

FIRST ORDER NO DROP ASSESSMENT: LIMPOPO PROVINCE



the status of water losses, water use efficiency and non-revenue water in municipalities

1. INTRODUCTION

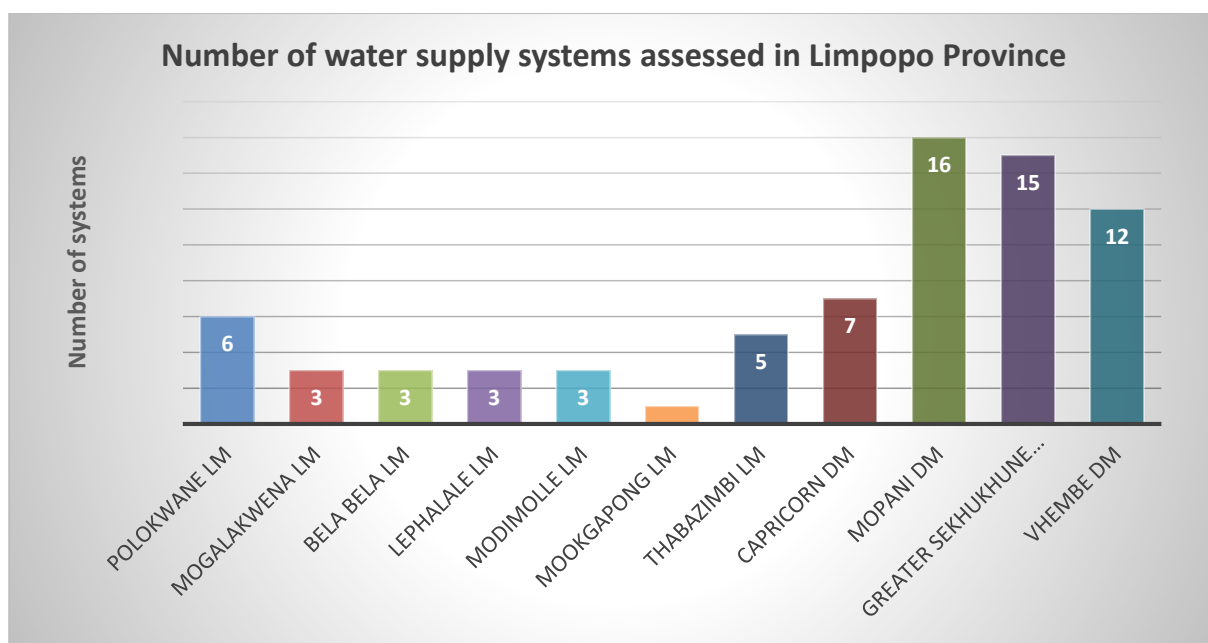
Drinking water is supplied by 11 municipalities (WSAs) in the Limpopo Province, made up of 4 district municipalities (Category C2) and 7 local municipalities (1 category B1; 1 category B2; 5 category B3). Data sets were received for only 2 municipalities representing a total population of 562 210 and 149 879 households. These households are supplied via a total mains network of 1 860 km via 142 527 connections, with an average of 77 connections per km pipeline. A total of 87 917 (61.7%) of all connections are metered and 54 610 (38.3%) are unmetered. The average system pressure is 50 m, ranging between 45 m to 55 m reported by the two municipalities.

**Figures based on verified information only.*

Municipality Name [WSA]	Munic Category	No. of Systems	No. of credible data sets	Population and Number of Municipal Categories						
				A	B1	B2	B3	B4	C1	C2
Polokwane LM	B1	6	✓		521 680					
Mogalakwena LM	B2	3	x			x				
Bela Bela LM	B3	3	x				x			
Lephalale LM	B3	3	✓				40 530			
Modimolle LM	B3	3	x				x			
Mookgapong LM	B3	1	x				x			
Thabazimbi LM	B3	5	x				x			
Capricorn DM	C2	7	x							x
Mopani DM	C2	16	x							x
Greater Sekhukhune DM	C2	15	x							x
Vhembe DM	C2	12	x							x
Totals	74	2		0	521 680	0	40 530	0	0	0
				562 210						
				0	1	1	5	0	0	4
				11						

2. NO DROP RESULTS FOR 2012/13

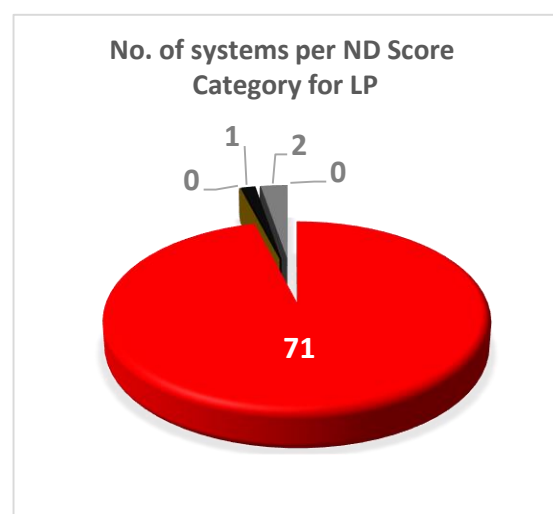
The No Drop results show that 74 water supply systems have been assessed in 11 municipalities. In some cases, DWS was necessitated to collapse some of the supply systems into one integrated system for the purposes of this No Drop Report.



The 2 WSAs assessed opted to provide evidence for 'one integrated system' instead of regarding each individual supply systems separately. This accounted for 6 systems being integrated into 2 systems. The remaining 68 systems were assessed as stand-alone water supply systems. (Note: the 6 systems were allocated with individual No Drop scores to ensure counting of No Drops with >90% scores).

2013 LP NO DROP COMPARATIVE ANALYSIS	
Performance Category	Performance indicators
Number of WSAs assessed	11 (100%)
Number of systems assessed	74 (100%)
Number of integrated systems*	2 (18%)
Average No Drop score	4,6%
Number of No Drop scores ≥50%	3 (4%)
Number of No Drop scores <50%	71 (96%)
Number of No Drop awards ≥90%	None
PROVINCIAL (weighted) NO DROP SCORE	10,5%

* Per original scorecard data



90-100%	Excellent
80-90%	Good
50-80%	Average
31-50%	Poor
0-31%	Critical

In total, 4% of the water supply systems obtained >50% No Drop score, with the balance of 96% <50%.

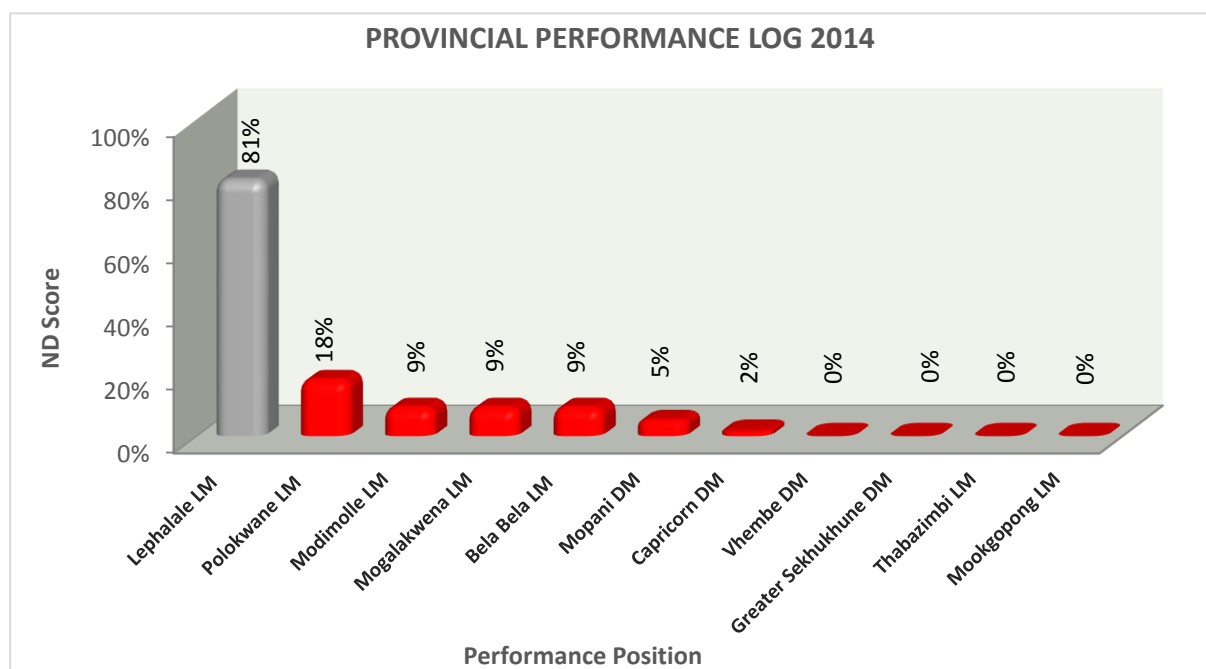
The Provincial (weighted) No Drop Score of 10.5%, supported by an average No Drop score of 4.6%, indicate that the Province falls in a No Drop category of 'Critical Performance'. Lephalale LM achieved good status in their Water Efficiency management practice with a No Drop score of 81%. All the other municipalities were found to be in the critical state.

This provincial average is weighed down by a significantly number of municipalities who could not provide evidence for assessment. These municipalities are not to be discouraged, as this is the first year of No Drop assessments, and the No Drop introduction has been a learning curve and awareness raising for all stakeholders to better prepare for the next (stand-alone) No Drop assessment.

None of the 74 systems achieved No Drop status with scores >90%. Only one WSA achieved a No Drop score of >50% and all the remaining ten WSAs are in the critical state performance category with No Drop scores <31%. The gap between the first WSA and the other WSAs are very significant, measured at about 63%.

Position	WSA Name	2014 No Drop Score	No. of systems with <31% No Drop score
1	Lephalale LM	81%	1 of 3
2	Polokwane LM	17,9%	5 of 6
3	Modimolle LM	9%	3 of 3
	Mogalakwena LM	9%	3 of 3
	Bela Bela LM	9%	3 of 3
4	Mopani DM	5%	16 of 16
5	Capricorn DM	1,7%	7 of 7
6	Vhembe DM	0%	12 of 12
	Greater Sekhukhune DM	0%	15 of 15
	Thabazimbi LM	0%	5 of 5

The Provincial Barometer for the Province with a weighted average No Drop score of 10.5% is shown below.



None of the municipal water supply systems assessed achieved No Drop score of >90% in the audit. The Regulator considers the Province to have a low knowledge base on the status of their water use and not having the necessary strategies and plans in place to address non-conformance to good practice and legal compliance requirements.

3. THE QUALITY OF EVIDENCE PROVIDED (KPA 1 AND 2)

Municipalities were required to present evidence to satisfy 3 sub-criteria of the 2014 Blue Drop Audit:

- Sub-criteria 6.1 of the audit measures the consistency and credibility of the MONTHLY and ANNUAL composite IWA water balance data and diagram based on actual meter readings per system as per Regulation 509 of 2001 Clause 10 of the Water Supply Regulations.
- Sub-criteria 6.2 reviews the Municipality's strategies and business plans (and its inclusion in the IDP) to reduce the system input volume, water losses and NRW and evaluates the progress made with the implementation of these strategies and business plans.
- Sub-criteria 6.3 measures the performance of the WSI against international best practice benchmarks and the water demand management regulations, and is focussed on knowing and improving the KPI status within the WSI.

In order to derive maximum benefit from the available data, the Department has collapsed the various supply systems into one integrated system for each municipality. The results are reported accordingly:

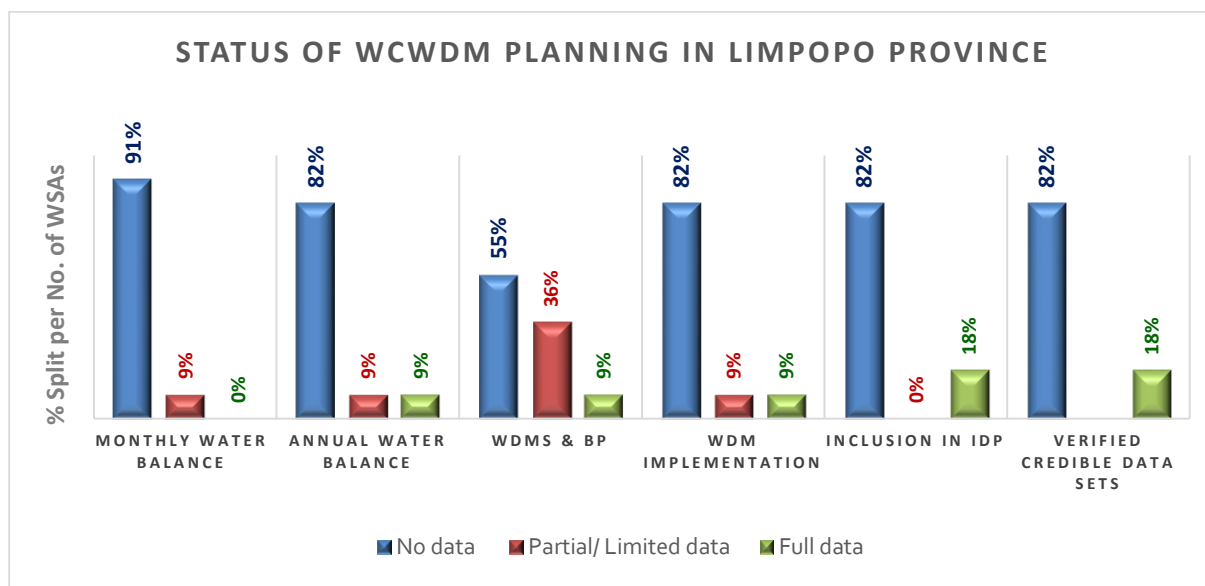
Data Status	6.1 - Water Balance	6.2 - WCWDM Strategy and Business Plan and Implementation	6.3 - Compliance and Performance
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	Monthly Water Balance	Annual Water Balance	WCWDM S & BP	WCWDM Implementation	Inclusion in IDP	Verified Credible Data Sets
No data	10 (91%)	9 (82%)	6 (55%)	9 (82%)	9 (82%)	9 (82%)
Partial data	1 (9%)	1 (9%)	4 (36%)	1 (9%)	0	
Full data	0	1 (9%)	1 (9%)	1 (9%)	2 (18%)	2 (18%)
No. of WSAs	11	11	11	11	11	11

The results shows that none of the 11 integrated systems (100%) do not have monthly Water Balances in place, and one system 9% has partial balances in place. The following planning profile is observed:

- 9% of the municipalities have WCWDM strategies and plans in place, with 55% not having any plans in place;
- 9% of municipalities implement WCWDM projects and have budgets and capacity to support implementation;
- 82% of municipalities do not implement any water demand measures, whilst 9% implement some form of demand management;
- 18% of municipalities have their WCWDM plans included in the IDP in detail;
- 82% of municipalities do not have WCWDM projects included in the IDP;
- The No Drop auditors found the credibility of data and information satisfactory at 18% of the municipalities, and not satisfactory for 82% of the auditees.

The following figure shows the submissions made for No Drop assessment as pertaining to WCWDM planning:



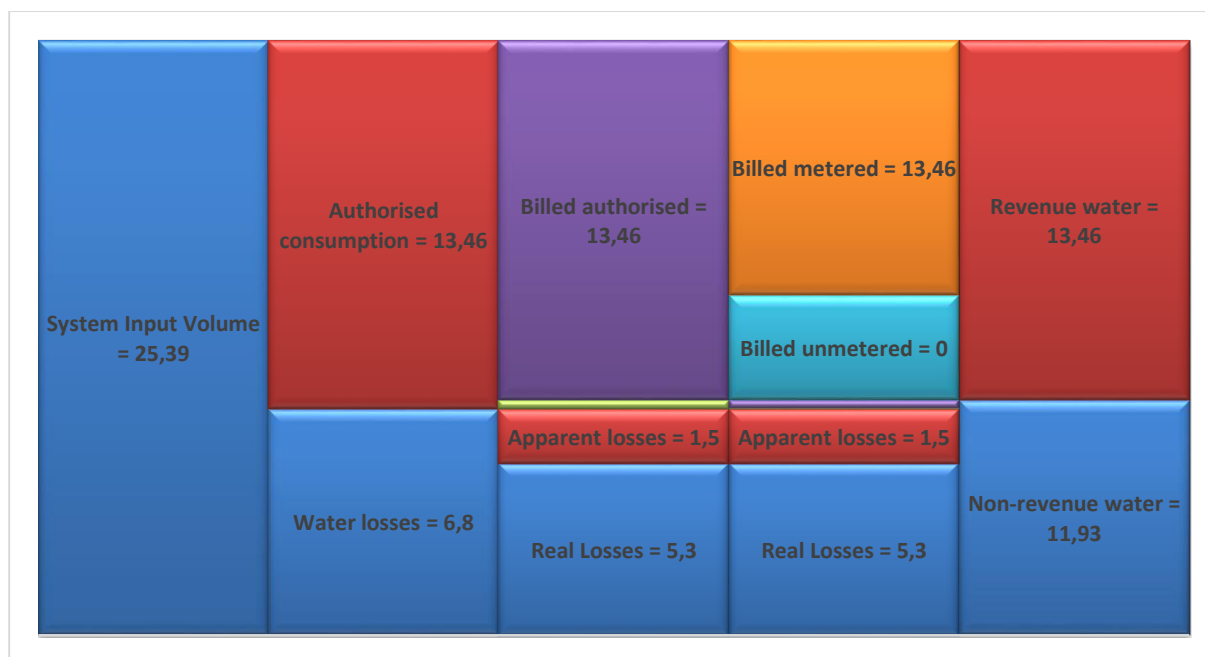
4. THE PROVINCIAL WATER BALANCE (KPA 1 AND 2)

A summary of the provincial results from the 2 (of 11) credible data sets is reflected in the following Table:

2013 Provincial No Drop Score		10.5%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.12%
No Drop Score (2013)		10.5% Critical
INPUT DATA	Population	562 210
	Households	149 879
	Metered Connections	87 917
	Unmetered Connections	54 610
	Length of mains (km)	1 860
	Average System Pressure (m)	50
	2014 Water Use Targets (Water Balance Targets)	192.73 million
	System Input Volume (kl/annum)	25.39 million
	Billed Metered Authorised Use (kl/annum)	13.46 million
	Billed Unmetered Authorised Use (kl/annum)	0
	Unbilled Authorised Use (kl/annum)	5.13 million
	Assumed Commercial Losses (%)	22%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	18.59 million
	Water Losses (kl/annum)	6.80 million
	Apparent losses (kl/annum)	1.50 million
	Real Losses (kl/annum)	5.30 million
	Revenue Water (kl/annum)	13.46 million
	Non-Revenue Water (kl/annum)	11.93 million
KPIs	Infrastructure Leakage Index (ILI)	1.97 Excellent
	Apparent/ Commercial Losses (%)	5.9%
	Non-Revenue Water (%)	47% Extremely poor
	Water Use Efficiency (l/cap/day)	123.7 Excellent
OTHER	Authorised Use (l/cap/day)	90.58
	Real Losses (l/cap/day)	25.85
	% Water Losses	26.80%

The Provincial Water Balance for the 2012/13 audit year shows a total SIV 25.39 million kl/annum of which 18.59 million kl/a (73.2%) is Authorised Consumption and 6.8 million kl/a (26.8%) is Water Losses. The Water Losses is made up of 1.5 million kl/a (22%) Apparent Losses and 5.3 million kl/a (78%) Real Losses, which result in a **NRW of 11.93 million kl/annum (47%)**.

2012/13 IWA Water Balance (million m³/annum)



5. COMPLIANCE AND PERFORMANCE (KPA 3)

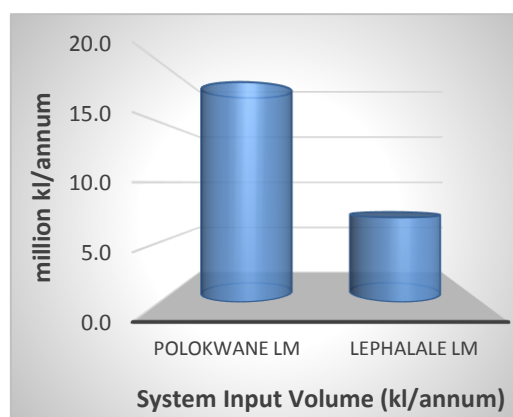
Audit Methodology

No Drop data was extracted from sub-criteria 6.3 of the Blue/No Drop assessment scorecards and the associated 2012/13 evidence/data. A secondary moderation processes ensured that the results contained in the scorecards were verified against the Water Balance historical trends. Where inconsistency and/or credibility concerns were detected, the ensuing data and results were corrected, supplemented or negated (in cases with limited data sets). Only the verified results are used in this report, and considered under the following Key Performance Indicator (KPI) headings.

5.1 System input volume

The System Input Volume represents the potable volume input to the water supply system from the water utility's own sources, as measured at the water treatment works (WTW) outlet, as well as any water imported from other sources.

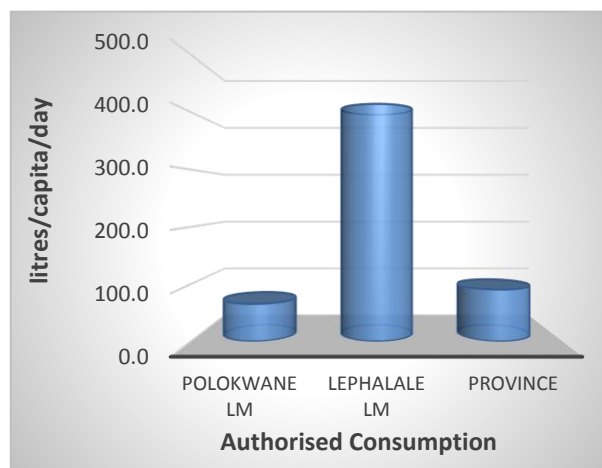
Limpopo has a total consumption of 25.39 million kl/a, where the Polokwane LM accounts for the majority of the total consumption of 72% (18.32 million kl/a) and Lephalale LM for 28% (7.07 million kl/a).



5.2 Authorised consumption

Authorised consumption includes metered/ unmetered and billed/ unbilled consumption and provides an indication of the actual water used by the consumer.

The total water used by the collective consumer in Limpopo is 480 litres/capita/day, with a weighted average consumption rate of 91 ℓ/c/d. Lephalale LM displays the highest level of authorised consumption at 414 ℓ/c/d. Polokwane LM at 65 ℓ/c/d shows an Authorised Consumption figure well below the benchmark of ≤200 ℓ/c/d.



A high authorised unit consumption could be an indication of inefficient water use, often as a result of high internal plumbing leakage or paying consumers who do not value the scarcity of water or effective metering and billing systems. A low authorised unit consumption could be an indication of unmetered consumption not included in the water balance or a large number of unauthorised consumption or theft.

5.3 Percentage non-revenue water (%)

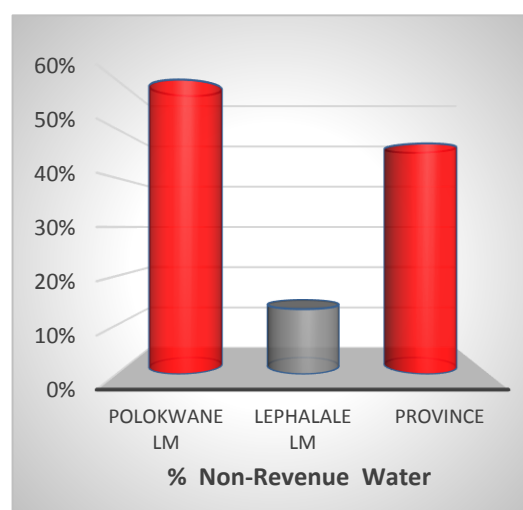
NRW is the volume of water supplied by the water utility but for which it receives no income. It should be noted that all billed water is considered revenue water, irrespective whether it is paid for or not.

- No Drop Benchmark: >40% = EXTREMELY POOR ; 30-40% = POOR ; 20-30% = AVERAGE ; 10-20% = GOOD ; <10% = EXCELLENT
- Limpopo Weighted Average: 47% = EXTREMELY POOR

One of the 2 municipalities (50%) has NRW in excess of 33%. The weighted average NRW is 47%. The highest NRW is seen for Polokwane LM at 60% followed by Lephalale LM at 13.3%. The graph below on average exhibits extremely poor non-revenue water management.

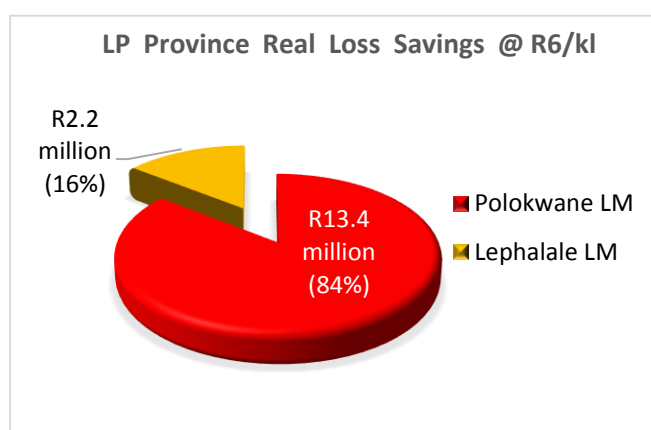
Non-Revenue Water (%) performance categories

	>40%	Extremely poor non-revenue water management
	30-40%	Poor non-revenue water performance
	20-30%	Average performance with potential for marked improvement
	10-20%	Good performance but some improvement may be possible subject to economic benefit
	<10%	Excellent non-revenue water management



The potential real loss savings at a fixed unit cost of R6/kl are reflected in the following table. By implementing Water Conservation and Demand Management projects, a potential saving of 2.65 million kl can be achieved per annum, which translate to R15.9 million per year.

Municipality Name [WSA]	Munic Category	UARL (Kl/annum)	Current		Target			Assumed Average Cost (Rand/Kl)	Estimated Savings R million
			CARL (Kl/annum)	ILI	TARL (Kl/annum)	ILI	Savings (Kl/annum)		
Polokwane LM	B1	2 200 766	4 456 239	2,02	2 228 119	1,01	2 228 119	6,00	R 13,4
Lephalale LM	B3	271 269	749 795	2,76	374 898	1,38	374 898	6,00	R 2,2
Provincial Totals		2 691 904	5 304 558	1,97	2 652 279	0,99	2 652 279	6,00	R 15,9



At an average of R 6.00/kl purchasing cost, this represents a loss of almost R15.9 million per annum (R6.00 x 2.65 million m³/annum).

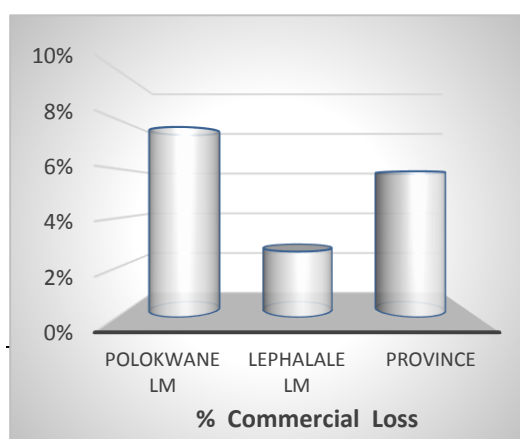


High %NRW could result due to customers not paying for water services, not being connected and billed by the municipality, households connected to the system through illegal connections, customers not receiving bills, incorrect billing based on estimates and difficult to understand for the average customer, and the general lack of co-operation between the finance and technical departments of the municipality.

5.4 Commercial loss (%)

The commercial loss, as % of the SIV, is made up from the unauthorised consumption (theft or illegal use), plus all technical and administrative inaccuracies associated with customer metering.

- 💧 **No Drop Benchmark:** >40% = EXTREMELY POOR ; 30-40% = POOR ; 20-30% = AVERAGE ; 10-20% = GOOD ; <10% = EXCELLENT
- 💧 **Limpopo Weighted Average:** 5.9% = EXCELLENT



The weighted average commercial loss for the Province, as % of the SIV, is 5.9%. The graph exhibits excellent commercial water loss management.

Apparent/Commercial loss (%) performance categories

>40%	Extremely high commercial loss
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	30-40%	Poor performance in commercial loss
	20-30%	Average commercial loss performance
	10-20%	Good commercial loss performance but some improvement may be economically viable
	<10%	Excellent commercial water loss management

Most WSA's find it difficult to calculate commercial losses, as its input parameters is not easy to measure illegal connections, meter accuracy and transfer errors. As result, most WSAs accept industry default values for commercial losses and there is almost no quantification of the actual percentage. A default value of 20% is used as the norm, unless a municipality can motivate a different value. The reported commercial losses are not considered accurate and seem unusually low. The commercial losses are expected to increase once these parameters are better quantified.



High commercial losses can be a result of high unbilled and unmetered consumption, high unauthorised consumption, and customer metering inaccuracies.

5.5 Physical water loss (ILI)

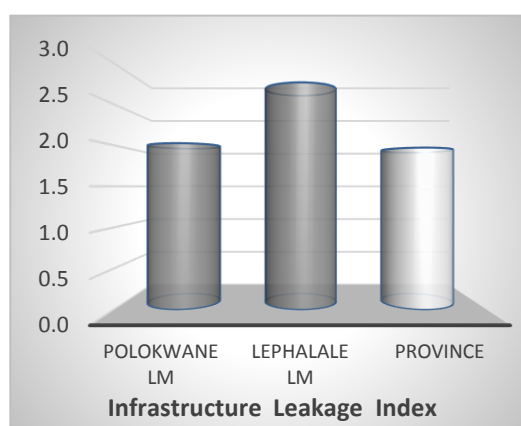
The Infrastructure Leakage Index (ILI) is the preferred real water loss indicator of the IWA and used in the scorecard to assess real losses. The ILI provides an indication of the current physical losses versus the expected physical losses. For example, an ILI of 3 means that the current leakage in the system is 3 times the expected minimum leakage.

- No Drop Benchmark: >8 = EXTREMELY INEFFICIENT ; 6-8 = POOR ; 4-6 = AVERAGE ; 2-4 = GOOD ; <2 = EXCELLENT
- Limpopo Weighted Average: 1.97 = EXCELLENT

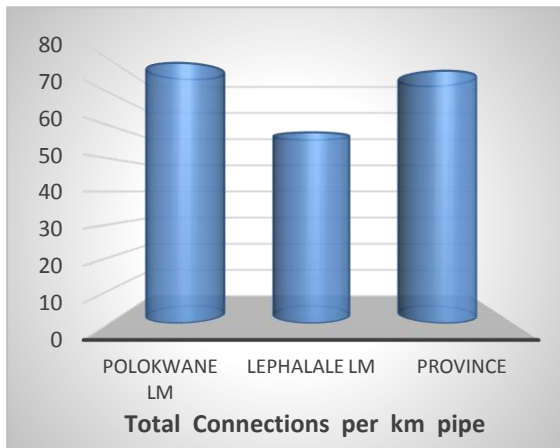
The weighted average ILI is 1.97. Polokwane LM has the lowest ILI of 2.02 followed by Lephalale LM with 2.76. Both exhibit good efficient water use and leakage record.

ILI performance categories

	>8	Extremely inefficient water use
	6-8	Poor leakage record
	4-6	Average with potential for marked improvement
	2-4	Good but some improvement may be possible subject to economic benefit
	<2	Excellent water loss management



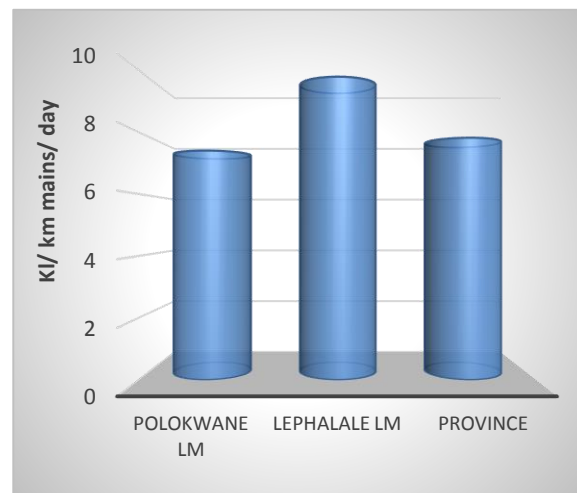
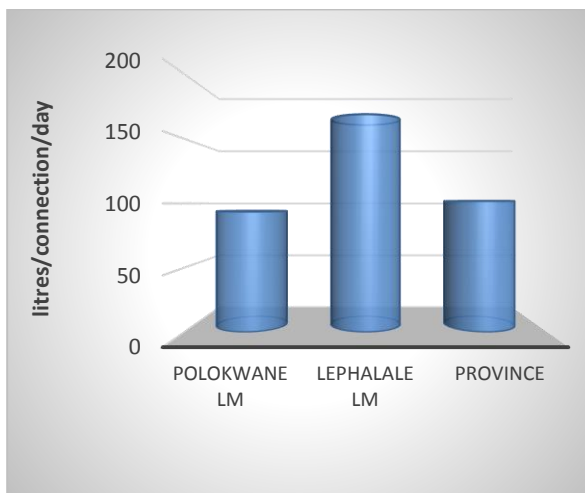
When considering that the length of mains and number of connections influences the ILI calculation, the following comparison can be made:



Connection density per length of pipeline is not a performance parameter, it does provide insight into the set-up of connections and meters on the existing water supply pipeline. The density of connections per km mains is 79 connections per km in Polokwane LM and 58 connections per km mains in Lephalale LM, with an average of 68 connections per km.

Some of the metros have raised the validity of the ILI as an indicator and the Department will investigate this further.

Other real water loss indicators include litres/connection/day (1st graph) and m³ or kl/km mains/day (2nd graph).



The 1st graph shows that Lephalale LM has the highest losses per connection per day (169 ℓ/connection/d) whereas Polokwane LM shows a lower loss per connection. The 2nd graph shows a higher real loss per km mains Lephalale LM but a lower real loss per km mains for Polokwane LM.



High physical losses could indicate leakages on the transmission and/or distribution mains, leakage on service connections up to point of customer metering, leakage and overflows at utility's storage tanks.

5.6 Litres per capita per day (Water Use Efficiency)

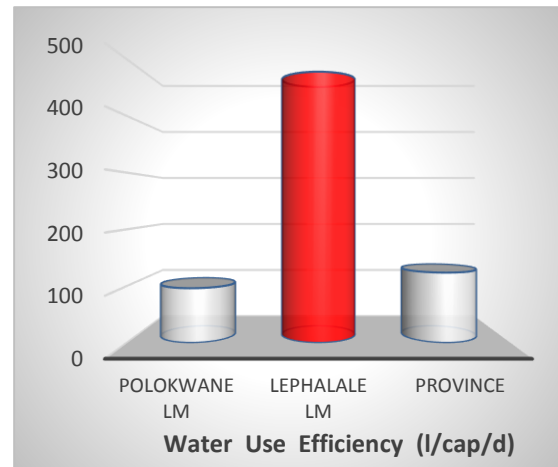
Litres per capita per day provide an indication of the gross volume of water used per capita (person) per day. Although the calculation is based on the total system input volume (m³/year) and not just the domestic component, it does provide a useful indicator.

<p> No Drop Benchmark: >300 ℓ/c/d = EXTREMELY HIGH ; 250-300 ℓ/c/d = POOR ; 200-250 ℓ/c/d = AVERAGE ; 150-200 ℓ/c/d = GOOD ; <150 ℓ/c/d = EXCELLENT </p>
<p> Limpopo Weighted Average: 124 ℓ/c/d – EXCELLENT </p>

LIMPOPO

Water use efficiency is typically one of the key performance indicators and reported against at national level. The weighted average WUE is 124 $\ell/\text{c}/\text{d}$. The average consumption is well below the international benchmark of 180 $\ell/\text{c}/\text{d}$ and the municipal target of below 200 $\ell/\text{c}/\text{d}$.

The results indicate that Lephalale LM has the highest WUE of 478 $\ell/\text{c}/\text{d}$ above the benchmark of 180 $\ell/\text{c}/\text{d}$. Polokwane LM reports WUE well below the international benchmark with excellent per capita water use management.



Water Use Efficiency (l/cap/day) performance categories

Extremely high per capita water use
Poor per capita water use
Average per capita water use with potential for marked improvement
Good per capita water use but some improvement may be possible subject to economic benefit
Excellent per capita water use management



A high use of water per capita could be an indication of inefficient water use due to high internal plumbing leakages or paying consumers who do not value the scarcity of water. Unmetered as well as unauthorised consumption needs to be addressed to improve this status.

Bela Bela Local Municipality

2013 Municipal No Drop Score	9%
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Key Performance Area	Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.27%
No Drop Score (2013)	9% Critical

Regulatory Impression

Limited evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- A basic WCWDMS and BP in place
- No evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Capricorn District Municipality

2013 Municipal No Drop Score		1.65%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.05%	
No Drop Score (2013)	1.65% Critical	

Regulatory Impression

Very limited evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- No WCWDMS and BP in place, no evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Greater Sekhukhune District Municipality

2013 Municipal No Drop Score		0.0%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.00%	
No Drop Score (2013)	0.0% Critical	

Regulatory Impression

No limited evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- No WCWDMS and BP in place, no evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Lephalale Local Municipality

2013 Municipal No Drop Score		81%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		2.43%
No Drop Score (2013)		81%
INPUT DATA	Population	40 530
	Households	12 166
	Metered Connections	12 166
	Unmetered Connections	0
	Length of mains (km)	210
	Average System Pressure (m)	55
	2014 Water Use Targets (Water Balance Targets)	NA
	System Input Volume (kl/annum)	7.07 million
	Billed Metered Authorised Use (kl/annum)	6.13 million
	Billed Unmetered Authorised Use (kl/annum)	0
	Unbilled Authorised Use (kl/annum)	0
	Assumed Commercial Losses (%)	20%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	6.13 million
	Water Losses (kl/annum)	0.94 million
	Apparent losses (kl/annum)	0.19 million
	Real Losses (kl/annum)	0.75 million
	Revenue Water (kl/annum)	6.13 million
	Non-Revenue Water (kl/annum)	0.94 million
KPIs	Infrastructure Leakage Index (ILI)	2.76 Good
	Apparent/ Commercial Losses (%)	2.70% Excellent
	Non-Revenue Water (%)	13% Good
	Water Use Efficiency (l/cap/day)	477.6 Extremely poor
OTHER	Authorised Use (l/cap/day)	414.23
	Real Losses (l/cap/day)	50.68
	% Water Losses	13.30%

2012/13 IWA Water Balance (million m³/annum)

System Input Volume = 7,07	Authorised consumption = 6,13	Billed authorised = 6,13	Billed metered = 6,13	Revenue water = 6,13
			Billed unmetered = 0	
	Water losses = 0,94	Apparent losses = 0,19	Apparent losses = 0,19	Non-revenue water = 0,94
		Real Losses = 0,75	Real Losses = 0,75	

No Drop Findings

- The No Drop score indicates that the municipality is achieving good performance with room and is encouraged to undertake key interventions to achieve the excellent status.
- Monthly and annual water balance submitted was linked to the assessment period in question but lacked the schematic and Free Basic water data. The historic water balance trend data was used to verify and adjust the data set accordingly.
- WCWDM Strategy is in place. Components listed under the WCWDM Strategy and Business Plan is included in the IDP.
- WCWDM implementation was implied with no projects listed but an implementation plan was referred to.
- The ILI of 2.76 is demonstrating good but some improvement may be possible subject to economic benefit.
- The water use efficiency performance is extremely poor at 477.6 l/c/d.
- The commercial loss (2.70%) is indicating excellent commercial water loss management.
- The NRW (13%) is demonstrating good non-revenue management but some improvement may be possible subject to economic benefit.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Modimolle Local Municipality

2013 Municipal No Drop Score		9%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.27%
No Drop Score (2013)		9% Critical

Regulatory Impression

Limited evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- WCWDMS and BP in place but only partially compliant
- No evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Mogalakwena Local Municipality

2013 Municipal No Drop Score		9%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.27%
No Drop Score (2013)		9% Critical

Regulatory Impression

Limited evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place in the prescribed format
- WCWDMS and BP in place but no evidence of Council approval
- Started with some WCWDM implementation with the installation of prepaid meters
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Mookgapong Local Municipality

2013 Municipal No Drop Score		0.0%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.00%	
No Drop Score (2013)	0.0% Critical	

Regulatory Impression

No evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- No WCWDMS and BP in place, no evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Mopani District Municipality

2013 Municipal No Drop Score		5.02%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.15%	
No Drop Score (2013)	5.02% Critical	

Regulatory Impression

Very limited evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- WCWDMS and BP in place and signed but the detail information (flesh around the skeleton) is still lacking
- No evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

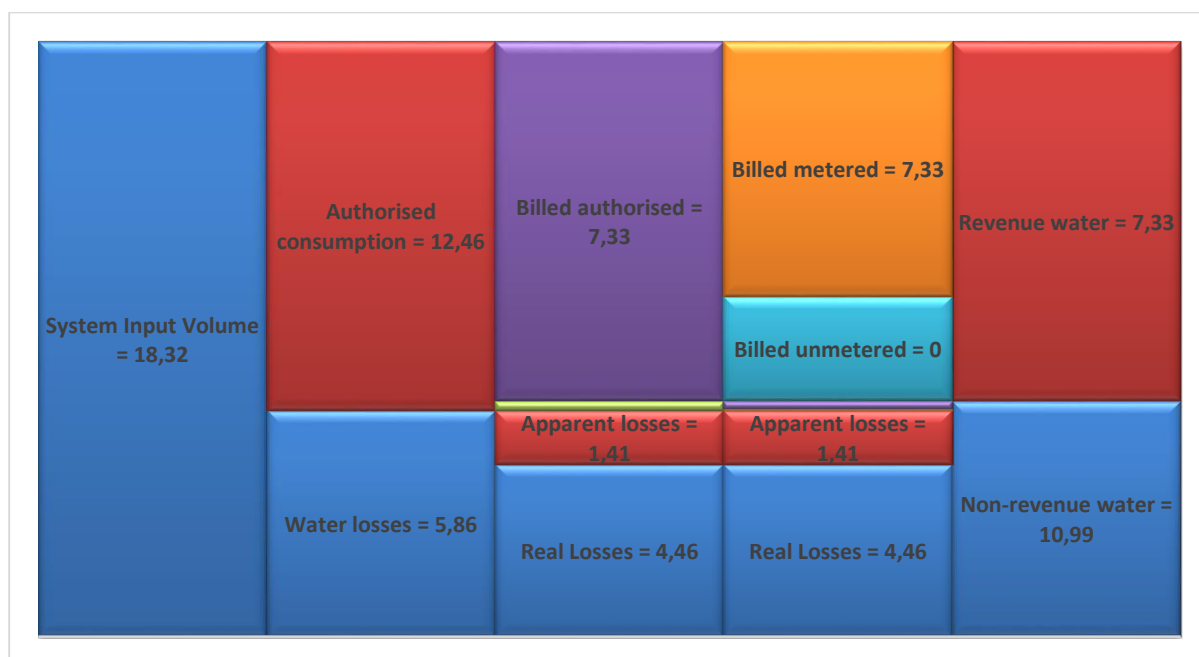
Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Polokwane Local Municipality

2013 Municipal No Drop Score		17.88%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.54%
No Drop Score (2013)		17.88% Critical
INPUT DATA	Population	521 680
	Households	137 713
	Metered Connections	75 751
	Unmetered Connections	54 610
	Length of mains (km)	1 650
	Average System Pressure (m)	45
	2014 Water Use Targets (Water Balance Targets)	33.56 million
	System Input Volume (kl/annum)	18.32 million
	Billed Metered Authorised Use (kl/annum)	7.33 million
	Billed Unmetered Authorised Use (kl/annum)	-
	Unbilled Authorised Use (kl/annum)	5.13 million
	Assumed Commercial Losses (%)	24%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	12.46 million
	Water Losses (kl/annum)	5.86 million
	Apparent losses (kl/annum)	1.41 million
	Real Losses (kl/annum)	4.46 million
	Revenue Water (kl/annum)	7.33 million
	Non-Revenue Water (kl/annum)	10.99 million
KPIs	Infrastructure Leakage Index (ILI)	2.02 Good
	Apparent/ Commercial Losses (%)	7.70% Excellent
	Non-Revenue Water (%)	60% Extremely poor
	Water Use Efficiency (l/cap/day)	96.2 Excellent
OTHER	Authorised Use (l/cap/day)	65.44
	Real Losses (l/cap/day)	23.40
	% Water Losses	32%

2012/13 IWA Water Balance (million m³/annum)



No Drop Findings

- The No Drop score indicates that the municipality performance is in a critical state requiring urgent interventions to turnaround the status quo.
- Only an annual water balance submitted was linked to the assessment period in question. The historic water balance trend data was used to verify and adjust the data set accordingly.
- No WCWDM Strategy in place. Components listed in a WCWDM Strategy and Business Plan is not included in the IDP.
- No WCWDM implementation taking place.
- The ILI of 2.02 is demonstrating good water loss management but some improvement may be possible subject to economic benefit.
- The water use efficiency performance is excellent at 96.2 l/c/d.
- The commercial loss (7.70%) is indicating excellent commercial water loss management.
- The NRW (60%) is demonstrating extremely poor non-revenue management.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Thabazimbi Local Municipality

2013 Municipal No Drop Score		0%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.00%	
No Drop Score (2013)	0% Critical	

Regulatory Impression

No evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- No WCWDMS and BP in place, no evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Vhembe District Municipality

2013 Municipal No Drop Score		0%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.00%	
No Drop Score (2013)	0% Critical	

Regulatory Impression

No evidence provided. Credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram reflected.

No Drop findings

- No monthly and annual water balances in place
- No WCWDMS and BP in place, no evidence of WCWDM implementation
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability pathway

The metro should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.