2012.

## 2. 2014 Blue Drop Report

- 2.1 The 2014 Blue Drop Report (herewith referred to as "The Report") provides information on the performance of Water Services Authorities (WSAs) with respect to drinking water management from January to December 2013. 1036 drinking water supply systems were audited. The Report not only provides audit details on drinking water quality compliance with respect to the South African National Standard for drinking water (SANS 241) but also include:
  - assessment of water safety planning which is a risk-based approach in drinking water quality management dealing with associated risks and mitigation thereof,
  - Asset management (operation & maintenance, design capacity, budgeting)
  - Technical skills availability for operation of the plants, and
  - Management support.
- 2.2 Despite the huge improvements in the previous years, the 2014 Blue Drop Report shows a reduction of 8% in the national average score from 87.6 % in 2012 to 79.6% in 2014. Possible factors that may have contributed to the decline in performance include limited application of water safety planning and introduction of the No Drop criteria looking at managing water losses within supply systems. Drinking water quality compliance showed great improvement with more than 80% of the supply systems complying with microbiological standards as per SANS 241: 2006 whilst chemical compliance needs much attention with 24% of systems showing consistent compliance. This does not mean that the water was not safe for human consumption at the time but it was observed that data submission/ uploading on the Blue Drop system was lagging behind including compliance to chemical monitoring programme as registered on the Blue Drop System for some water supply systems. Table 1 below depicts the national performance with respect to the 2014 audit cycle.

Table 1: National comparative performance since 2009

Performance	2009	2010	2011	2012	2014
category					
National	51.4%	67.2%	72.9%	87.6%	79.6%
Blue Drop					
Score					
Number of	107	153	162	153	152
WSAs					
assessed					
Number of	402	787	914	931	1036
systems					
assessed					
Number of	25	38	66	98	44
systems					
achieving					
Blue Drop					
status					

- 2.3 On asset management, the results show that 68% of systems apply good asset management practices. However there is still room for improvement with respect to operation and maintenance as some of the systems didn't have dedicated budget for this whilst the asset register is kept by the finance department. The design capacity of some treatment plants need to be looked into as 48% of these plants are already operating at 75% or more of their design capacity.
- 2.4 As part of its effort to implement water conservation and demand management, the No Drop criteria was introduced in this audit cycle and this only contributed 3% to the overall Blue Drop score. This criteria looks at water use efficiency and water loss management within a system and will assist municipalities in reducing the high volumes of water lost during purification process and distribution thereof. Only 30 systems were found to be 100 % compliant with respect to the No Drop criteria whilst 18 % (191) of the plants showed good performance.
- 2.5 The Report also provide details with respect to risk management through the Blue Drop risk rating (BDRR) tool which serves as a precautionary tool for water services authorities informing them about possible risks and the level thereof within their supply systems that may impact negatively on the supply of drinking water. The Blue Drop risk rating tool therefore empowers WSAs to implement strategic and operational decisions to improve service delivery or mitigate identified risks. Compared to 2013, there is immense improvement with respect to BDRR with systems in low risk category increasing from 16 to 365 in 2014 whilst those in critical risk rating category decreased from 234 in 2013 to 26 in 2014. Caution should be exercised not to correlate the Blue Drop scores directly with the Blue Drop Risk Ratings. The Blue Drop score reflects the result for the complete drinking water business for a specific system, while the Risk Ratings are only focused on specific areas within the drinking water business
- 2.6 Even though the number of systems achieving Blue Drop status decreased by 55%, 533 systems (51%) have improved scores compared to the previous audit cycle with seven (7) systems attaining Blue Drop status for the first time. A total of 44 systems achieved Blue Drop status. Systems that achieved Blue Drop Certification status are provided in Table 2 below.

Table 2: Water supply systems that achieved Blue Drop Certification

Province	WSA	System	WSP	2011 BD	2012 BD	2014 BD
KwaZulu-Natal	Lembe District Municipality	Dolphin Coast	Umgeni Water, Sembcorp Siza Water	97.03%	98.30%	99.19%
Mpumalanga	Steve Tshwete Local Municipality	Hendrina OCH	Optimum Coal Holdings	97.96%	98.25%	99.07%
KwaZulu-Natal	Msunduzi Local Municipality	Msunduzi	Umgeni Water	95.60%	95.38%	97.97%
Free State	Maluti-a-Phofung Local Municipality	Makwane	Maluti-a-Phufong LM, MAP Water	95.74%	97.20%	97.90%
Free State	Maluti-a-Phofung Local Municipality	Fika Patso	Maluti a Phufong, MAP Water	86.54%	82.28%	97.65%
Mpumalanga	Steve Tshwete Local Municipality	Middelburg Mhluzi	Steve Tshwete LM	97.53%	98.25%	97.63%
Gauteng	City of Tshwane Metropolitan Municipality	Rietylei	City of Tshwane, Rand Water	97.22%	99.20%	97.56%
Free State	Maluti-a-Phofung Local Municipality	Harrismith	Maluti-a-Phufong, MAP Water	95.74%	96.32%	97.56%
Mpumalanga	Steve Tshwete Local Municipality	Komati Power Station	Eskom, Steve Tshwete LM	92.37%	97.00%	97.36%
Free State	Matjabeng Local Municipality	Virginia	Sedibeng Water	79.80%	95.24%	97.27%
Gauteng	City of Tshwane Metropolitan Municipality	Roodeplaat	City of Tshwane	95.48%	96.88%	97.22%
North West	Tlokwe City Council Local Municipality	Tlokwe	Tlokwe City Council LM	96.87%	98.45%	97.20%
Mpumalanga	Mbombe la Local Municipality	Nelspruit	Sembcorp-Silulumanzi	96.11%	99.15%	97.13%
Gauteng	City of Tshwane Metropolitan Municipality	Bronkhorst-spruit	City of Tshwane	81.24%	95.33%	96.80%
Mpumalanga	Mbombe la Local Municipality	Matsulu	Sembcorp-Silulumanzi	95.56%	96.22%	96.68%
Gauteng	Ekurhuleni Metropolitan Municipality	Ekurhuleni Metropolitan Municipality	Rand Water	97.44%	98.95%	96.62%
Mpumalanga	Steve Tshwete Local Municipality	Arnot / Rietkuil Power Station	Eskom, Steve Tshwete LM	97.36%	95.29%	96.56%
Western Cape	Overstrand Local Municipality	Greater Hermanus	Overstrand LM	87.23%	97.93%	96.44%
KwaZulu-Natal	eThekwini Metropolitan Municipality	eThekwini Main	Umgeni Water, Tongaat Hulett, eThekwini MM	96.05%	98.79%	96.18%
Northern Cape	//Khara Hais Local Municipality	AH September (Upington)	//Khara Hais LM	43.96%	72.32%	96.17%
Gauteng	City of Johannesburg Metropolitan Municipality	Greater Johannesburg	Rand Water, Johannesburg Water	97.63%	98.92%	96.06%
Gauteng	City of Tshwane Metropolitan Municipality	Findley Fountains	City of Tshwane	92.22%	97.02%	96.04%
KwaZuki-Natal	iLembe District Municipality	Groubille	Umgeni Water	95.01%	95.94%	96.01%
Western Cape	Witzenberg Local Municipality	Wolseley	Witzenberg LM	96.55%	96.99%	96.00%
Western Cape	Witzenberg Local Municipality	Tubagh	WitzenbergLM	95.68%	95.64%	95.89%
Western Cape	City of Cape Town Metropolitan Municipality	City of Cape Town	City of Cape Town	97.61%	98,14%	95.86%
Western Cape	Witzenberg Local Municipality	Ceres	WitzenbergLM	98.75%	98.44%	95.84%
Mpumalanga	Mbombe la Local Municipality	Karino	Sembcorp-Silulumanzi		98.25%	95.81%
KwaZulu-Natal	uMgungundlovu District Municipality	Howick, Camperdown & Mshwathi	uMgeni Water, uMgungundovu DM	91.12%	98.78%	95.69%
Gauteng	City of Tshwane Metropolitan Municipality	Summ erplace	City of Tshwane		66.33%	95.53%
KwaZulu-Natal	City of uMhlathuze	Nisezi	uMhlathuæ Water	88.90%	98.39%	95.38%
Mpumalanga	Steve Tshwete Local Municipality	Hendrina Pullenshope Power Station	Eskom, Steve Tshwete LM	97.75%	96,26%	95.27%

Northern Cape	//Khara Hais Local Municipality	Ntsikelelo	//Khara Hais UM	32.94%	37.61%	95.24%
Western Cape	Beaufort West Local Municipality	Beaufort West	Beaufort West LM	95.44%	96.27%	95.22%
Free State	Matjabeng Local Municipality	Ventershung	Sedibeng Water	80.81%	95.24%	95.11%
Gauteng	Midvaal Local Municipality	Meyerton	Rand Water	85.73%	85.95%	95.10%
Western Cape	Witzenberg Local Municipality	Prince Alfred Harriet	WitzenbergLM	9819%	96.51%	95.09%
Limpopo	Polokwane Local Municipality	City Polokwane	Lepelle Northern Water	95.05%	92.03%	95.08%
Mpumalanga	Mhombela Local Municipality	Primkop	Serribcorp-Sikukurranzi	91.13%	97.97%	95.06%
Western Cape	Witzenberg Local Municipality	Op die Berg	Witzenberg LM	95.00%	96.36%	95.06%
Gauteng	City of Tshwane Metropolitan Municipality	Cullinan	Magalies Water			95.05%
KwaZulu-Natal	iLembe District Municipality	Ndwedwe	Umgeni Water	72.41%	96.72%	95.04%
KwaZulu-Natal	City of uMhlathuze	Ngwelezane	WSSA	91.35%	96.37%	95.02%
Free State	Matjabeng Local Municipality	Hennenman	Sedibeng Water	80.78%	95.24%	95.01%

# 2.7 Provincial performance is summarized as follows:

- Gauteng Province leads with an overall BD score of 92% with 97% of its systems in low risk category followed by Western Cape and KwaZulu- Natal with scores of 89% and 86% respectively.
- Mpumalanga showed an 8% improvement compared to 2012 with an overall BD score of 69%.
- Free State and Eastern Cape scores declined from 82% in 2012 to 75% and 72% respectively in 2014.
- Limpopo and North West Provinces are lagging behind with their scores declining by 17% from 79% in 2012 to 62% and 63% respectively in 2014.

Table 3 below provides Provincial performance.

Table 3: Provincial average Blue Drop performance

Blue Drop Pro	vincial trends	<u> </u>			
Province	2009	2010	2011	2012	2014
Gauteng	74%	86%	95%	98%	92%
Western					
Cape	60%	92%	94%	94%	89%
Kwa Zulu					
Natal	73%	66%	80%	92%	86%
Free State	54%	79%	77%	82%	75%
Eastern					
Cape	41%	55%	64%	82%	72%
Mpumalanga	40%	66%	62%	61%	69%
Northern					
Cape	40%	49%	64%	68%	68%
North West	28%	47%	62%	79%	63%
Limpopo	51%	65%	57%	79%	62%

## 2.8 Detailed performance per Province is provided below

### PROVINCIAL PERFORMANCE

## 2.8.1 Gauteng

The Gauteng Province has ten (10) WSAs with twenty nine (29) water supply systems. Of the 29 systems, Rand Water is operational in 17 systems, while Magalies Water and Johannesburg Water are operational in 3 and 2 systems respectively.

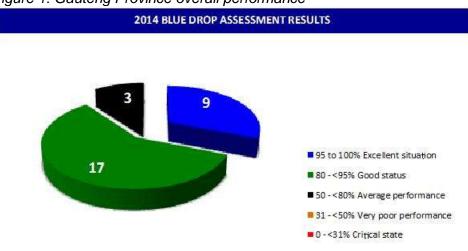
The overall 2014 Gauteng Province Blue Drop score declined by 6% while the Blue Drop performance also dropped in nine of the ten Water Services Authorities. The number of systems achieving Blue Drop Certification status also declined from 16 to 9 with 5 WSAs achieving BD status with scores more than 95%. Table 4 below shows the 9 systems that attained the BD status.

Table 4: Systems that achieved BD status in Gauteng

	BLUE DROP CERTIFIED SYSTEMS							
2014Log position	Blue Drop certified system	Blue Drop certified system Store		Water Services Provider				
1	Rietvlei	97.56%	City of Tshwane Metropolitan Municipality	City of Tshwane, Rand Water				
2	Roodeplaat	97.22%	City of Tshwane Metropolitan Municipality	Oty of Tshwane				
3	Bronkhorst-spruit	96.80%	City of Tshwane Metropolitan Municipality	City of Tshwane				
4	Elurhuleni Metropolitan Municipality	96.62%	Elcurhuleni Metropolitan Municipality	Rand Water				
5	Greater Johannesburg	96.06%	City of Johannesburg Metropolitan Municip	Rand Water, Johannesburg Water				
6	Findley Fountains	96.04%	City of Tshwane Metropolitan Municipality	City of Tshwane				
7	Summerplace	95.53%	City of Tshwane Metropolitan Municipality	City of Tshwane				
8	Meyerton	95.10%	Midvaal Local Municipality	Rand Water				
9	Cullinan	95.05%	City of Tshwane Metropolitan Municipality	Magalies Water				

The majority of the remaining systems (17) were deemed to be of good status (80 – <95% Blue Drop score). Only 3 systems scored on an average level (50% - <80%). Of importance is that no system performed very poorly, or was in a critical state. The Gauteng Province thus remains a best performing Province, despite the decline in overall performance. The diagram below (Figure 1)provides the overall performance within the Province.

Figure 1: Gauteng Province overall performance



Immense improvement was observed in Midvaal Local Municipality whose score increased from 84% in 2012 to 95% in 2014. Also, the number of systems achieving the BD status in the City of Tshwane increased to 6 in 2014 compared to 4 in 2012.

Ekurhuleni Metro is the best performing municipality with a BD score of 96.6% followed by City of Johannesburg at 96.06%, Midvaal at 94.65% and City of Tshwane with a score of 94.4% respectively.

The Blue Drop Certification status was lost in Westonaria Local Municipality (all 6 systems), one system in each of Randfontein, Mogale City, Merafong and Emfuleni local municipalities; while 2 new systems were certified in the City of Tshwane Metropolitan Municipality and 1 in Midvaal Local Municipality. The improvements in the 2 WSAs are commended, while the deterioration in other WSAs needs to be addressed to prevent further decline.

The average Blue Drop Risk Rating for the Province decreased marginally from 13.7% in 2012 to 17% in 2014. The major contributory factors on this are the observed increase in the operational capacity (increased from 77% in 2012 to 90% in 2014) and drinking water quality which increased from 13.3% to 26.75% in 2014. Even though the BDRR declined, it is encouraging that no system is in critical or high risk categories. However, the Onverwacht system in Tshwane needs focused attention as it falls within the medium risk category with a BDRR of 56.9%.

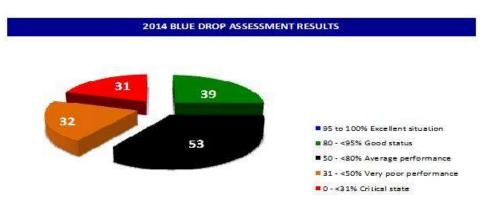
The major area recommended for improvement in the Gauteng Province, is Water Use Efficiency and Loss Management as performance below average (< 50 %) for any specific criterion is of concern to the Department. The 2014 assessment indicated 12 systems with below average performance for the Water Use Efficiency and Loss Management criterion, of which 10 systems were observed to be in a critical state.

## 2.8.2 Eastern Cape

There are 16 WSAs in the Eastern Cape Province supplying drinking water through 155 systems. 9 of the WSAs are supported by Water Services Providers (WSPs) with Amatola Water operational in 61 systems, Nelson Mandela Bay providing services in 2 district municipalities while Sintec SA Consulting services 1 system.

The general water service provision in the Province declined with 10% compared to 2012 from 82% to 72% in 2014 with 63 systems achieving scores of less than 50%, 53 systems displaying average performance whilst 39 systems displayed good performance. Figure 2 below provides the overall performance within the Province.

Figure 2: Overall Provincial performance



The fact that no system achieved BD Certification status is disheartening. This means that the 9 systems that attained the BD status in 2012 digressed in terms of their performance. Table 5 below provides the overall Provincial performance per WSA.

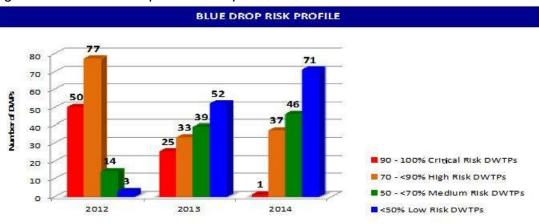
Table 5: EC Provincial performance trends

Blue Drop trends 2009 to 2014							
Water Services Authority	2009	2010	2011	2012	2014		
Alfred Nzo District Municipality	N/A	26%	53%	64%	63%		
Arrathole District Municipality	63%	68%	65%	75%	80%		
Baviaans Local Municipality	N/A	53%	24%	35%	26%		
Blue Crane Route Local Municipality	45%	30%	40%	59%	35%		
Buffalo City Metropolitan Municipality	68%	95%	91%	93%	73%		
Camdeboo Local Municipality	24%	37%	33%	52%	61%		
Chris Hani District Municipality	90%	53%	73%	75%	83%		
llsvezi Local Municipality	N/A	7%	27%	296	15%		
loe Ggabi District Municipality	65%	55%	83%	85%	75%		
Kou-Karrima Local Municipality	16%	16%	14%	6%	26%		
Kouga Local Municipality	N/A	61%	75%	61%	52%		
Malana Local Municipality	35%	28%	55%	72%	71%		
Ndlambe Local Municipality	62%	38%	21%	42%	49%		
Nelson Mandela Bay Metropolitan Municipality	85%	95%	90%	90%	72%		
OR Tambo District Municipality	45%	22%	44%	23%	49%		
Sundays River Valley Local Municipality	N/A	47%	36%	25%	36%		

Even though a general decline in performance was observed in this Province, an improvement in Blue Drop performance was noted in eight of the sixteen WSAs with an increase in the number of systems attaining Blue Drop scores between 50% and 95%, increasing from 87 in 2012 to 92 in 2014. The Chris Hani District Municipality (DM) improved with an overall BD score of 83.4 % andwas the top achiever within the Province. This was followed by the Amathole and Joe Gqabi DMs scoring 80% and 75% respectively.

The 2014 Blue Drop Risk Ratings for the Province decreased from 50.3% to 44.5% with the average municipal risk rating varying from 36% in the Nelson Mandela Bay Metro to 79% for Ikwezi LM. 37 water supply systems in the Province were classified in the High Risk category with one system in the Critical Risk category. The diagram (Figure 3) below depicts the comparative Provincial risk profile since 2012

Figure 3: Provincial comparative risk profile



Focused attention on drinking water quality and asset management is needed as 61 and 48 systems are in critical state in these two assessment criteria respectively. Also, the fact that the BDRR associated with drinking water quality increased from 27% in 2012 to 44.6% in 2014 indicates the need for implementation of proper mitigation measures. Another area requiring intervention is Water Use Efficiency and Water Loss Management as 102 systems displayed below average performance and 95 systems in a critical.

## 2.8.3 FREE STATE

Free State Province has twenty (20) Water Services Authorities assisted by Water Services Providers six (06) operating approximately thirty four (34) water supply systems. Bloem Water is operational in 16 systems, Sedibeng Water in 9 systems; Maluti-a-Phofung (MAP) Water 3 systems whilst Rand Water is operational in 2 systems. The Department assessed a total of seventy nine (79) water supply systems within the province as part of the 2014 Blue Drop audit cycle.

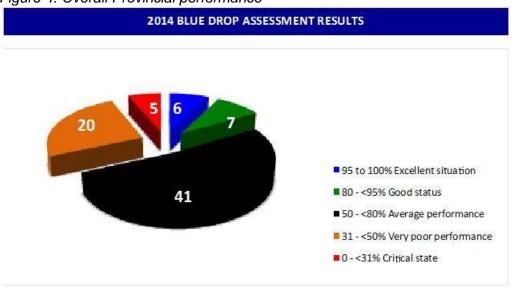
The general water services provision picture in the Province reveals that the water services management has declined by 7.2% from 82.1% in 2012 to 74.9%.in 2014. This decline of performance was further noted in 9 of the 20 WSAs and the number of water supply systems achieving Blue Drop Certification status for drinking water quality management excellence also declined from 7 to 6 supply systems. Table 6 below provides a list of systems that achieved BD certification status.

Table 6: FS Provincial Blue Drop Certified systems

		BLUE DROP CERT	THE DOTOTE HO	
2014 Log position	Blue Drop certified system	aystern Blue Drop	Water Services Authority	Water Services Provider
1	Makwane	97.90%	Maluti-a-Phofung Local Municipality	Maluti-a-Phufong LM MAP Water
2	Fika Patso	97. <del>EI</del> K	Makuti-a-Phofung Local Municipality	Maluti-a-Phufong, MAP Water
3	Harrismith	97.56%	Maluti-a-Phofung Local Municipality	Maluti-a-Phufong, MAP Water
1 <b>4</b>	Virginia	97.27%	Matjabeng Local Municipality	Sedibeng Water
5	Ventersburg	95.11%	Matjabeng Local Municipality	Sedibeng Water
6	Hennenman	95.01%	Matjabeng Local Municipality	Sedibeng Water

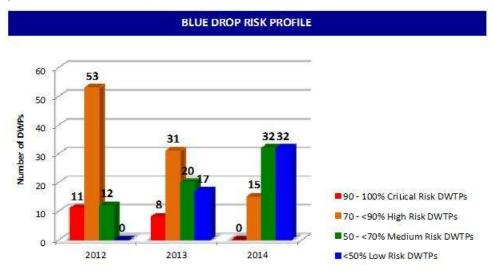
Maluti-a-Phofung Local Municipality together with Map water as WSP is the best performing municipality in the Province with an overall BD score of 97.66% followed by Matjabeng LM and Sedibeng Water, with a score of 93.60%. Nketoana Local municipality showed immense improvement from 19% in 2012 to 71% in 2014 whilst Phumelela LM also recorded a significant improvement, from 17.9% in 2012 to 61.3% in 2014. This is an outstanding achievement for both WSAs. It is disconcerting that Masilonyana and Mafube LMs performed poorly attaining BD scores of 30% and 29% respectively. The diagram below (Figure 4) shows the overall Provincial performance.

Figure 4: Overall Provincial performance



The average Blue Drop Risk Rating remained unchanged in 2014 following a significant decrease in 2013. However, the Department is encouraged to note that no drinking water systems were classified in the critical risk category compared to 8 systems identified in 2013. The lowest risk of 17% was achieved by Matjabeng local municipality while Nketoana and Masilonyana municipalities recorded highest risk of 75%. The 75% of Blue Drop risk rating of both municipalities is a major concern to the Department. The diagram below (Figure 5) shows the Provincial risk profile.

Figure 5: Provincial risk profile



It is evident from the Provincial performance that there are areas that need intervention and focused attention especially Masilonyana and Mafube LM. These aredrinking water quality compliance, implementation of identified monitoring programmes, process control and data submission in most of the systems.

### 2.8.4 KWA-ZULU NATAL

The Province has fourteen (14) Water Services Authorities providing water supply through 209 systems assisted by a significant number of Water Services Providers in 178 supply systems. Umgeni and Mhlathuze Water Boards are operational in 31 systems and 2 systems respectively, uThukela Water in 34 systems, Water and Sanitation Services SA in 89 systems, SembcorpSiza Water in 1 system, Amajuba LM in 5 systems, Ugu DM in 1 system, PixleyKaSeme Municipality in 1 system, City of Mhlatuze in 3 systems, Abaqulusi LM in 5 systems and to a lesser degree, a few other private companies such as Sappi in 2 systems, whilst Heartland Leasing, Spoornet, Talbot and Talbot and TongaatHulett operate 1 system each.

The provincial Blue Drop score decreased from 92.1 in 2012% to 86.1% in 2014 by 6%. Furthermore 61 systems have a Blue Drop score below 50% compared to 19 in 2012 while 18 water supply systems are in critical state achieving scores below 31%. The Blue Drop certified systems halved from 16 to 8. Table 7 provides a list of systems attaining BD certification status.

Table 7: KZN Provincial Blue Drop Certified systems

2014 Log	Blue Drop certified system	Blue Drop	Water Services Authority	Water Services
position	SO ESTE GOALSTON SOMEON TO ESTA	Score	SELVE SEARCH AND SECRETARY SERVENCES TO	Provider
1	Dolphin Coast	99.19%	iLembe District Municipality	Umgeni Water, Sembcorp Siza Wate
2	Msunduzi	97.97%	Msunduzi Local Municipality	Umgeri Water
3	eThekwini Main	96.18%	-Thul- 12 (88-11 1141- 88-211-114.	Umgeni Water,
	e i nekwini wain	90.16%	eThekwini Metropolitan Municipality	Tongaat Hulett,
4	Groutville	96.01%	iLembe District Municipality	Umgeni Water
5	Howick, Camperdown & Mshwathi	95.69%	uMgungundlovu District Municipality	uMgeni Water, uMgungundlovu DM
6	Nsezi	95.38%	City of uMhlathuze	uMhlathuze Water
7	Ndwedwe	95.04%	iLembe District Municipality	Umgeni Water
8	Ngwelezane	95.02%	City of uMhiathuze	WSSA

Blue Drop status was lost in 2014 for the following systems: Alcockspruit and Hattingspruit (Amajuba DM), Ixopo (Harry Gwala DM), Newcastle (Newcastle LM), Umtamvuna, Umtwalume and Umzinto (Ugu DM) and Biggarsberg (uMzinyathi DM). A decline in Blue Drop performance is evident in 12 of the 14 WSAs with the decrease varying between 2% in the eThekwini Metro and to the huge value of 32% in the Zululand District Municipality. The worst deterioration was evident in Zululand with a decrease in score of 32% (decreased from 83% to 51%), Ugu District Municipality with a decrease of 27% (decreased from 93% to 66%) and uThukela District Municipality with a decrease of 22% (decreased from 57% to 35%). Table 8 shows the Provincial performance trends since 2009.

Table 8: Provincial performance trends

Blue Drop trends 2009 to 2014							
Water Services Authority	2845	2818	2811	2812	2914		
Msunduzi Local Municipality	N/A	73%	96%	95%	98%		
eThekwini Metropolitan Municipality	97%	96%	96%	99%	96%		
uMgungundkwu District Municipality	21%	65%	56%	92%	90%		
City of ul/Hathuze	N/A	80%	89%	93%	90%		
Newcastle Local Municipality	71%	75%	76%	97%	89%		
Lembe District Municipality	100%	51%	86%	88%	87%		
uMzinyathi District Municipality	80%	66%	70%	93%	78%		
uThungulu District Municipality	78%	37%	71%	73%	74%		
Ugu District Municipality	94%	87%	93%	93%	66%		
Harry Gwala District Municipality	34%	54%	40%	69%	63%		
Amajuba District Municipality	68%	56%	84%	83%	58%		
uMichanyakude District Municipality	N/A	22%	32%	78%	58%		
Zululand District Municipality	92%	60%	72%	83%	51%		
uThukela District Municipality	55%	54%	55%	57%	35%		

The Msunduzi Local Municipality together with Umgeni Water achieved the provincial top spot with admirable 97.97% Blue Drop score. This municipality maintained its Blue Drop

status for the third consecutive audits. eThekwini Metro achieved second position on the provincial performance with a score of 95.9% whilst uMgungundlovu district Municipality attained third position with a score of 89.9% within the province. The diagram below provides the overall Provincial performance with respect to BD status.

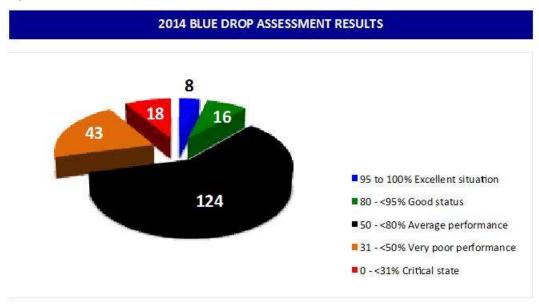


Figure 6: Provincial performance

There is an improvement in operational capacity as a percentage of design capacity improved from 74% to 66% compared to 2012 and this could be attributed to progress in the availability of information and not really improved capacity.

The average Blue Drop Risk rating improved marginally from 30.6% in 2013 to 27.4% in 2014. This reduction could be attributed to improvement of Drinking Water Quality and risk management risk ratings. The Blue Drop Risk rating shows performance of Msunduzi Local Municipality to be best by 12% and uMkhanyakude District Municipality has recorded the highest risk of 69%. Figure 7 below provides the Provincial risk profile.

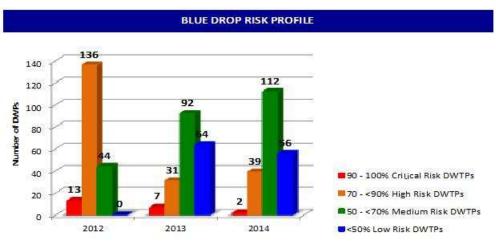


Figure 7: Provincial risk profile

In general there are only 2 of the 14 WSAs that have improved from the previous assessment. Other 12 WSAs have deteriorated hence the need for focused attention. Identified areas of intervention include drinking water quality, management accountability and water use efficiency and loss management.

#### 2.8.5 LIMPOPO PROVINCE

The province has eleven (11) WSAs together with the Water Services Providers assisting some of the WSAs. The Department has audited 74 water supply systems during 2014 Blue Drop audit cycle. There was substantial decline in 2014 provincial Blue Drop score with a decrease of 17.9% resulting in a decline from 9 to 1 in the number water supply systems achieving Blue Drop Certification status. Forty five systems received BD scores below 50% while 18% of the systems are in high category risk while 2 systems are in critical risk category. Table 9 below depicts the Provincial performance trends since 2009.

Table 9: Provincial performance trends

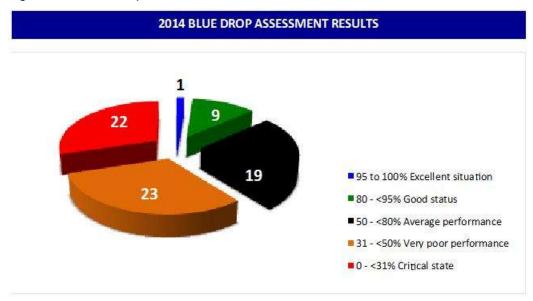
Blue Drop trends 2009 to 2014							
Water Services Authority	2009	2010	2011	2012	2014		
Polokwane Local Municipality	65%	81%	93%	87%	92%		
Lephalale Local Municipality	15%	34%	83%	93%	85%		
Capricorn District Municipality	45%	56%	87%	72%	71%		
Modimolle Local Municipality	19%	40%	82%	70%	63%		
Mopani District Municipality	N/A	75%	64%	79%	62%		
Mogalakwena Local Municipality	N/A	47%	78%	61%	60%		
Thabazimbi Local Municipality	N/A	54%	14%	54%	56%		
Greater Sekhukhune District Municipality	N/A	50%	59%	60%	48%		
Bela-Bela Local Municipality	64%	61%	71%	71%	43%		
Vhembe District Municipality	N/A	42%	45%	75%	39%		
Mookgopong Local Municipality	N/A	45%	25%	32%	26%		

The Polokwane local municipality together with Lepelle Northern Water is the best performer in the province attaining the Blue Drop status for City of Polokwane supply system with a Blue Drop score of 92.8% an increase of 5% compared to 2012. Lephalale Local municipality achieved second provincial spot together with Exxaro and Eskom which are WSPs for the municipality with a score of 85% followed by Capricorn District Municipality in third position with a score of 71%.

The Department has notice slight improvement in Thabazimbi local municipality from 54% to 56%. Though this improvement may not be significant but it's a step in the right direction towards improved service delivery.

A decline in municipal Blue Drop performance was noted in nine of the eleven Water Services Authorities within the Province. Furthermore, the number of supply systems scoring less than 50% increased significantly from 17 to 45. The decline of Blue Drop performance compared to 2012 BD audit was also noticed in Bela-Bela LM ,Vhembe District Municipality and Mookgopong municipality. Figure 8 below provides the overall Provincial performance.

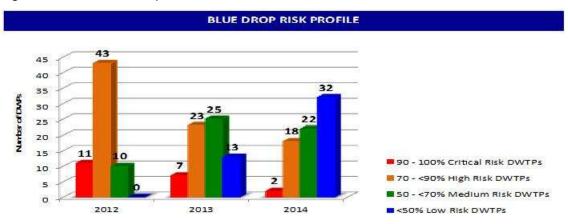
Figure 8: Provincial performance



In contrast to the Blue Drop scores, the 2014 Blue Drop Risk Ratings for the province generally showed an improvement with the average risk rating decreasing from 52% to 23%. This improvement could be attributed to reduction of risk rating in Process controlling and risk management within the Province.

The average municipal risk rating varied widely from the Polokwane local municipality with a low risk rating of 24% to the Mookgopong local municipality with a concerning risk rating of 84%. However, the increase of drinking water quality risk rating from 23% in 2013 to 25% in 2014 is a concern. This shows that the drinking water quality is not in compliant with the SANS 241 drinking water quality standard and could pose health risks to the public. Figure 9 below shows the Provincial risk profile

Figure 9: Provincial risk profile



The WSAs in the province are required to improve and correct the downward trend to ensure that the required quality of water services is provided within the province. Major focus is needed specifically on compliance to drinking water quality standards. Water

safety planning, asset management and water use efficiency and loss management require particular attention and focused interventions.

### 2.8.6 MPUMALANGA

The province has eighteen (18) Water Services Authorities providing water through 100 water supply systems. Six of the 18 WSAs contracted Water Service Providers to manage 34 of the systems. Water Service Providers include Bushbuckridge Water operational in 13 systems, Rand Water in 5 systems, Sembcorp-Silulumanzi in 5 systems, City of Tshwane in 4 systems, Thembisile Hani and Dr JS Moroka local municipalities in 1 system each, Eskom in 4 systems and Optimum Coal Holdings in 1 system.

Substantial improvements have been observed in this Province with the average Blue Drop scores increasing from 60.9% in 2012 to 69.9 in 2014 by 9%. Steve Tshwete LM achieved an overall BD score of 97 % and is the best performer in the Province with 5 systems attaining BD certification status. Even though the BD score decreased for Dr JS Moroka compared to 2012, it is the second best performer with an overall score of 89.2 % followed by Mbombela on third position with a BD score of 88.8%. Table 10 provides a list of systems attaining BD certification status.

Table 10: MPLProvincial Blue Drop Certified systems

		BLUE DROP CER	TIFIED SYSTEMS	
2014 Log position	Blue Drup certified system	Blue Drop certified system Blue Drop score		Water Services Fresider
1	Hendrina OCH	99.07%	Steve Tshwete Local Municipality	Optimum Coal Holdings
2	Middelburg Mhluzi	97.63%	Steve Tshwete Local Municipality	Steve Tshwete LM
3	Komati Power Station	97.36%	Steve Tshwete Local Municipality	Eskom, Steve Tshwete LM
4	Nelspruit	97.13%	Mbombela Local Municipality	Sembcorp-Silulumanz
5	Matsulu	96.68%	Mbombela Local Municipality	Sembcorp-Silulumanz
6	Arnot / Rietkuil Power Station	96.56%	Steve Tshwete Local Municipality	Eskom, Steve Tshwete
7	Karino	95.81%	Mbombela Local Municipality	Sembcorp-Silulumanz
8	Hendrina Pullenshope Power Station	95.27%	Steve Tshwete Local Municipality	Eskom, Steve Tshwete LM
9	Primkop	95.06%	Mbombela Local Municipality	Sembcorp-Silulumanz

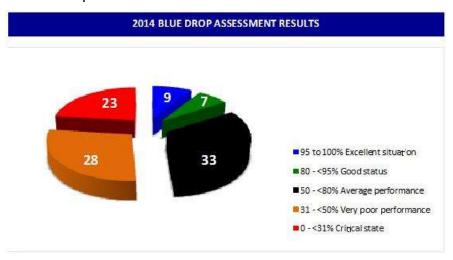
Ten WSAs improved their Blue Drop Scores while eight had decreased scores. The largest improvement was reported for Chief Albert Luthuli municipality with an increase of 35% on the Blue Drop score while Umjindi municipality Blue Drop had decreased significantly from 76% in 2012 to 19% in 2014. Table 11 shows the Provincial performance trends since 2009.

Table 11: Provincial performance trends

Blue Drop trends 2009 to 2014							
Water Services Authority	2009	2010	2011	2012	2014		
Steve Tshwete Local Municipality	N/A	92%	97%	97%	97%		
Dr JS Morola Local Municipality	49%	96%	84%	93%	89%		
Mhombela Local Municipality	84%	81%	75%	88%	89%		
Goven Mibeki Local Municipality	N/A	79%	78%	78%	77%		
Victor Khanye Local Municipality	N/A	N/A	18%	80%	73%		
Thembisile Local Municipality	N/A	38%	28%	78%	68%		
Bushbuckridge Local Municipality	40%	8%	30%	31%	64%		
Chief Albert Luthuli Local Municipality	N/A	8%	10%	18%	53%		
Nkomazi Local Municipality	N/A	18%	59%	17%	51%		
Emakhazeni Local Municipality	59%	71%	84%	80%	50%		
eMalahleni Local Municipality	43%	30%	47%	38%	44%		
Pidey Ka Seme Local Municipality	45%	N/A	46%	41%	43%		
Michondo Local Municipality	N/A	29%	5%	11%	32%		
Lekwa Local Municipality	N/A	20%	10%	35%	21%		
Umjindi Local Municipality	35%	53%	60%	76%	19%		
Msukaligwa Local Municipality	N/A	N/A	11%	21%	18%		
Dipalaseng Local Municipality	N/A	N/A	7%	41%	11%		
Thaba Chweu Local Municipality	N/A	45%	59%	19%	9%		

Fifty one systems receive score below 50% while 25% systems were in the high category. Impressive improvements compared to 2012 were also noticed in three municipalities; Chief Albert Luthuli (35%), Nkomazi (34%) and Bushbuckridge (33%) as these municipalities were in critical category in 2012. Figure 10 shows the overall Provincial performance.

Figure 10: Provincial performance



It is disheartening that 51 systems are in high (28) to critical (23) state categories even though the Provincial performance improved. The bottom three WSAs that need focused attention include Msukaligwa (18%), Dipaleseng municipality (11%) and ThabaChweu municipality (9%).

The average Blue Drop Risk Rating within the Province increased significantly from 28.6% in 2012 to 65.5% in 2014. The WSAs should work towards reducing the risks of each water supply systems. Figure 11 provides the Provincial risk profile.

**BLUE DROP RISK PROFILE** 54 50 Number of DMPs 40 35 25 30 20 90 - 100% Critical Risk DWTPs 10 70 - <90% High Risk DWTPs 50 - <70% Medium Risk DWTPs 0 2012 2013 2014 <50% Low Risk DWTPs

Figure 11: Provincial risk profile

Dedicated interventions are needed in this Province especially on addressing the operational capacity of treatment plants as the score on this category increased to 97%. This shows that WSAs are almost reaching their design volume of the water treatment works. This is an operational risk associated with operating water services works beyond design capacity resulting in final water failing to comply with the SANS 241 Standard. Other areas that need focused attention are drinking water quality including water use efficiency and loss management.

## 2.8.7 Northern Cape

There are twenty seven (27) Water Services Authorities (WSAs) within the province responsible for managing 173 water supply systems. Ten of the WSAs are assisted by Water Service Providers (WSAs) in 46 water supply systems with Sedibeng Water operational in 41 systems, and 5 private mines in 5 systems accordingly.

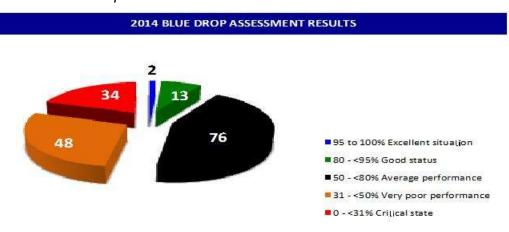
The best performing WSA was //KharaHais Local Municipality whose Blue Drop score increased by 25% to 96%. This shows that all WSAs may achieve the Blue Drop status if concerted effort and best practices are implemented to manage drinking water provision. This is followed by Hantamand Ubuntu LM. The Ubuntu municipality improved their score by 38%. An impressive improvement of 38% was observed in Umsobomvu Local Municipality whose score increased from 15.8% in 2012 to 53.9% in 2014. Table 12 below shows the Provincial performance trends since 2009.

Table 12: Provincial performance trends

Blue Drop trends 2009 to 2014						
Water Services Anthonity	2003	2818	2811	2012	2814	
//Khara Hais Local Municipality	7%	38%	44%	71%	96%	
Hantam Local Municipality	0%	69%	75%	82%	82%	
Ubuntu Local Municipality	95%	67%	67%	73%	82%	
Sol Plaatje Local Municipality	0%	64%	84%	72%	81%	
Kgatelopele Local Municipality	38%	97%	54%	66%	77%	
Khai-Ma Local Municipality	0%	34%	47%	53%	77%	
Emthanjeni Local Municipality	29%	68%	60%	63%	75%	
Thembelihle Local Municipality	55%	55%	46%	73%	73%	
Sai Sarib Local Municipality	0%	0%	47%	629%	71%	
Phokwane Local Municipality	36%	33%	49%	60%	71%	
Tsantsabane Local Municipality	0%	75%	59%	66%	70%	
Nama Khoi Local Municipality	63%	22%	58%	63%	64%	
Siyathemba Local Municipality	31%	53%	41%	62%	62%	
Dikgatlong Local Municipality	0%	84%	67%	95%	61%	
loe Morolong Local Municipality	0%	0%	60%	33%	58%	
Siyancuma Local Municipality	0%	55%	29%	20%	54%	
Umsobomvu Local Municipality	0%	23%	36%	16%	54%	
Kareeberg Local Municipality	6%	62%	35%	39%	53%	
Gamagara Local Municipality	2%	42%	50%	40%	50%	
Karoo Hoogland Local Municipality	0%	39%	51%	40%	49%	
Richtersveld Local Municipality	0%	26%	36%	37%	42%	
Ga-Segonyane Local Municipality	0%	25%	37%	72%	41%	
Kamiesberg Local Municipality	24%	29%	53%	36%	41%	
Renosterberg Local Municipality	0%	29%	25%	18%	38%	
Magareng Local Municipality	40%	54%	66%	73%	29%	
!Kheis Local Municipality	42%	46%	53%	50%	28%	
Mier Local Municipality	24%	25%	26%	25%	22%	

However, the Department has noticed a slight decrease inProvincial average Blue Drop score from 68.2% in 2012 to 67.7% in 2014. Though this is not a significant decline but the Department would like to see WSAs improving their Blue Drop performance. The number of water supply system certified for the Blue Drop status has increased by 1 supply system. Eighty two of the 173 water supply systems in the Northern Cape received scores below 50% in the Blue Water Services Audit, with 58 systems were found to be in the High Category Risk, and 4 systems [both 2 systems for Khai-Ma (Onseepkans / Melkbosrand / Viljoensdraai and Witbank) and Mier Local (Swartkop Dam and Andriesvale) Municipalities] are in the Critical Risk Category. One water supply system had lost the Blue Drop status within the province at Kgatelopele local municipality. The loss of Blue Drop status could be attributed to lack of full implementation of the water safety planning to manage drinking water quality. Figure 12 provides the overall Provincial performance.

Figure 12: Provincial performance

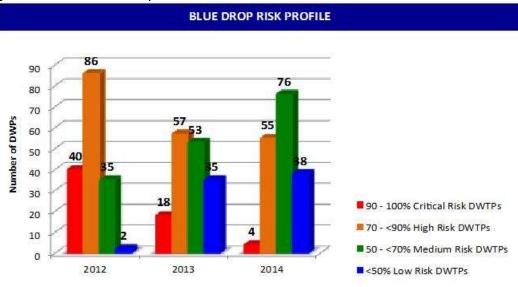


The Department is concerned that almost halve of the water supply system within the Province achieved Blue Drop score below 50% during the 2014 Blue Drop Audit.

The bottom three municipalities are Magareng, which moved from one of the best municipalities which achieved 73% in 2012 and decline by 29% in 2014 followed by!kheis and Mier municipalities with scores of 28% and 22% respectively. The Department through Provincial operations should work with those municipalities to turnaround the performance on the Blue Drop performance to these municipalities.

The average Blue Drop Risk rating within the province has improved significantly and this is encouraging. The provincial Blue Drop Risk Rating improved from 57.5% to 25.5% from 2012 to 2014. This achievement is commendable and should be replicated by other water supply systems within the Province. Figure 13 below provides the Provincial risk profile.

Figure 13: Provincial risk profile



There is serious concern about Process Control in most of the municipal water supply systems, with 22 systems in critical risk and 94 systems in high risk

categories. Concerted intervention measures should be implemented in the Province especially the four water supply systems which are in critical state (scores <30%). Major improvements are needed in drinking water quality, management accountability as well as water use efficiency and loss management.

#### 2.8.8 NORTH WEST

There are eleven (11) Water Services Authorities in the Province supported by several Water Services Providers providing water through 95 water supply systems. Eight WSAs are assisted by Water Service Providers (WSAs) in 74 water supply systems with Sedibeng Water operational in 44 systems, Magalies Water in 6 systems, Botshelo Water in 11 systems, Tswaing in 3 systems, Rand Water and Lekwa-Tsemane in 2 systems respectively, Rustenburg WS Trust, Phokwane, Mamusa, Midvaal Water Company, Naledi, Ramotshere and City of Tshwane operating in 1 system each respectively.

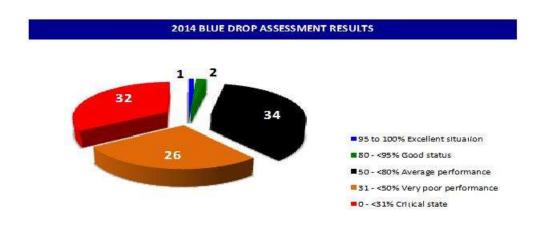
The provincial Blue Drop score decreased substantially from 78.7% in 2012 to 63% in 2014by 15.3% with BD status lost in two water supply systems. The top 3 performing WSAs are Tlokwe, Rustenburg and City of Matlosana with BD scores of 97%, 86% and 77.3% respectively. Table 13 below shows the Provincial performance trends since 2009.

Table 13: Provincial performance trends

Blue Drop trends 2009 to 2014					
Water Services Authority	2009	2010	2011	2012	2014
City of Matlosana Local Municipality	N/A	60%	95%	95%	77%
Dr Ruth Segomotsi Mompati District Municipality	74%	18%	64%	53%	30%
Kgetlengrivier Local Municipality	27%	29%	25%	48%	18%
Madibeng Local Municipality	N/A	4%	37%	58%	58%
Maquassi Hills Local Municipality	N/A	65%	57%	75%	63%
Moretele Local Municipality	2%	N/A	33%	60%	57%
Moses Kotana Local Municipality	57%	49%	32%	69%	56%
Ngaka Modiri Molema District Municipality	36%	31%	1%	41%	30%
Rustenburg Local Municipality	30%	95%	93%	92%	86%
Tlokure City Council Local Municipality	96%	95%	97%	98%	97%
Ventersdorp Local Municipality	0%	19%	35%	56%	25%

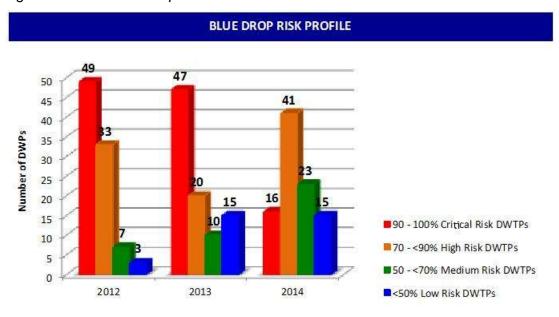
Sixty one percent of the water supply systems received scores below 50% in the Blue Water Services Audit, while 41 & 15systems are in high and critical Risk Categories respectively. Fifty eight systems are in a very poor to critical state with intervention required urgently. The BD score for Ventersdorp Local Municipality decreased by 31% from 56% in 2012 to 25% in 2014 followed by Kgetlengrivier and NgakaModiriMolema. Figure 14 provides the overall Provincial performance.

Figure 14: Provincial performance



The Provincial Blue Drop risk rating declined from 29.3% in 2013 to 42.6 in 2014 withdrinking water quality and process controlling major contributors in this decline. It is encouraging that the number of water supply systems in the critical risk decreased compared to 2013 from 47 to 16 systems in 2014. The number of water supply systems in the low risk category has increased considerable for drinking water quality criterion to 69 systems with Tlokwe maintaining its low risk status. Figure 15 below provides the Provincial risk profile.

Figure 15: Provincial risk profile



Intervention measures need to be implemented in Water Use Efficiency & Loss Management, Asset Management, Management Accountability, Water Safety Planning, Treatment Process Management and to a lesser extent, for Drinking Water Quality in this Province.

### 2.8.9 WESTERN CAPE

There are twenty five (25) Water Services Authorities together with the Water Services Providers assisting some of the WSAs to operate 22 water supply systems within the province. The Department has audited in total 122 water supply systems during 2014 Blue Drop audit.

City of Cape Town Metropolitan Municipality received the highest Blue Drop score 95.86%. Excellent performance was also observed in Witzenberg Local Municipality which achieved a Blue Drop score of 95.77%. All five water supply systems in this municipality achieved Blue Drop Certification. Figure 16 below provides overall Provincial performance.

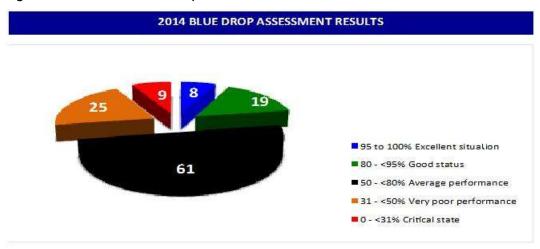


Figure 16: Overall Provincial performance

Western Cape has been affected significantly with the decline in systems that qualified for the Blue Drop certification from 33in2012 to 8 in 2014. This means that 25 water supply systems lost their Blue Drop status. Table below provides a list of systems that attained BD certification status.

Table 14: Western Cape Blue Drop certified systems

BLUE DROP CERTIFIED SYSTEMS						
2614 Log position	Blue Drop certified system	Blue Drop score	Water Services Authority	Water Services Provider		
1	Greater Hermanus	96.44%	Overstrand Local Municipality	Overstrand LM		
2	Wolseley	96.00%	Witzenberg Local Municipality	Witzenberg LM		
3	Tulbagh	95.89%	Witzenberg Local Municipality	Witzenberg LM		
4	City of Cape Town	95.86%	City of Cape Town Metropolitan Municipali	City of Cape Town		
5	Ceres	95.84%	Witzenberg Local Municipality	Witzenberg LM		
6	Beaufort West	95.22%	Beaufort West Local Municipality	Beaufort West LM		
7	Prince Alfred Hamlet	95.09%	Witzenberg Local Municipality	Witzenberg LM		
8	Op die Berg	95.06%	Witzenberg Local Municipality	Witzenberg LM		

The provincial Blue Drop performance has also significantly declined to 88.5% compared to 94.2% in 2012. More than 80% of the WSAs in the province (24 out of

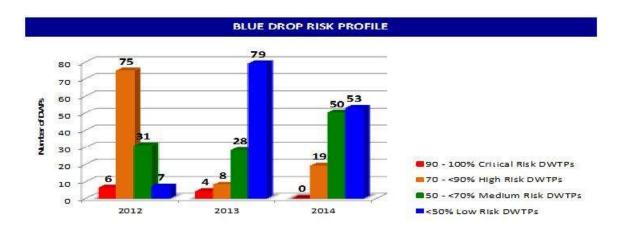
25) had reduced the score with decline of 2% to the 45% with Laingsburg Local Municipality most affected. City of Cape Town, Witzenberg local municipality and Overstrand municipalities are the top 3 Provincial performers with scores of 96% and 91% respectively. Immense improvements were observed in Langeberg Local Municipality and Hessequa Local Municipality whose BD scores increased from 52% in 2012 to 72% in 2014 and 36% to 55% respectively. The bottom three municipalities are Prince Albert, Kannaland and Laingsburg. Table 15 provides Provincial performance trends.

Table 15: Provincial performance trends

Blue Drop trends 2009 to 2014						
Water Services Authority	2009	2010	2011	2012	2014	
City of Cape Town Metropolitan Municipality	100%	98%	98%	98%	96%	
Witzenberg Local Municipality	62%	93%	98%	98%	96%	
Overstrand Local Municipality	43%	72%	91%	97%	91%	
Bitou Local Municipality	97%	98%	96%	98%	90%	
Beaufort West Local Municipality	66%	84%	92%	95%	90%	
Breede Valley Local Municipality	62%	74%	86%	89%	89%	
George Local Municipality	100%	97%	96%	98%	83%	
Stellenbosch Local Municipality	94%	95%	96%	96%	80%	
Mossel Bay Local Municipality	34%	85%	95%	96%	79%	
Swartland Local Municipality	N/A	69%	93%	95%	74%	
Langeberg Local Municipality	N/A	N/A	32%	52%	72%	
Drakenstein Local Municipality	86%	92%	96%	96%	72%	
Cape Agulhas Local Municipality	N/A	79%	73%	87%	69%	
Saklanha Bay Local Municipality	58%	81%	88%	95%	69%	
Theewaterskloof Local Municipality	67%	49%	75%	72%	64%	
Bergrivier Local Municipality	61%	63%	85%	91%	64%	
Knysna Local Municipality	92%	75%	90%	92%	62%	
Swellendam Local Municipality	N/A	67%	81%	25%	57%	
Hessequa Local Municipality	N/A	46%	14%	36%	55%	
Oudrshoom Local Municipality	N/A	45%	37%	65%	51%	
Matzikama Local Municipality	10%	30%	33%	70%	49%	
Cederberg Local Municipality	59%	60%	51%	80%	40%	
Prince Albert Local Municipality	11%	55%	71%	70%	34%	
Kannaland Local Municipality	12%	19%	56%	28%	32%	
Laingsburg Local Municipality	58%	64%	81%	71%	26%	

The average Blue Drop Risk Rating deteriorated significantly from 21.0% to 32.5% in 2014 compared to 2013. The deterioration of the Blue Drop Risk Rating attributed to poor performance in drinking water quality and water use efficiency and loss management criteria. Figure 17 below provides the Provincial risk profile.

Figure 17: Provincial risk profile



Drinking water quality including water use efficiency and loss management need focussed attention within this Province.