

1. INTRODUCTION

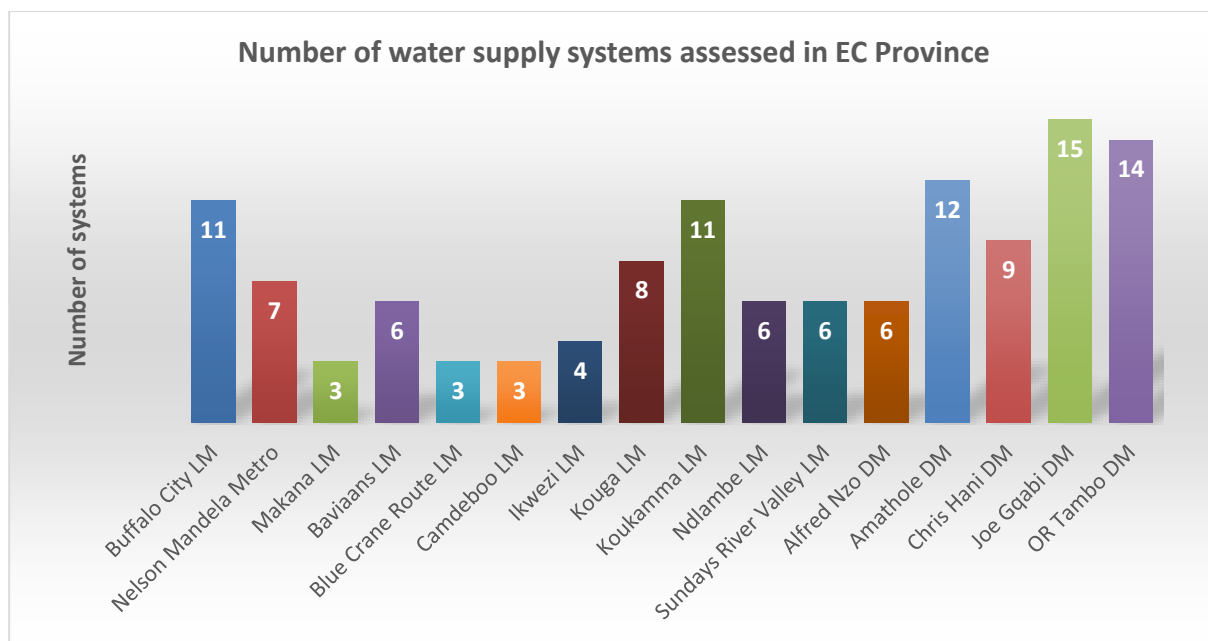
Drinking water is supplied by 16 municipalities (WSAs) in the Eastern Cape Province, made up of 2 metros (Category A), 5 district municipalities (Category C2) and 9 local municipalities (1 category B2; 8 category B3). Data sets were received for 10 municipalities representing a total population of 2 549 846 and 746 123 households. These households are supplied via a total mains network of 13 361 km and 636 780 connections, with an average of 48 connections per km pipeline. A total of 521 818 (81.9%) of all connections are metered and 114 962 (18.1%) are unmetered. The average system pressure is 43 m, ranging between 27 m to 60 m reported by the various 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
Buffalo City LM	A	11	√	652 404						
Nelson Mandela Metro	A	7	√	1 152 115						
Makana LM	B2	3	x			x				
Baviaans LM	B3	6	√				16 000			
Blue Crane Route LM	B3	3	√				36 000			
Camdeboo LM	B3	3	√				54 000			
Ikwezi LM	B3	4	x				x			
Kouga LM	B3	8	√				76 087			
Koukamma LM	B3	11	x				NA			
Ndlambe LM	B3	6	√				61 728			
Sundays River Valley LM	B3	6	x				x			
Alfred Nzo DM	C2	6	x							
Amathole DM	C2	12	√							324 580
Chris Hani DM	C2	9	√							99 497
Joe Gqabi DM	C2	15	x							x
OR Tambo DM	C2	14	√							77 435
Totals	124	10		1 804 519	0	0	243 815	0	0	501 512
				2 549 846						
				2	0	1	8	0	0	5
				16						

2. NO DROP RESULTS FOR 2012/13

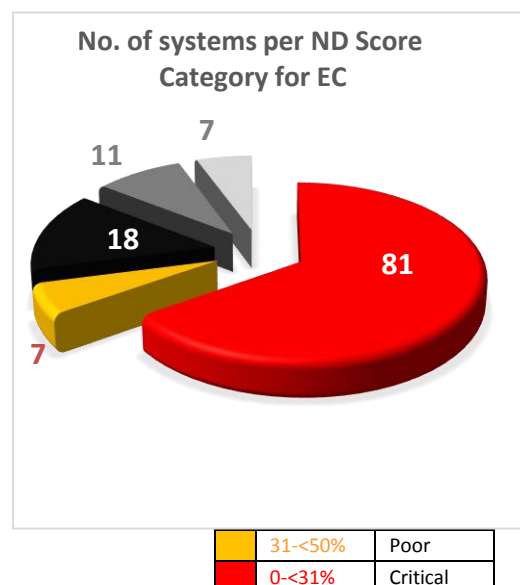
A total of 124 water supply systems have been assessed in 16 municipalities (100%). In some cases, DWS was necessitated to collapse some of the supply systems into one integrated system for the purposes of this No Drop Report.



A total of 7 WSAs opted to provide evidence for 'one integrated system' instead of regarding each individual supply systems separately. This accounted for 58 systems being integrated into 7 systems. The remaining 66 systems were assessed as stand-alone water supply systems. (Note: the 58 systems were allocated with individual No Drop scores to ensure counting of No Drops with >90%).

2013 EC NO DROP COMPARATIVE ANALYSIS	
Performance Category	Performance indicators
Number of WSAs assessed	16 (100%)
Number of systems assessed	124 (100%)
Number of integrated systems*	7 (44%)
Average No Drop score	29,8%
Number of No Drop scores $\geq 50\%$	36 (29%)
Number of No Drop scores $< 50\%$	88 (71%)
Number of No Drop awards $\geq 90\%$	7 (5.7%)
PROVINCIAL (weighted) NO DROP SCORE	66,5%

* Per original scorecard data



In total, 29% of the water supply systems obtained >50% No Drop score, with the balance of 71% <50%.

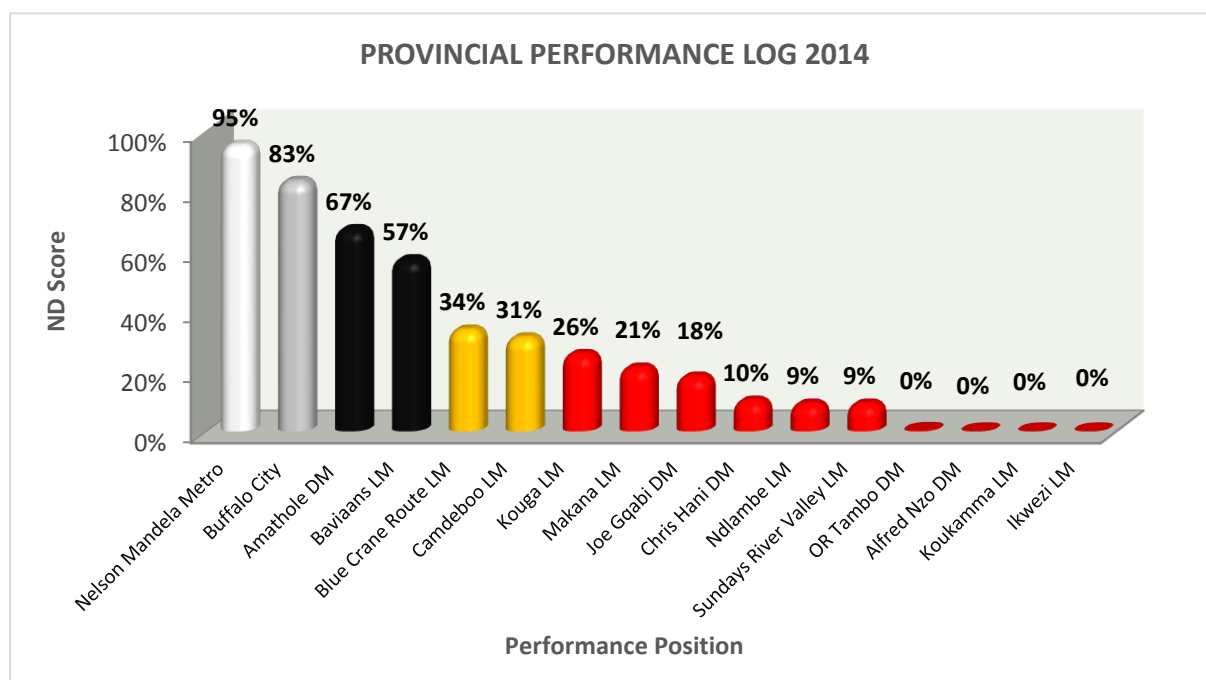
The Provincial (weighted) No Drop Score of 66.5% fall within the No Drop category of ‘Average Performance’, which is a significantly good score, given that this is the first No Drop assessment for the Eastern Cape municipalities. Seven (7) of the 124 systems achieved No Drop status and earned scores of >90%. Nelson Mandela Bay achieved excellence in their Water Efficiency management practice with a No Drop score of 95%. Buffalo City scored 83%, followed by Amathole DM with 67%.

Contrary to the above, an average No Drop score of 29.8% were achieved overall which points to a critically low performance for municipalities. This provincial average is as result of a substantial number of municipalities which 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 Regulator acknowledges that 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.

Seven (7) of the 124 systems achieved No Drop Certification status and earned scores of >90%. Four WSAs achieved No Drop scores of >50% and ten WSAs are in the critical state performance category with No Drop scores <31%. The gaps between the first 4 WSAs and the lower ten WSAs are significant, measured at about 32%.

Position	WSA Name	2014 No Drop Score	No. of systems with <31% No Drop score
1	Nelson Mandela Bay Metro	95,0%	None
2	Buffalo City Metro	83,0%	None
3	Amathole DM	67,0%	None
4	Baviaans LM	57,0%	None
5	Blue Crane Route LM	33,6%	None
6	Camdeboo LM	31,0%	None
7	Kouga LM	25,5%	8 (of 8)
8	Makana LM	21,0%	3 (of 3)
9	Joe Gqabi DM	18,0%	15 (of 15)
10	Chris Hani DM	10,0%	9 (of 9)
11	Ndlambe LM	9,0%	6 (of 6)
	Sundays River Valley LM	9,0%	6 (of 6)
12	OR Tambo DM	0,3%	13 (of 14)
13	Alfred Nzo DM	0,0%	6 (of 6)
	Koukamma LM	0,0%	11 (of 11)
	Ikwezi LM	0,0%	4 (of 4)

The Provincial Barometer for the Province with a weighted average No Drop score of 66.5% is shown in the figure below.



The following municipality and water supply systems attained No Drop scores of >90%. The Regulator considers these municipalities to be knowledgeable on the status of their water use status and having the necessary strategies and plans in place to address non-conformance:

- 💧 Nelson Mandela Metro: Churchill, Elandsjagt, Nooitgedacht, Groendal, Springs, Lorie and Rocklands (7 systems)



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.*

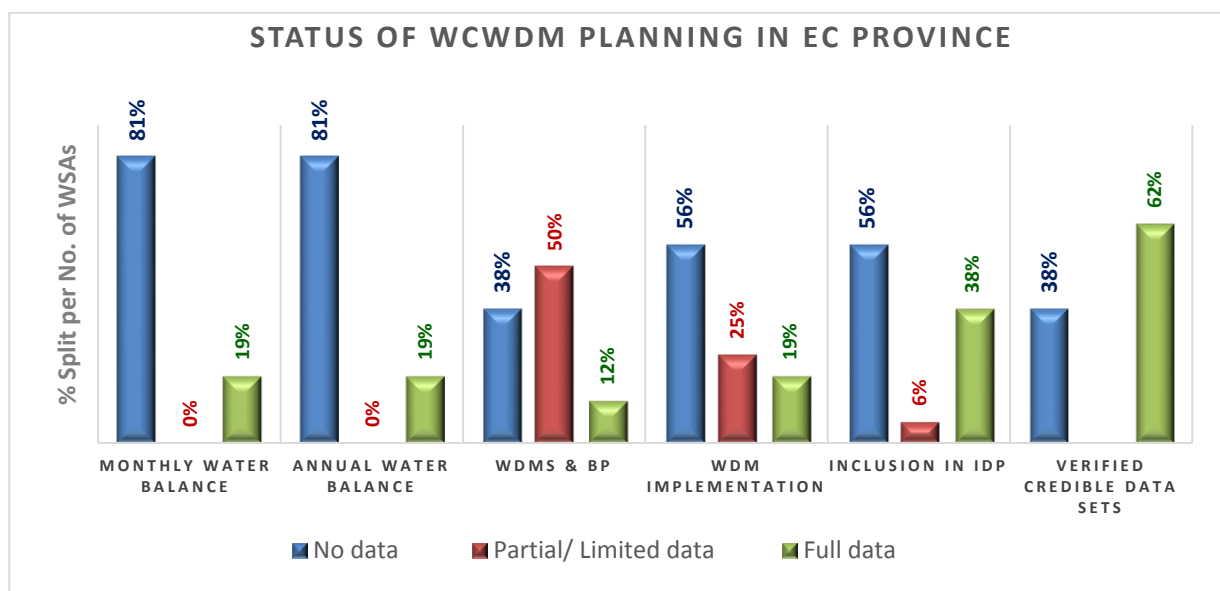
In order to derive maximum benefit from the available data, the Department has collapsed the various supply systems into one integrated system for each municipality. The results are reported accordingly:

Data Status	6.1 - Water Balance		6.2 - WCWCWDM Strategy and Business Plan and Implementation			6.3 - Compliance and Performance
	Monthly Water Balance	Annual Water Balance	WCWDM S & BP	WCWDM Implementation	Inclusion in IDP	Verified Data Sets
No data	13 (81%)	13 (81%)	6 (38%)	9 (56%)	9 (56%)	6 (38%)
Partial data	0	0	8 (50%)	4 (25%)	1 (6%)	
Full data	3 (19%)	3 (19%)	2 (12%)	3 (19%)	6 (38%)	10 (62%)
No. of WSAs	16	16	16	16	16	16

The results shows that 13 of the 16 integrated systems (81.3%) does not have monthly and annual Water Balances in place, and 19% has partial balances in place. The following planning profile is observed:

- 12% of the municipalities have WCWDM strategies and plans in place, with 50% not having any plans in place;
- 19% of municipalities implement WCWDM projects and have budgets and capacity to support implementation;
- 25% of municipalities do not implement any water demand measures, whilst 56% implement some form of demand management;
- 38% of municipalities have their WCWDM plans included in the IDP in detail, and 6% are mentioned in the IDP only;
- 56% of municipalities do not have WCWDM projects included in the IDP;
- The No Drop auditors found the credibility of data and information satisfactory at 62% of the municipalities, and not satisfactory for 38% of the auditees.

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



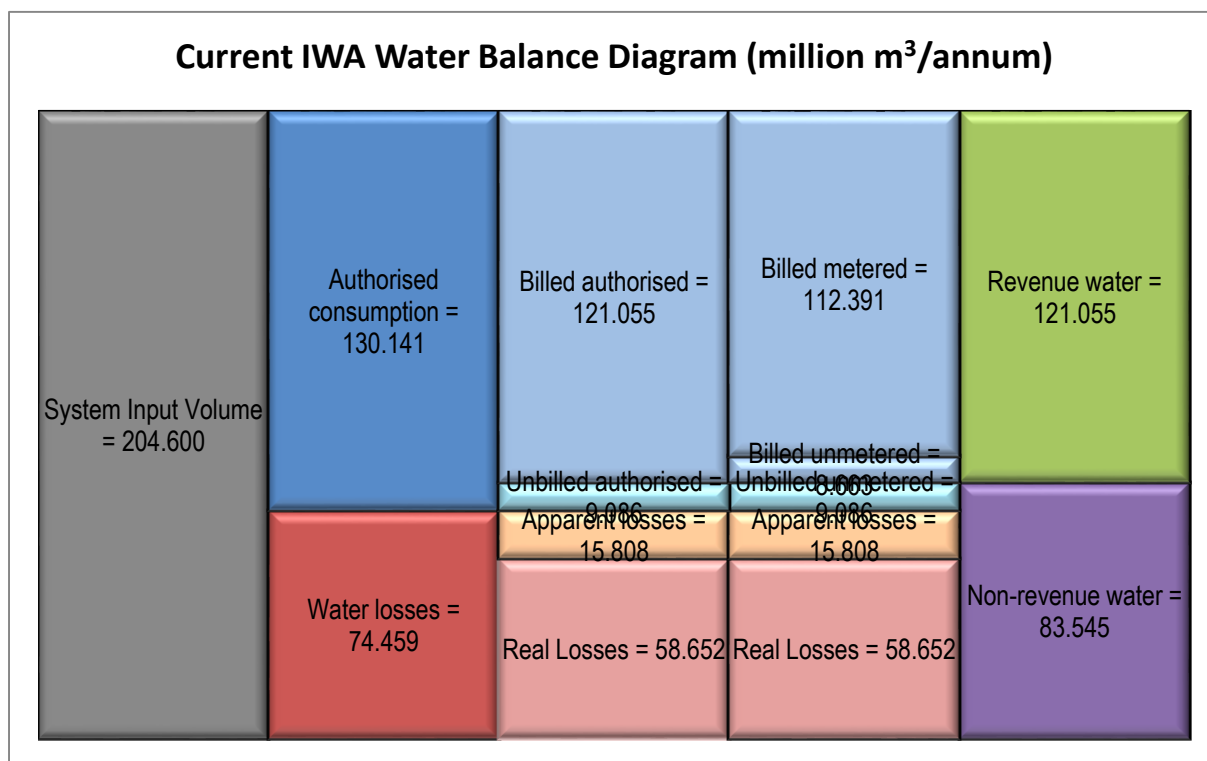
4. THE PROVINCIAL WATER BALANCE (KPA 1 AND 2)

A summary of the provincial results from the 10 (of 16) credible data sets is reflected in the following Table:

2013 Provincial No Drop Score		66.5%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		2,00%
No Drop Score (2013)		66.5% Average
INPUT DATA	Population	2 549 846
	Households	746 123
	Metered Connections	521 818
	Unmetered Connections	114 962
	Length of mains (km)	13 361
	Average System Pressure (m)	43
	2014 Water Use Targets (Water Balance Targets)	206.02 million
	System Input Volume (kl/annum)	204.60 million
	Billed Metered Authorised Use (kl/annum)	112.39 million
	Billed Unmetered Authorised Use (kl/annum)	8.66 million
	Unbilled Authorised Use (kl/annum)	9.09 million
	Assumed Commercial Losses (%)	21.2%
WATER BALANCE DATA	Authorised Use (kl/annum)	130.14 million
	Water Losses (kl/annum)	74.46 million
	Apparent losses (kl/annum)	15.81 million
	Real Losses (kl/annum)	58.65 million
	Revenue Water (kl/annum)	121.05 million
	Non-Revenue Water (kl/annum)	83.55 million
KPIs	Infrastructure Leakage Index (ILI)	2.47 Good
	Apparent/ Commercial Losses (%)	7.7%
	Non-Revenue Water (%)	40.8% Extremely Poor
	Water Use Efficiency (ℓ/c/d)	219.8 Average
OTHER	Authorised Use (ℓ/c/d)	139.73
	Real Losses (ℓ/c/d)	63.01
	% Water Losses	36.4%

The Provincial Water Balance for the 2012/13 audit year shows a total SIV 204.6 million kl/annum of which 130.14 million kl/a (63.6%) is Authorised Consumption and 74.46 million kl/a (36.4%) is Water Losses. The Water Losses is made up of 15.81 million kl/a (21.2%) Apparent Losses and 58.65 million kl/a (78.8%) Real Losses, which result in a **NRW of 83.55 million kl/annum (40.8%)**.

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



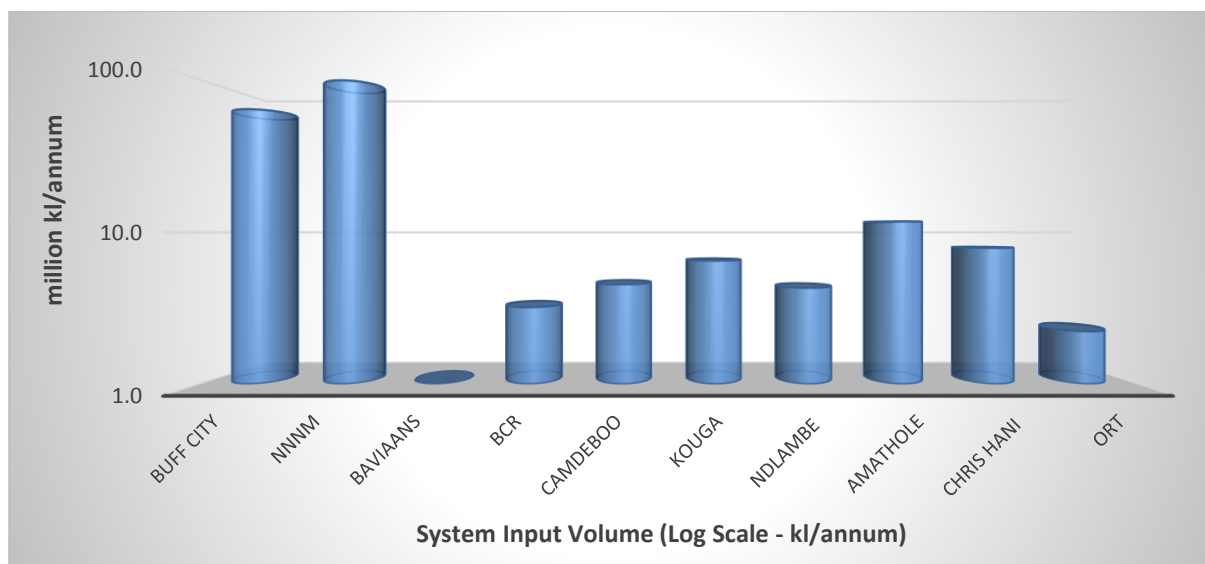
5. COMPLIANCE AND PERFORMANCE (KPA 3)

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 (kl/a)

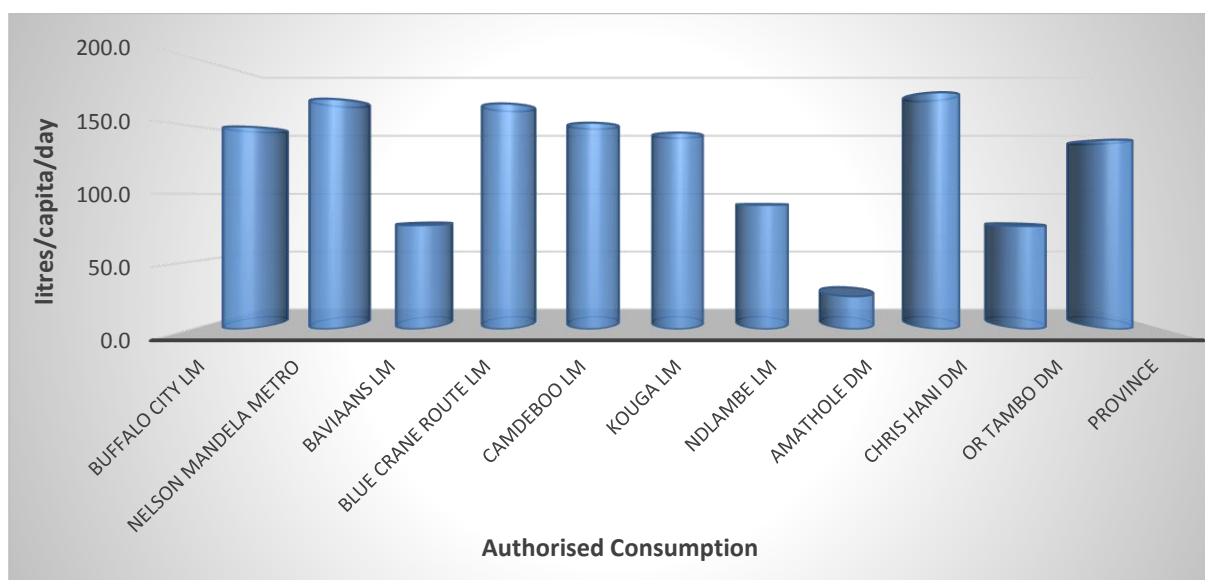
The System Input Volume represents the potable volume input to the water supply system from the water utility's own sources, as measured at the water treatment works (WTW) outlet, as well as any water imported from other sources.



A total consumption of 204.6 million kl/a is recorded for the Eastern Cape, the two Category A metros account for the majority of the total consumption in the Eastern Cape, namely Nelson Mandela for 55% (71.43 million kl/a) and Buffalo City for 27% (35.59 million kl/a). The water consumption for the other municipalities are individually and collectively less than that of the two metros, and collectively account for only 18% of the province's consumption.

5.2 Authorised consumption (l/c/d)

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



The per capita total authorised use by the collective consumer in Eastern Cape is 1227 litres/capita/day, with a weighted average per capita consumption of 140 l/c/d. Chris Hani DM displays the highest level of per capita authorised consumption at 175 l/c/d, followed by Nelson Mandela Bay (170 l/c/d) and Blue Crane Route (166 l/c/d). Authorised consumption per capita is the lowest in Amathole DM (24 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, 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.

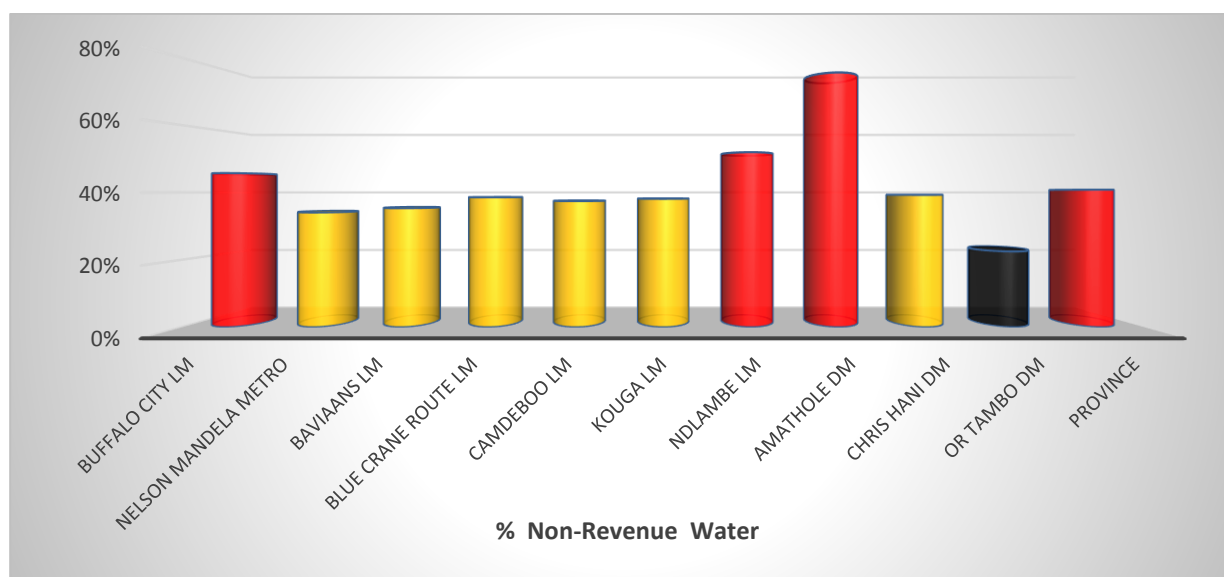
5.3 Percentage non-revenue water (%)

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
- **Eastern Cape Weighted Average:** 40.8% = EXTREMELY POOR

NRW (%) performance categories

>40%	Extremely poor
30-40%	Poor
20-30%	Average
10-20%	Good
<10%	Excellent

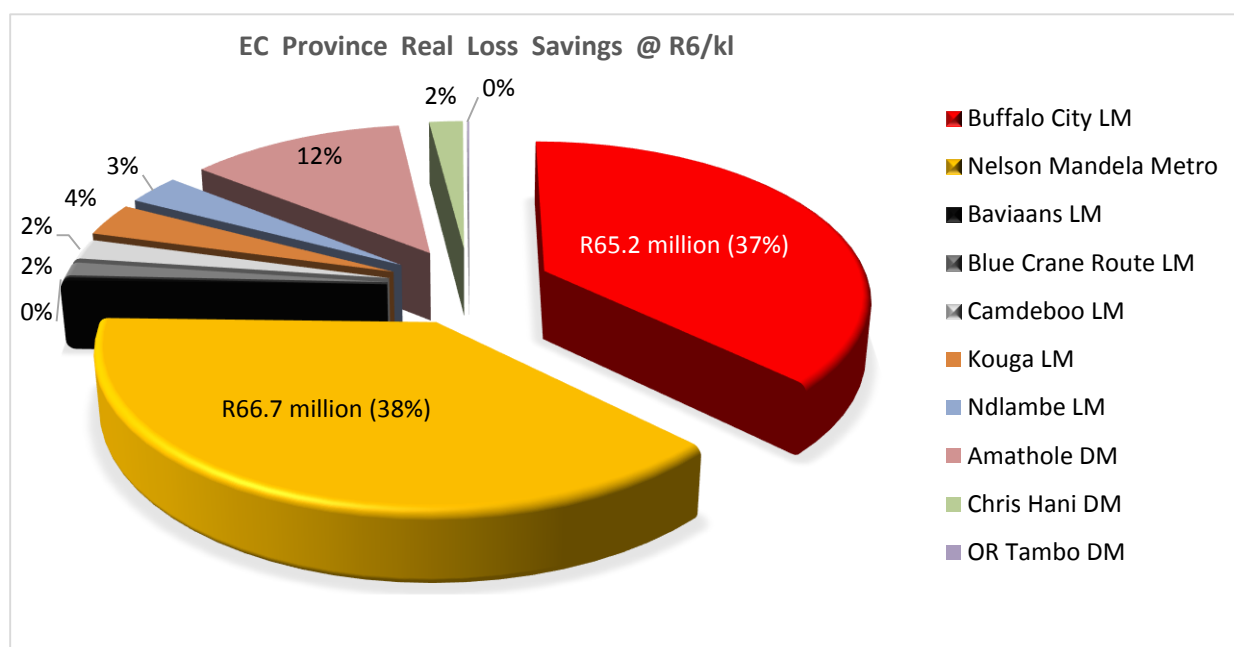


Nine of the 10 municipalities (90%) have NRW in excess of 33%. The weighted average NRW is 40.8%. The highest NRW is seen for Amathole DM at 75.6% followed by Ndlambe LM at 51.9% and Buffalo City at 45.7%. The above graph exhibits predominantly poor to extremely poor non-revenue water management. The high percentage NRW in the latter municipalities to an extent NW, is expected due to the high number of rural water supply schemes in these provinces and the complications associated with metering and billing. Both graphical scenarios suggest generally poor non-revenue water management, when noting that 'good NRW' is benchmarked at 10-20% NRW.

A total volume of 83.5 million kl/annum is lost as NRW which, calculated at a unit cost of R6/kl, amounts to R 501 million per annum for the Province as a whole. The financial and potential saving, at a fixed unit cost of R6/kl is considered in the following table. By implementing Water Conservation and

Demand Management projects, a potential saving of 29.33 million kl can be achieved per annum, which translate to R 174.9 million per year. For a Province concerning itself with water conservation and economic growth based on water security, a potential **saving of R 175 million** is worth investing in. This potential saving is calculated from the 10 (62%) usable datasheets, which passed the No Drop quality assurance (credibility) checks. **Savings in excess of R200 million** can be projected if all EC municipalities' water balances are considered and extrapolated.

Municipality Name [WSA]	Munic Category	UARL kl/annum	Current		Target			Rand value (million) @ R6.00/kl		
			CARL kl/annum	ILI	TARL kl/annum	ILI	Savings kl/annum	UARL R million)	CARL (R million	Savings R million
Buffalo City LM	A	4 145 422	21 733 774	5.24	10 866 887	2.62	10 866 887	24.87	130.40	65.20
Nelson Mandela Metro	A	5 550 415	22 228 998	4.00	11 114 499	2.00	11 114 499	33.30	133.37	66.69
Baviaans LM	B3	71 277	196 026	2.75	98 013	1.38	98 013	0.43	1.18	0.59
Blue Crane Route LM	B3	115 842	820 521	7.08	410 260	3.54	410 260	0.70	4.92	2.46
Camdeboo LM	B3	165 761	1 232 000	7.43	616 000	3.72	616 000	0.99	7.39	3.70
Kouga LM	B3	656 453	1 981 745	3.02	990 872	1.51	990 872	3.94	11.89	5.95
Ndlambe LM	B3	485 720	1 788 652	3.68	894 326	1.84	894 326	2.91	10.73	5.37
Amathole DM	C2	2 648 615	7 142 986	2.70	3 571 493	1.35	3 571 493	15.89	42.86	21.43
Chris Hani DM	C2	388 234	1 113 036	2.87	556 518	1.43	556 518	2.33	6.68	3.34
OR Tambo DM	C2	133 675	57 005	0.43	28 502	0.21	28 502	0.80	0.34	0.17
Provincial Totals		11 870 482	58 651 622	4.94	29 325 811	2.47	29 325 811	86.17	R 349.8	174.88



The acceptable minimum level of leakage or UARL for the available datasets is 11.87 million m³/annum which is valued at R 86.2 million/annum based on R 6.00/kl. The current level of physical leakage or CARL, however, is 58.7 million m³/annum or 4.9 times higher than the acceptable minimum level of leakage. The current level of physical leakage is valued at R 350 million/a based on R 6.00/kl. If the CARL could be halved to an ILI 2.47, which is an acceptable level of leakage for developed countries, a saving of 29.3 million m³/annum or R 175 million/annum could be realised.

The R 6.00/kl is considered a realistic bulk water supply tariff for 2013/14, based on the Water Services Tariffs Report for 2012/13 (DWA, 2013). Any escalation in water unit prices above the assumed average cost of water (R6/kl) would result in higher savings potential in future (i.e. >R200 million). The R 6.00/kl is considered a realistic bulk water supply tariff for 2013/14, based on the Water Services Tariffs Report for 2012/13 (DWA, 2013).



High %NRW is possibly as result of 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. All these factors impact on revenue management and overall financial sustainability of the municipality.

The most common causes for high physical water losses are

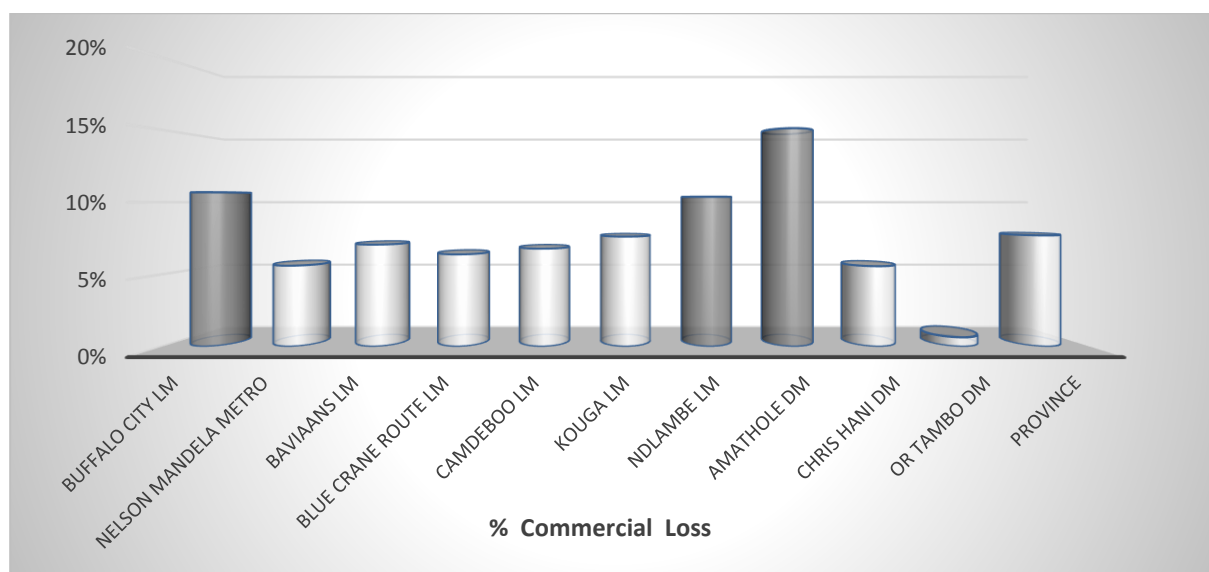
- leakage on transmission and/or distribution mains,
- leakage on service connections up to point of customer metering,
- leakage and overflows at utility's storage tanks, and

The most common causes for commercial losses are:

- unbilled unmetered consumption,
- unauthorised consumption,
- customer metering inaccuracies
- high internal plumbing leakage on private properties, and
- inefficient garden watering and household water use.

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.



The weighted average commercial loss for the Province, as % of the SIV, is 7.7%. The graphs above show commercial losses in the order of 1-15%. Most WSA's find it difficult to calculate commercial

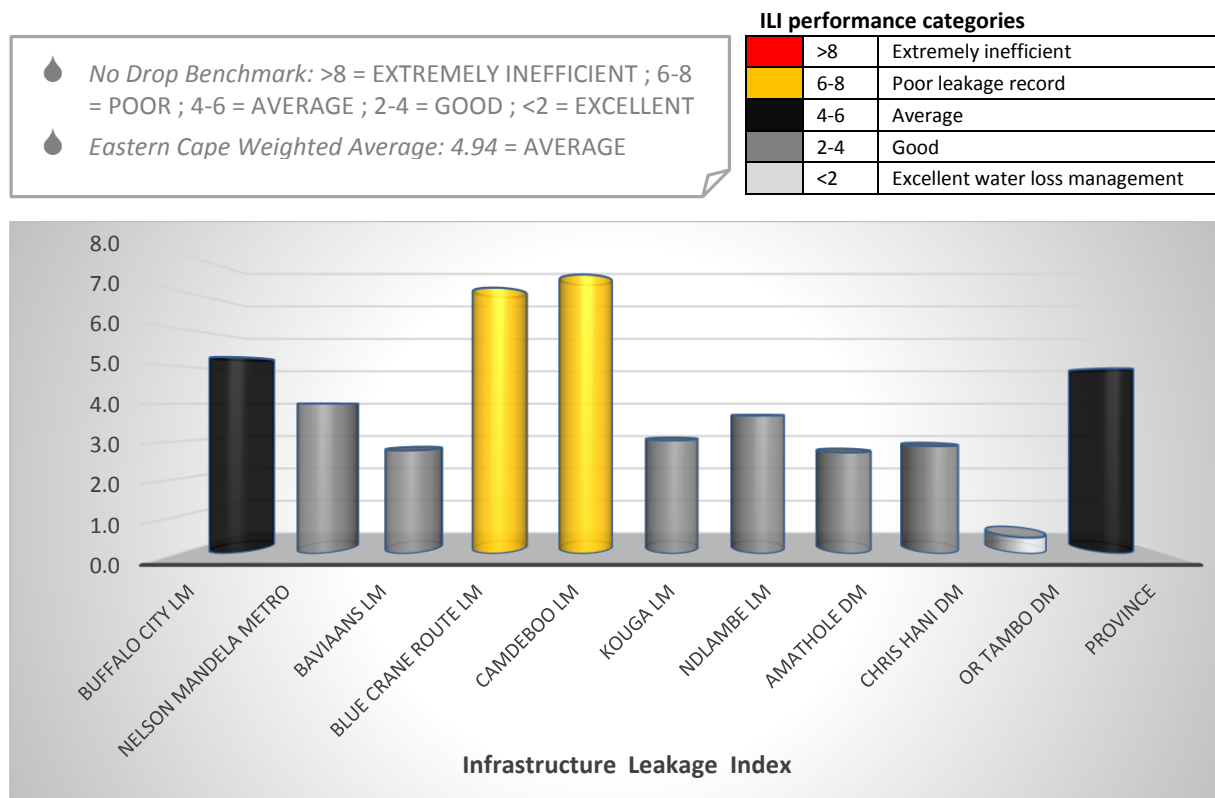
losses, as its input parameters is not easy to measure illegal connections, meter accuracy and transfer errors. As result, most WSAs accept industry default values for commercial losses and there is almost no quantification of the actual percentage. A default value of 20% is used as the norm, unless 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.

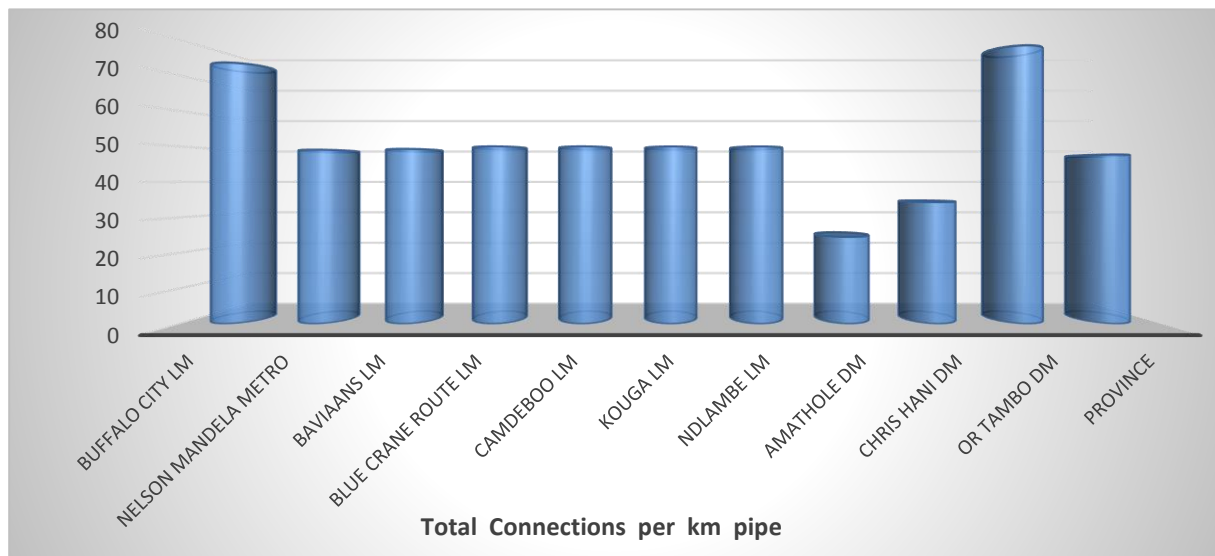
5.5 Physical water loss (ILI unit)

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.



The provincial weighted average ILI is 4.94. OR Tambo has the lowest ILI of 0.43, followed by Amathole DM (2.7) and Baviaans LM (2.75). The highest ILI can be seen for Blue Crane Route LM at 7.08 and Camdeboo LM at 7.43 which exhibit a poor leakage record.

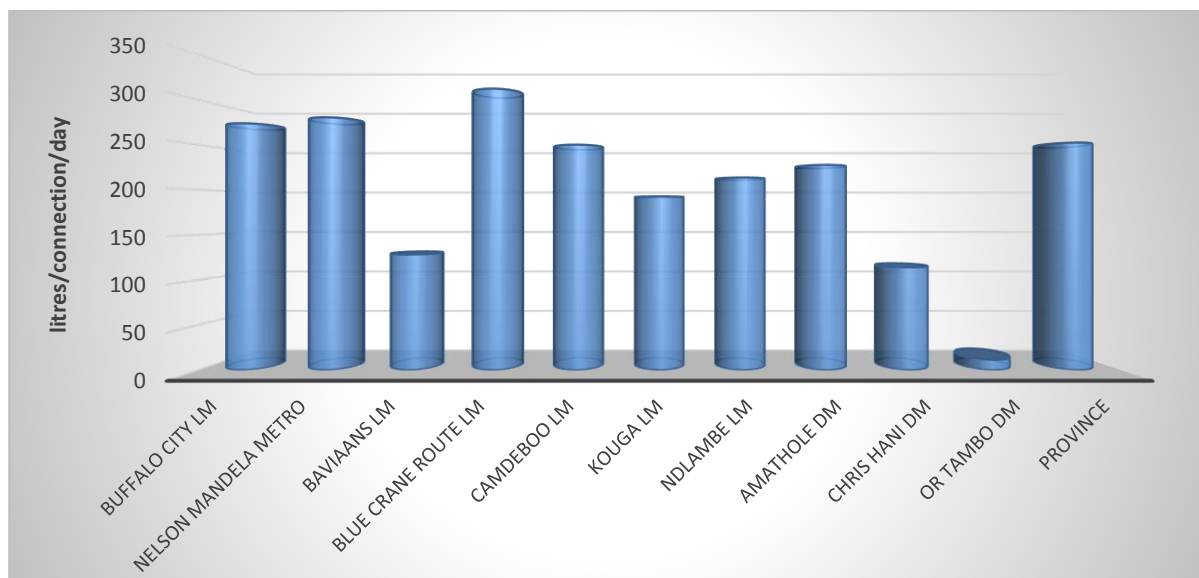
When considering that the length of mains and number of connections influences the ILI calculation, the following comparison can be made:

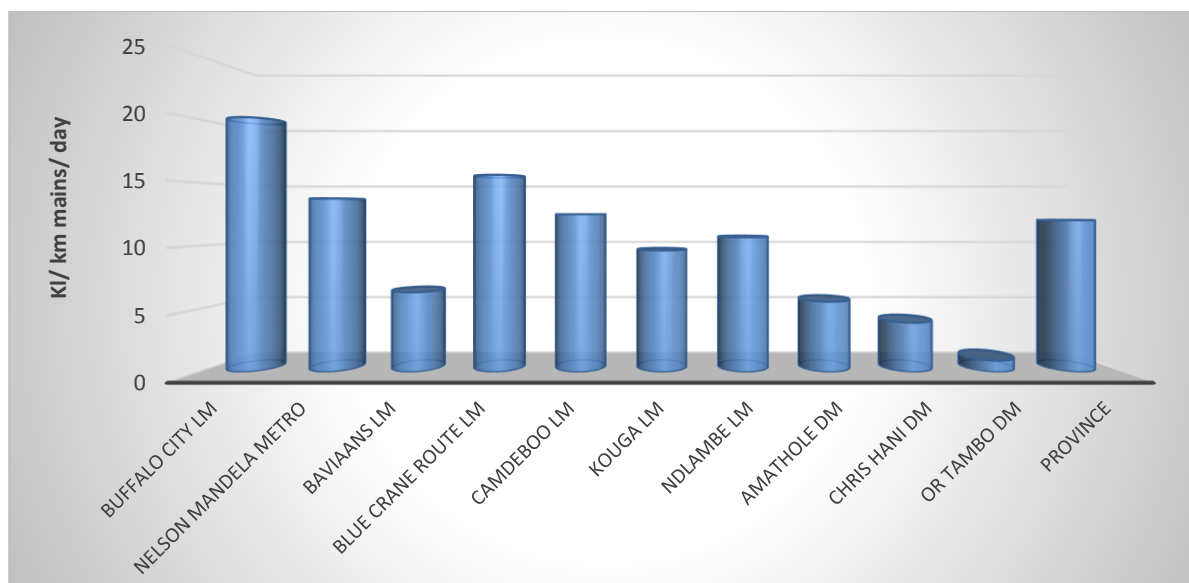


Connection density per length of pipeline is not a performance parameter, it does provide insight into the set-up of connections and meters on the existing water supply pipeline. The density of connections per km mains varies from 79 connections per km in OR Tambo DM to 25 connections per km mains in Amathole DM, with an average of 48 connections per km. The high density of connections in OR Tambo DM increases the unavoidable real losses (UARL) and reduces the ILI.

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 Blue Crane, Nelson Mandela Bay, Buffalo City and Camdeboo have the highest losses per connection per day (312 to 250 $\text{ℓ}/\text{connection}/\text{d}$), whereas Baviaans and ORT shows very low losses per connection. The 2nd graph also shows that much higher real loss per km main for Buffalo City, Blue Crane Route LM, Nelson Mandela Metro and Camdeboo. The low values of ORT will be confirmed during the next audit.



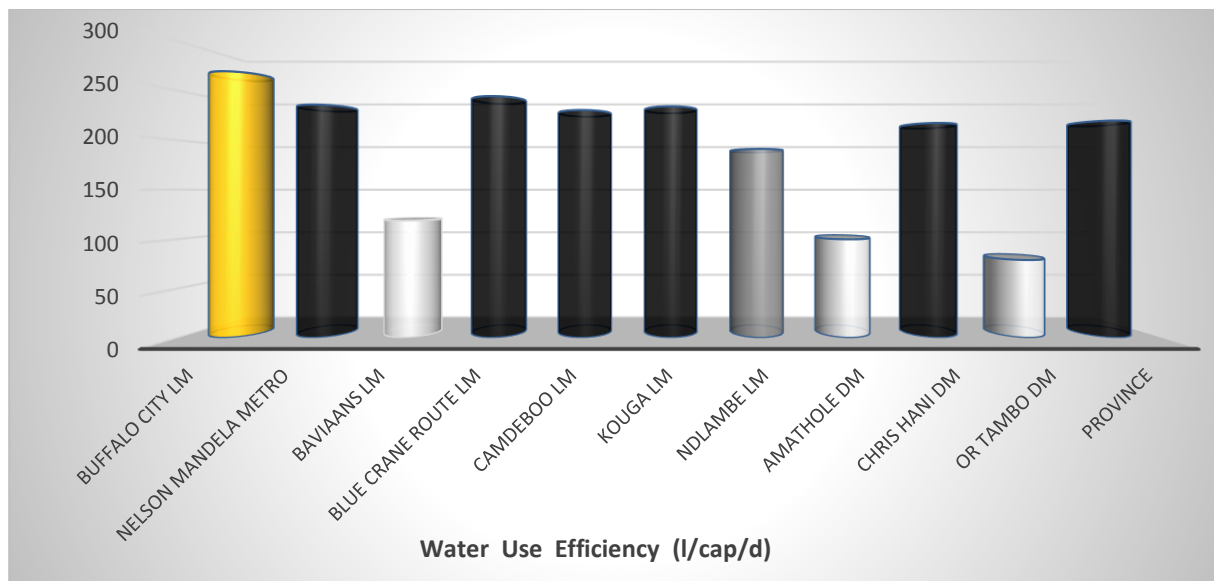
High physical losses could indicate leakages on the transmission and/or distribution mains, leakage on service connections up to point of customer metering, leakage and overflows at utility's storage tanks.

5.6 Water use efficiency ($\text{ℓ}/\text{c}/\text{d}$)

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 (m^3/year) and not just the domestic component, it does provide a useful indicator.

- No Drop Benchmark:** $>300 \text{ ℓ}/\text{c}/\text{d}$ = EXTREMELY HIGH ; $250\text{-}300 \text{ ℓ}/\text{c}/\text{d}$ = POOR ; $200\text{-}250 \text{ ℓ}/\text{c}/\text{d}$ = AVERAGE ; $150\text{-}200 \text{ ℓ}/\text{c}/\text{d}$ = GOOD ; $<150 \text{ ℓ}/\text{c}/\text{d}$ = EXCELLENT
- Eastern Cape Weighted Ave:** $220 \text{ ℓ}/\text{c}/\text{d}$ = AVERAGE

	>300	Extremely high per capita water use
	$250\text{-}300$	Poor
	$200\text{-}250$	Average
	$150\text{-}200$	Good
	<150	Excellent per capita water use



Water use efficiency is typically one of the key performance indicators and reported against at national level. The provincial weighted average WUE is 220 $\ell/c/d$. The average consumption is above the international benchmark of 180 $\ell/c/d$ and the municipalities must continue to target an average consumption of below 200 $\ell/c/d$.

The results indicate that Buffalo City has the highest WUE of 270 $\ell/c/d$ and most of the municipalities are above the benchmark of 180 $\ell/c/d$. Baviaans, Amathole and ORT reports WUE below international benchmark values with 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.

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

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. Alfred Nzo is encouraged to establish its Water Balance as a matter of priority.

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

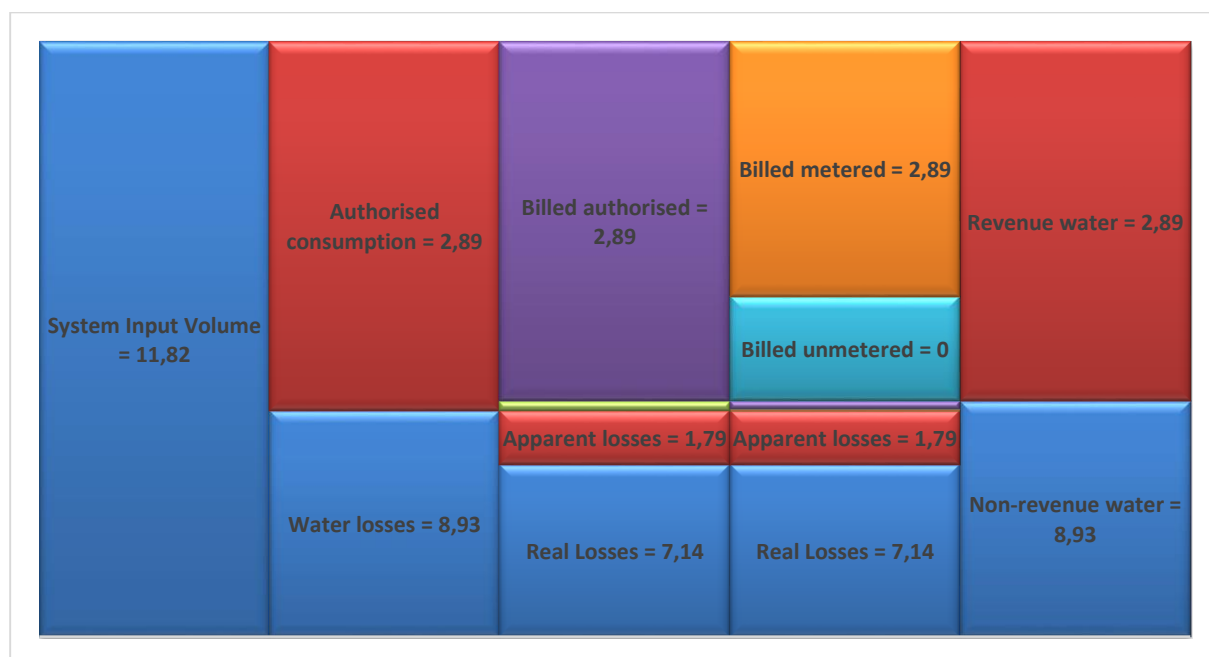
The municipality should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Amathole District Municipality

2013 Municipal No Drop Score	67.0%
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Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		2,01%
No Drop Score (2013)		67.0% Average
INPUT DATA	Population	324 580
	Households	91116
	Metered Connections	68250
	Unmetered Connections	17740
	Length of mains (km)	3508
	Average System Pressure (m)	55
	2014 Water Use Targets (Water Balance Targets)	14.04 million
	System Input Volume (kl/annum)	11.82 million
	Billed Metered Authorised Use (kl/annum)	2,89 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)	2,89 million
	Water Losses (kl/annum)	8,93 million
	Apparent losses (kl/annum)	1,79 million
	Real Losses (kl/annum)	7,14 million
	Revenue Water (kl/annum)	2,89 million
	Non-Revenue Water (kl/annum)	8,93 million
KPIs	Infrastructure Leakage Index (ILI)	1.35 Excellent
	Apparent/ Commercial Losses (%)	15.1%
	Non-Revenue Water (%)	75.6% Extremely Poor
	Water Use Efficiency (l/cap/day)	99.7 Excellent
OTHER	Authorised Use (l/cap/day)	24,38
	Real Losses (l/cap/day)	60.00
	% Water Losses	75.6%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The No Drop score indicates that the municipality is achieving average performance with room for improvement. The municipality is commended for 'knowing its status'. The ILI of 1.35 is demonstrating excellent water loss management and the water use efficiency performance is excellent at 99.7 l/c/d. The high NRW need urgent attention, which would require the will, effort and resources from the municipality as a collective.

No Drop Findings

- Monthly and annual water balance submitted was not linked to the assessment period in question. The historic water balance trend data was used to verify and adjust the data set accordingly.
- WCWDM Strategy in place but not yet approved by Council. Components listed under the WCWDM Strategy and Business Plan is included in the IDP.
- WCWDM implementation includes the retrofitting projects for internal plumbing, domestic meters and PR valves at bulk meters at Iduthwa, Butterworth, Cathgart, Stutterheim, Fort Beaufort and Adelaide as an ongoing process. Scheduled completion end May 2014. Currently taking zonal meter readings. Domestic meters being read. Checking consumption history before, putting in meters and loggers and then monitoring the consumption trend. Some political interference noted. Actual network pressure unknown. Retrofitting projects approved by Council but not the strategy. Target set for reduction of 5-10% per financial year.
- The NRW (75.6%) is demonstrating extremely poor non-revenue management.

Sustainability Pathway

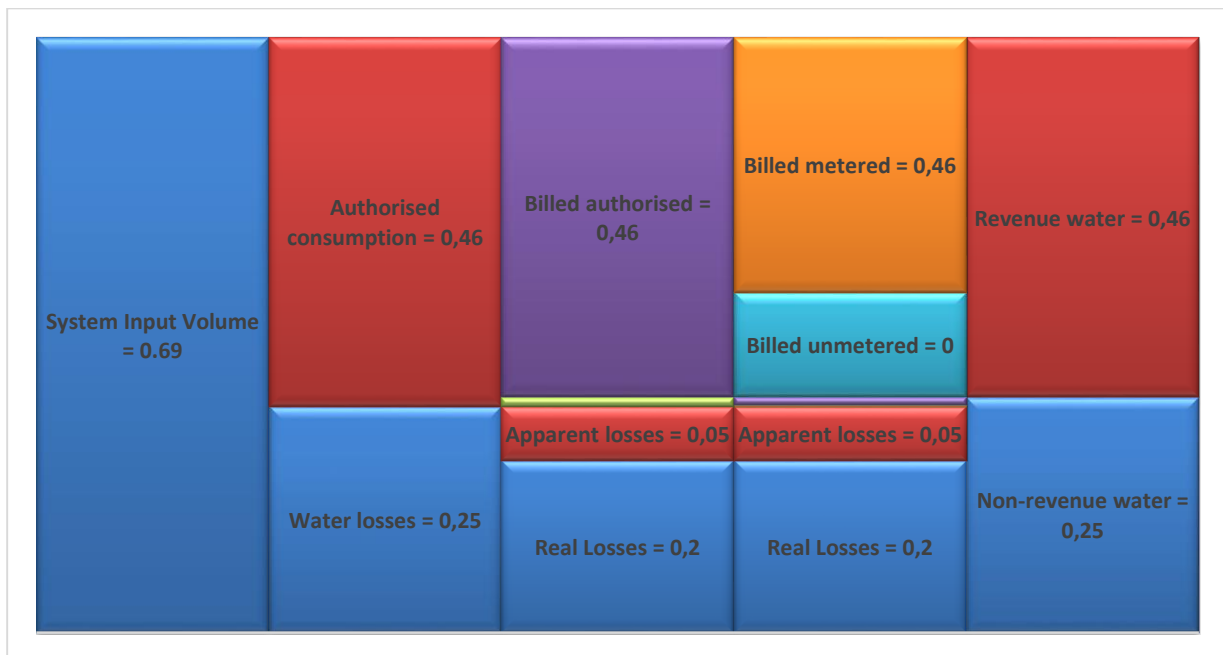
The municipality should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Baviaans Local Municipality

2013 Municipal No Drop Score	57%
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Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		1.71%
No Drop Score (2013)		57% Average
INPUT DATA	Population	16 000
	Households	4 200
	Metered Connections	3 900
	Unmetered Connections	290
	Length of mains (km)	85
	Average System Pressure (m)	40
	2014 Water Use Targets (Water Balance Targets)	0.96 million
	System Input Volume (kl/annum)	0.69 million
	Billed Metered Authorised Use (kl/annum)	0.46 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)	0.46 million
	Water Losses (kl/annum)	0.25 million
	Apparent losses (kl/annum)	0.05 million
	Real Losses (kl/annum)	0.20 million
	Revenue Water (kl/annum)	0.46 million
	Non-Revenue Water (kl/annum)	0.25 million
KPIs	Infrastructure Leakage Index (ILI)	2.75 Good
	Apparent/ Commercial Losses (%)	7.1%
	Non-Revenue Water (%)	35.3% Poor
	Water Use Efficiency (l/cap/day)	118.8 Excellent
OTHER	Authorised Use (l/cap/day)	76.88
	Real Losses (l/cap/day)	33.57
	% Water Losses	35.3%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The No Drop score indicates that the municipality is achieving average performance with room for improvement. The municipality is commended for 'knowing its status'.

The ILI of 2.75 is demonstrating good water loss management, whilst the water use efficiency performance is excellent at 118.8 l/c/d. The 35.3% NRW needs attention and would require the will, effort and resources from the municipality as a collective.

No Drop Findings

- The No Drop score indicates that the municipality is achieving average performance with room for improvement
- Monthly and annual water balance submitted was not linked to the assessment period in question. The historic water balance trend data was used to verify and adjust the data set accordingly.
- WCWDM Strategy in place but not yet approved by Council. Components listed under the WCWDM Strategy and Business Plan is not included in the IDP.
- No WCWDM implementation was indicated.
- The NRW (35.3%) is demonstrating poor non-revenue management.

Sustainability Pathway

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

Blue Crane Route Local Municipality

2013 Municipal No Drop Score	33.63%
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Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		1.01%
No Drop Score (2013)		33.63% Very Poor
INPUT DATA	Population	36 000
	Households	7 200
	Metered Connections	7 200
	Unmetered Connections	0
	Length of mains (km)	144
	Average System Pressure (m)	38
	2014 Water Use Targets (Water Balance Targets)	3.58 million
	System Input Volume (kl/annum)	3.21 million
	Billed Metered Authorised Use (kl/annum)	1.97 million
	Billed Unmetered Authorised Use (kl/annum)	0
	Unbilled Authorised Use (kl/annum)	0.21 million
	Assumed Commercial Losses (%)	20%
WATER DATA	Authorised Use – billed & unbilled (kl/annum)	2.19 million
	Water Losses (kl/annum)	1.03 million
	Apparent losses (kl/annum)	0.21 million
	Real Losses (kl/annum)	0.82 million
	Revenue Water (kl/annum)	1.97 million
	Non-Revenue Water (kl/annum)	1.24 million
KPIs	Infrastructure Leakage Index (ILI)	7.08 Poor
	Apparent/ Commercial Losses (%)	6.4%
	Non-Revenue Water (%)	38.5% Poor
	Water Use Efficiency (l/cap/day)	244.4 Average
OTHER	Authorised Use (l/cap/day)	166.39
	Real Losses (l/cap/day)	62.44
	% Water Losses	31.9%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The No Drop score indicates that the municipality is not on par with the Regulator's expectation and does not sufficiently 'know its status' at this point in time.

The water use efficiency performance is average at 244.4 l/c/d with potential for marked improvement. The 38.5% needs attention and would require the will, effort and resources from the municipality as a collective.

No Drop Findings

- The No Drop score indicates that the municipality is showing very poor performance and may require some targeted interventions.
- Monthly and annual water balance submitted was not linked to the assessment period in question. The historic water balance trend data was used to verify and adjust the data set accordingly.
- WCWDM Strategy in place but not yet approved by Council. Components listed under the WCWDM Strategy and Business Plan is not included in the IDP.
- WCWDM implementation does not appear to be taking place.
- The ILI of 7.08 is demonstrating poor water loss management.
- The water use efficiency performance is average at 244.4 l/c/d and could be improved further.
- The NRW (38.5%) is demonstrating poor non-revenue management.

Sustainability Pathway

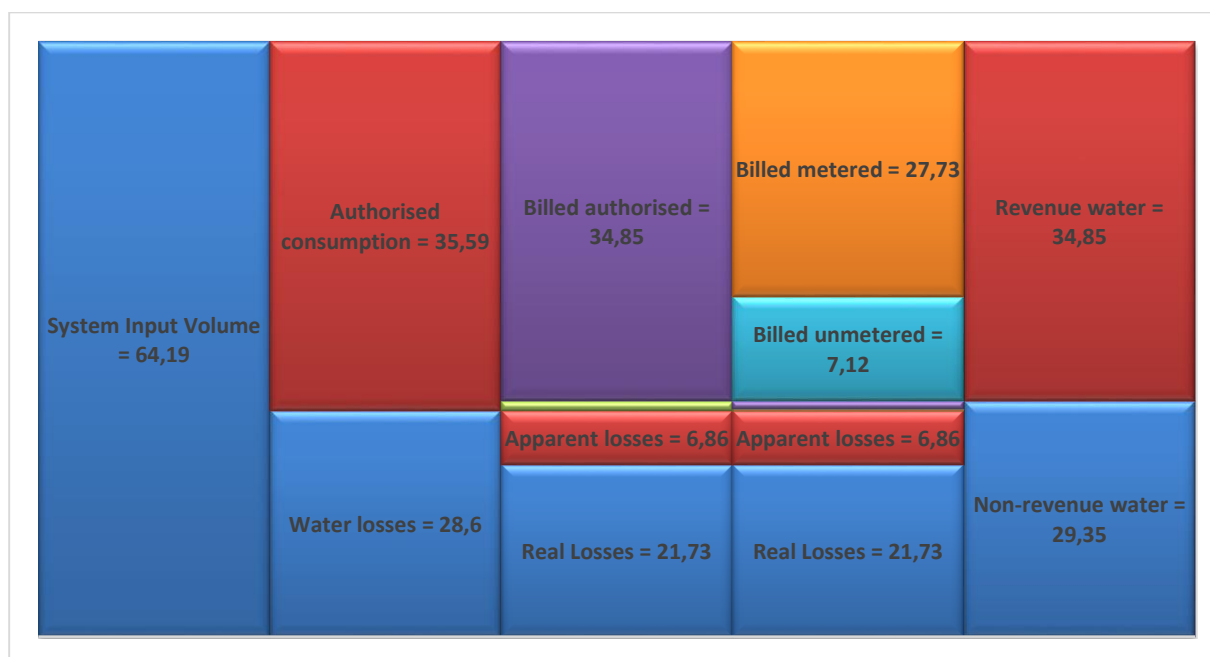
The municipality should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Buffalo City Local Municipality

2013 Municipal No Drop Score	83%
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Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		2.49%
No Drop Score (2013)		83% Good
INPUT DATA	Population	652 404
	Households	217 468
	Metered Connections	141 124
	Unmetered Connections	76 344
	Length of mains (km)	2 954
	Average System Pressure (m)	50
	2014 Water Use Targets (Water Balance Targets)	57.88 million
	System Input Volume (kl/annum)	64.19 million
	Billed Metered Authorised Use (kl/annum)	27.73 million
	Billed Unmetered Authorised Use (kl/annum)	7.12 million
	Unbilled Authorised Use (kl/annum)	0.75 million
	Assumed Commercial Losses (%)	24%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	35.59 million
	Water Losses (kl/annum)	28.60 million
	Apparent losses (kl/annum)	6.86 million
	Real Losses (kl/annum)	21.73 million
	Revenue Water (kl/annum)	34.85 million
	Non-Revenue Water (kl/annum)	28.60 million
KPIs	Infrastructure Leakage Index (ILI)	5.24 Average
	Apparent/ Commercial Losses (%)	10.7%
	Non-Revenue Water (%)	45.7% Extremely poor
	Water Use Efficiency (l/cap/day)	269.6 Poor
OTHER	Authorised Use (l/cap/day)	149.46
	Real Losses (l/cap/day)	91.27
	% Water Losses	44.6%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The No Drop score indicates that the municipality is achieving good performance as indicated by the score of 83%. The No Drop score indicates that the municipality is achieving good status and can shift to excellent with key interventions. The municipality is commended for having the required systems and process in place to 'know its status'.

The ILI of 5.24 is demonstrating average water loss management with potential for marked improvement. The 45.7% NRW needs urgent attention and would require the will, effort and resources from the municipality as a collective. The Regulator notices that WCWCWDM implementation is occurring through municipal funding and ACIP funding. Clear targets have been set for reducing water losses. A budget of R141 million has been set aside for a 5 year period. Buffalo City is commended for taking such a deliberate and exemplary decision.

No Drop Findings

- Monthly and 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.
- WCWDM Strategy in place and approved by Council. Components listed under the WCWDM Strategy and Business Plan is included in the IDP.
- The water use efficiency performance is poor at 269.6 l/c/d and need focussed interventions improve the status
- The NRW (45.7%) is demonstrating extremely poor non-revenue management which would need prioritised projects to turnaround this status.

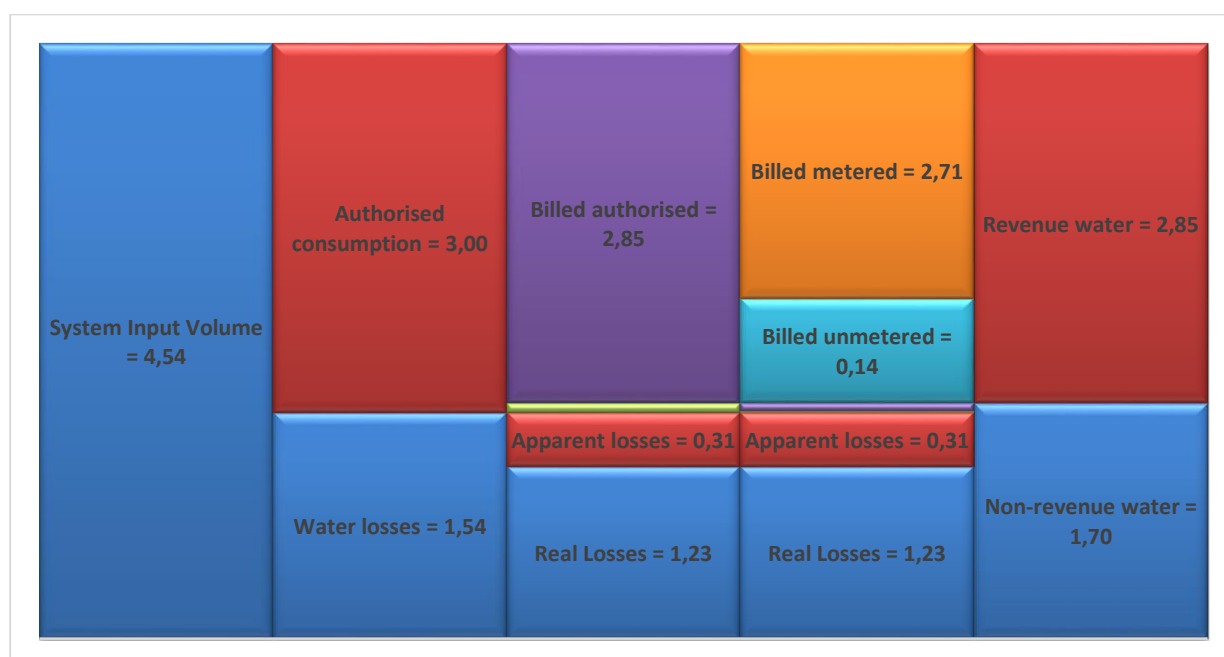
Sustainability Pathway

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

Camdeboo Local Municipality

2013 Municipal No Drop Score		31%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.93%
No Drop Score (2013)		31% Very Poor
INPUT DATA	Population	54 000
	Households	13 500
	Metered Connections	13 500
	Unmetered Connections	0.93
	Length of mains (km)	270
	Average System Pressure (m)	29
	2014 Water Use Targets (Water Balance Targets)	4.96 million
	System Input Volume (kl/annum)	4.54 million
	Billed Metered Authorised Use (kl/annum)	2.71 million
	Billed Unmetered Authorised Use (kl/annum)	0.14 million
	Unbilled Authorised Use (kl/annum)	0.16 million
	Assumed Commercial Losses (%)	20%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	3.00 million
	Water Losses (kl/annum)	1.54 million
	Apparent losses (kl/annum)	0.31 million
	Real Losses (kl/annum)	1.23 million
	Revenue Water (kl/annum)	2.84 million
	Non-Revenue Water (kl/annum)	1.70 million
KPIs	Infrastructure Leakage Index (ILI)	7.43 Poor
	Apparent/ Commercial Losses (%)	6.8%
	Non-Revenue Water (%)	37.4% Poor
	Water Use Efficiency (l/cap/day)	230.4 Average
OTHER	Authorised Use (l/cap/day)	152.26
	Real Losses (l/cap/day)	62.51
	% Water Losses	33.9%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The No Drop score of 31% indicates that the municipality is not on par with the Regulator's expectation and does not sufficiently 'know its status' at this point in time.

The 37.4% NRW and 33.9% water losses need attention and would require the will, effort and resources from the municipality as a collective.

No Drop Findings

- The No Drop score indicates that the municipality is performing very poorly and may require targeted interventions to remedy the status quo.
- Monthly and annual water balance was not submitted for the assessment period in question.
- WCWDM Strategy in draft form and no evidence of approval by Council. Components listed under the WCWDM Strategy and Business Plan are partially included in the IDP.
- WCWDM implementation does not appear to be taking place.
- The ILI of 7.43 is demonstrating poor water loss management.
- The water use efficiency performance is average at 230.4 l/c/d with potential for marked improvement.
- The NRW (37.4%) is demonstrating poor non-revenue management and need targeted interventions to turnaround this status.

Sustainability Pathway

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

Chris Hani District Municipality

2013 Municipal No Drop Score		10.03%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.30%
No Drop Score (2013)		10.03% Critical
INPUT DATA	Population	99 497
	Households	26 769
	Metered Connections	19 112
	Unmetered Connections	7 657
	Length of mains (km)	780
	Average System Pressure (m)	30
	2014 Water Use Targets (Water Balance Targets)	7.56 million
	System Input Volume (kl/annum)	7.89 million
	Billed Metered Authorised Use (kl/annum)	4.79 million
	Billed Unmetered Authorised Use (kl/annum)	0
	Unbilled Authorised Use (kl/annum)	1.55 million
	Assumed Commercial Losses (%)	28.3%
	Authorised Use – billed & unbilled (kl/annum)	6.34 million
WATER BALANCE DATA	Water Losses (kl/annum)	1.55 million
	Apparent losses (kl/annum)	0.44 million
	Real Losses (kl/annum)	1.11 million
	Revenue Water (kl/annum)	4.79 million
	Non-Revenue Water (kl/annum)	3.10 million
	Infrastructure Leakage Index (ILI)	2.87 Good
KPIs	Apparent/ Commercial Losses (%)	5.6%
	Non-Revenue Water (%)	39.3% Poor
	Water Use Efficiency (l/cap/day)	217.4 Average
OTHER	Authorised Use (l/cap/day)	174.62
	Real Losses (l/cap/day)	30.65
	% Water Losses	19.7%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The No Drop score of 10% indicates that the municipality is performing critically and that urgent water use efficiency interventions would be required. This performance is not on par with the Regulator's expectation and does not sufficiently 'know its status' at this point in time.

The 39.3% NRW needs attention and would require the will, effort and resources from the municipality as a collective. The ILI of 2.87 is demonstrating good water loss management but some improvement may be possible subject to economic benefit.

No Drop Findings

- Monthly and annual water balance was not submitted for the assessment period in question.
- WCWDM Strategy in place but does appear to be approved by Council. Components listed under the WCWDM Strategy and Business Plan do not appear to be included in the IDP.
- WCWDM implementation does not appear to be taking place.
- The water use efficiency performance is average at 217.4 l/c/d and the ILI at 2.87, both metric indicate substantial potential for further improvement.
- The NRW (39.3%) is demonstrating average non-revenue management.

Sustainability Pathway

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

Ikwezi 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.

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. Ikwezi is encouraged to establish its Water Balance as a matter of priority.

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

Joe Gqabi District Municipality

2013 Municipal No Drop Score		18%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.54%	
No Drop Score (2013)	18% 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. The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. Joe Gqabi DM is encouraged to establish its Water Balance as a matter of priority.

The municipality is commended for having compiled a report on current situation with regards to WCWCWDM in the municipality and recommendations going forward. Interventions include a public awareness campaign, find and fix program (register of houses and proof of work undertaken), with the focus to reduce water losses in areas where supply was inadequate and not aligned to the strategy undertaken after these programs were initiated. However, there appear to be limited movement against targets. The programme is funded by MWIG with R3.5 million spent to date from the R10 million 3-year budget. A budget from DWS is noted to have been received for the communication strategy, however, no multi-year implementation plan associated with the budget. The municipality is encouraged to implement WCWCWDM from a measured baseline (Water Balance) and to proceed purposefully towards meeting defined targets.

No Drop findings

- No monthly and annual water balances in place
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

Sustainability Pathway

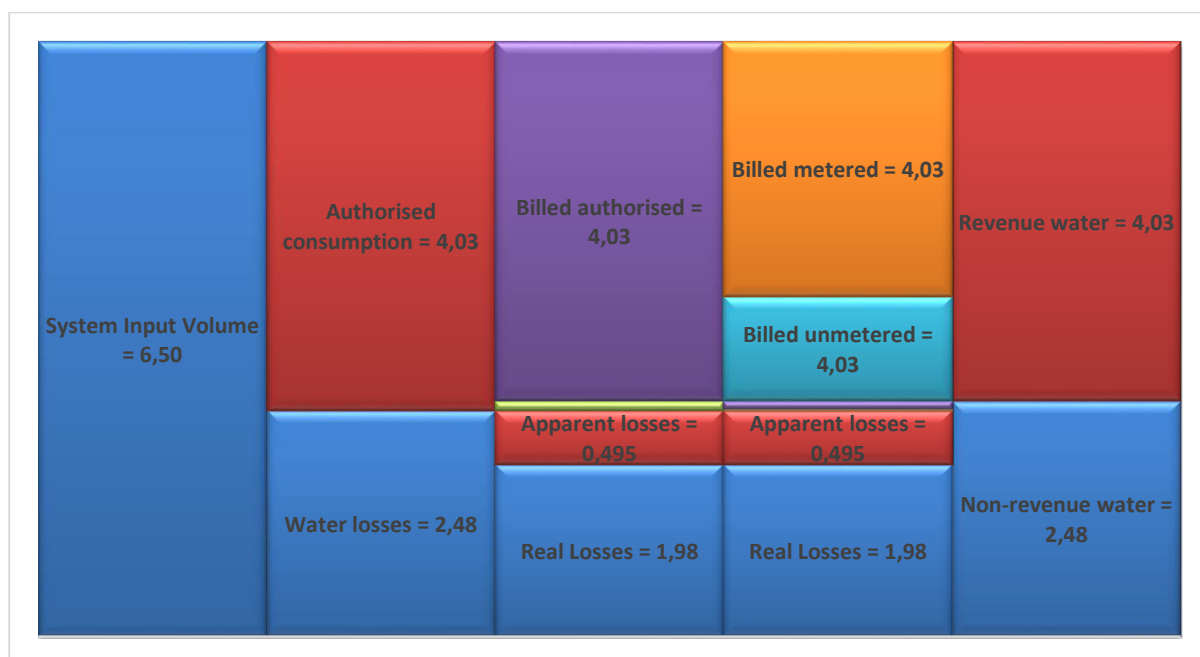
The municipality should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Kouga Local Municipality

2013 Municipal No Drop Score	25.54%
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Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.77%
No Drop Score (2013)		25.54% Critical
INPUT DATA	Population	76 087
	Households	28 185
	Metered Connections	24 265
	Unmetered Connections	3 920
	Length of mains (km)	564
	Average System Pressure (m)	55
	2014 Water Use Targets (Water Balance Targets)	7.04 million
	System Input Volume (kl/annum)	6.50 million
	Billed Metered Authorised Use (kl/annum)	4.03 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)	4.03 million
	Water Losses (kl/annum)	2.48 million
	Apparent losses (kl/annum)	0.495 million
	Real Losses (kl/annum)	1.98 million
	Revenue Water (kl/annum)	4.03 million
	Non-Revenue Water (kl/annum)	2.48 million
KPIs	Infrastructure Leakage Index (ILI)	3.02 Good
	Apparent/ Commercial Losses (%)	7.6%
	Non-Revenue Water (%)	38.1% Poor
	Water Use Efficiency (l/cap/day)	234.2 Average
OTHER	Authorised Use (l/cap/day)	144.98
	Real Losses (l/cap/day)	71.36
	% Water Losses	38.1%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. Kouga is acknowledged for having a Water Balance in place, but the Regulator notes with concern that the monthly and annual water balance submitted had limited and questionable data set.

The ILI of 3.02 is demonstrating good water loss management and Kouga is encouraged to improve its current No Drop status of 25.5% by also addressing the NRW (38.1%) and water losses (38%).

No Drop Findings

- The No Drop score indicates that the municipality is performing critically and that urgent water use efficiency interventions would be required.
- WCWDM Strategy not in place and no WCWDM implementation indicated.
- The water use efficiency performance is average with 234.2 l/c/d and has the potential for marked improvement.
- The NRW (38.1%) is demonstrating poor non-revenue management.

Sustainability Pathway

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

Koukamma 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.

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. Koukamma is encouraged to establish its Water Balance as a matter of priority.

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

Makana Local Municipality

2013 Municipal No Drop Score		21%
Key Performance Area	Status and Performance	
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)	0.63%	
No Drop Score (2013)	21% Critical	

Regulatory Impression

The municipality provided limited evidence for the No Drop assessment. The credibility of data could not be confirmed during the audit process. No 2012/13 IWA water balance diagram were reflected upon during the audit.

The municipality is however commended for having commenced with WCWCWDM implementation for 2012/13. Notably are the following projects: Fittings supply, installation & commissioning of electromagnetic flow meters; training of semi-skilled plumbers; contract & appoint semi-skilled plumbers for 12 months; purchase toolkit for semi-skilled plumbers; upgrade a telemetry system; purchase fittings for district meters; install district meters; awareness programme at twenty schools; marketing & publicity material; water loss investigations, purchase of domestic water meters and toilet cisterns for RDP houses. The budget allocation of R3 million for 2011/12, R 7.04 million for 2012/13 and R 5.97million for 2013/14 shows that the municipality is committed to make a concerted effort to its status.

However, the impact of any interventions will only be measurable if a Water Balance is in place. The Regulator will follow Makana's progress with attentiveness during the next No drop assessment.

No Drop findings

- No monthly and annual water balances in place
- WCWDMS and BP in place but not clear as to whether approved by Council or not.
- Compliance and performance evidence could not be provided
- Insufficient evidence to award a bonus.

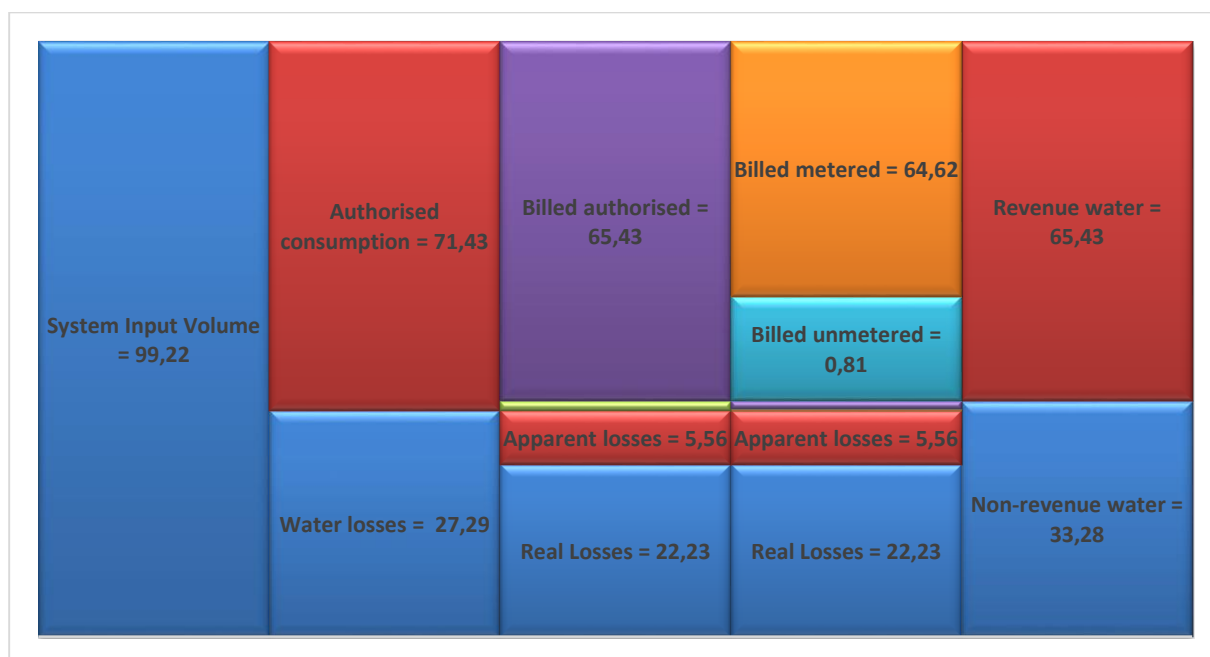
Sustainability Pathway

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

Nelson Mandela Metro

2013 Municipal No Drop Score		95%
Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		2.85%
No Drop Score (2013)		95% Excellent
INPUT DATA	Population	1 152 115
	Households	314 848
	Metered Connections	217 075
	Unmetered Connections	122
	Length of mains (km)	4 427
	Average System Pressure (m)	60
	2014 Water Use Targets (Water Balance Targets)	87.76 million
	System Input Volume (kl/annum)	99.22 million
	Billed Metered Authorised Use (kl/annum)	64.62 million
	Billed Unmetered Authorised Use (kl/annum)	0.81 million
	Unbilled Authorised Use (kl/annum)	5.99 million
	Assumed Commercial Losses (%)	20%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	71.43 million
	Water Losses (kl/annum)	27.79 million
	Apparent losses (kl/annum)	5.56 million
	Real Losses (kl/annum)	22.23 million
	Revenue Water (kl/annum)	65.43 million
	Non-Revenue Water (kl/annum)	33.28 million
KPIs	Infrastructure Leakage Index (ILI)	4.00 Average
	Apparent/ Commercial Losses (%)	5.6%
	Non-Revenue Water (%)	34.0% Poor
	Water Use Efficiency (l/cap/day)	235.9 Average
OTHER	Authorised Use (l/cap/day)	169.86
	Real Losses (l/cap/day)	52.86
	% Water Losses	28.0%

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



Regulatory Impression

The 95% No Drop score indicates that the municipality is achieving excellent performance in terms of knowing its status and is encouraged to build and maintain this status quo. A WCWCWDM Strategy in place and is approved by Council and components listed under the WCWDM Strategy and Business Plan is included in the IDP. The metro is also advised to refer to the full No Drop Metro assessment for the 2013/14 year to focus its efforts on the findings that will most benefit the NRW and water loss performance indicators.

No Drop Findings

- Monthly and annual water balance submitted was not linked to the assessment period in question. The historic water balance trend data was used to verify and adjust the data set accordingly.
- No clear interventions were recorded for the WCWCWDM implementation but the Assessor viewed part of the minutes of project meetings to confirm this.
- The ILI of 4.00 is demonstrating average water loss management with potential for marked improvement
- The water use efficiency performance is average at 235.9 l/c/d.
- The NRW (34.0%) is demonstrating poor non-revenue management.

Sustainability Pathway

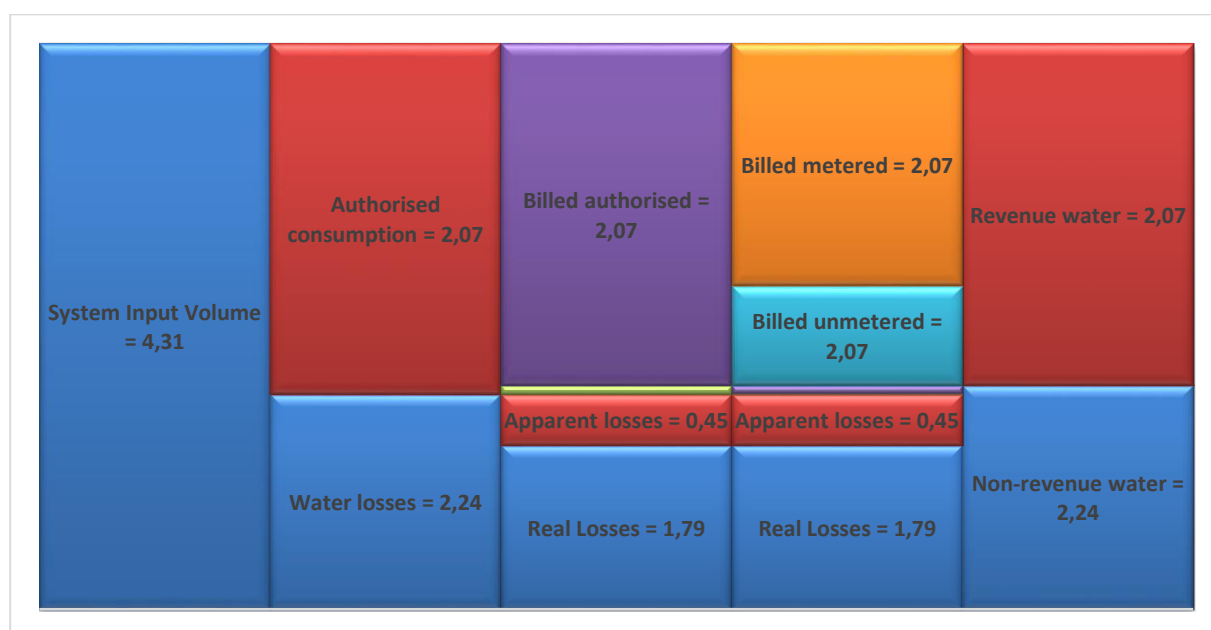
The municipality should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

Ndlambe 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
INPUT DATA	Population	61 728
	Households	25 000
	Metered Connections	14 052
	Unmetered Connections	8 889
	Length of mains (km)	459
	Average System Pressure (m)	50
	2014 Water Use Targets (Water Balance Targets)	3.88 million
	System Input Volume (kl/annum)	4.31 million
	Billed Metered Authorised Use (kl/annum)	2.07 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)	2.07 million
	Water Losses (kl/annum)	2.24 million
	Apparent losses (kl/annum)	0.45 million
	Real Losses (kl/annum)	1.79 million
	Revenue Water (kl/annum)	2.07 million
	Non-Revenue Water (kl/annum)	2.24 million
KPIs	Infrastructure Leakage Index (ILI)	3.68 Good
	Apparent/ Commercial Losses (%)	10.4%
	Non-Revenue Water (%)	51.9% Extremely poor
	Water Use Efficiency (l/cap/day)	191.2 Good
OTHER	Authorised Use (l/cap/day)	91.93
	Real Losses (l/cap/day)	79.39
	% Water Losses	51.9%

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



Regulatory Impression

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. The Regulator notes with concern that the monthly and annual water balance is not in place and had not been submitted as evidence. The No Drop score of 9% indicates that the municipal knowledge base is not in a good position and require urgent interventions to bring about a turnaround in the status quo.

It is noted with encouragement that some WCWCWDM implementation activities are taking place. This includes a list of projects for the training of technical staff, community awareness and fixing of leaks. Also, door to door assessments conducted and a report was compiled for the entire municipality, and since has addressed many of the leaks and faulty meters identified in the report. However, the project did not outline movement against current water losses. A budget was outlined for the Mvula project and expenditure is taking place against budget line items.

The water use efficiency performance is good at 191.2 l/c/d but some improvement may be possible subject to economic benefit. Ndlambe is urged to prioritise its high NRW and water losses, both >50%.

No Drop Findings

- Monthly and annual water balance was not submitted for the assessment period in question.
- WCWDM Strategy not in place as funds not sufficient to do so. Reference to the WCWDM Strategy and Business Plan is included in the IDP.
- The ILI of 3.68 is demonstrating good water loss management but some improvement may be possible subject to economic benefit.
- The NRW (51.9%) is demonstrating extremely poor non-revenue management.

Sustainability Pathway

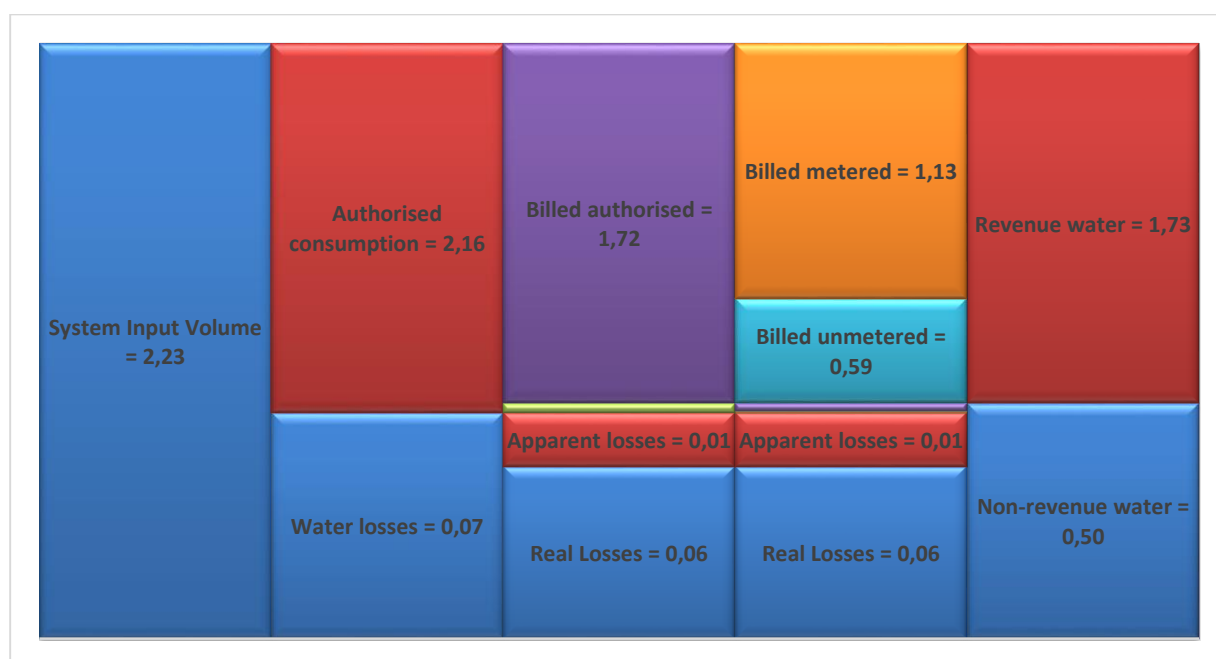
The municipality should endeavour to implement the recommendations of the No Drop assessment, which will lead to improved sustainability, and security of water services.

OR Tambo District Municipality

2013 Municipal No Drop Score	0.28%
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Key Performance Area		Status and Performance
WATER USE EFFICIENCY & WATER LOSS MANAGEMENT (3% weight)		0.01%
No Drop Score (2013)		0.28% Critical
INPUT DATA	Population	77 435
	Households	17 010
	Metered Connections	13 340
	Unmetered Connections	0
	Length of mains (km)	170
	Average System Pressure (m)	27
	2014 Water Use Targets (Water Balance Targets)	0 million
	System Input Volume (kl/annum)	2.23 million
	Billed Metered Authorised Use (kl/annum)	1.13 million
	Billed Unmetered Authorised Use (kl/annum)	0.59 million
	Unbilled Authorised Use (kl/annum)	0.43 million
	Assumed Commercial Losses (%)	20%
WATER BALANCE DATA	Authorised Use – billed & unbilled (kl/annum)	2.16 million
	Water Losses (kl/annum)	0.07 million
	Apparent losses (kl/annum)	0.01 million
	Real Losses (kl/annum)	0.06 million
	Revenue Water (kl/annum)	1.73 million
	Non-Revenue Water (kl/annum)	0.50 million
KPIs	Infrastructure Leakage Index (ILI)	0.43 Excellent
	Apparent/ Commercial Losses (%)	0.6%
	Non-Revenue Water (%)	22.5% Average
	Water Use Efficiency (l/cap/day)	78.8 Excellent
OTHER	Authorised Use (l/cap/day)	76.26
	Real Losses (l/cap/day)	2.02
	% Water Losses	3.2%

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



Regulatory Impression

The Regulator impresses on ORT that the first and most important step to ensure water security is to know your status. The Regulator notes with concern that the monthly and annual water balance is not in place and had not been submitted as evidence. The No Drop score of 0.3% indicates that the municipal knowledge base is not in a good position and require urgent interventions to bring about a turnaround in the status quo.

Positive aspects are noted such as the implementation of WCWCWDM measures for Flagstaff and Mthatha, e.g. meter replacement and calibration, pipe replacement and installation of a telemetry system at command reservoirs, Mthatha pipe replacement project. The ILI of 0.43 and water use efficiency of 78.8 l/c/d indicate very good to excellent performance. ORT is encouraged to compile a Water Balance which is on par with international best practice and to verify the metrics in the Water Balance to ensure that all performance metrics are accurate for the next No Drop assessment.

No Drop Findings

- The municipality is performing at a critical level which requires urgent interventions and turnaround.
- No monthly and annual water balance was submitted for the assessment period in question.
- A Council approved WCWCWDM Strategy is in place as well as a master plan. However, essential components of the Strategy and Business Plan were not clearly indicated in the IDP.
- The NRW (22.5%) is demonstrating average non-revenue management with potential for marked improvement.

Sustainability Pathway

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

Sundays River Valley 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

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

The Regulator impresses on the municipality that the first and most important step to ensure water security is to know your status. Sundays River Valley is encouraged to establish its Water Balance as a matter of priority.

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