

DRAFT NO DROP REQUIREMENTS 2016-2024 (10 year planning horizon) Water Use Efficiency and Loss Management Incentive-based Regulation



MULTI-YEAR SCORING PROJECTION

Criterion #	Description	2016 (%)	2018 (%)	2020 (%)	2022 (%)	2024 (%)
1	WCDM strategy and planning	30	20	20	20	20
2	Asset management	10	10	15	20	20
3	Technical skills	10	10	5	5	5
4	Credibility	15	15	10	10	10
5	Compliance and performance	35	35	35	30	30
6	Local regulation	0	0	5	5	5
7	Customer care	0	10	10	10	10
Bonus		(17%)	(17%)	(17%)	(17%)	(17%)
Qualifiers		none	none	(100%)	(100%)	(100%)
TOTAL		100	100	100	100	100

Key Performance Area	Green Drop	Sub-requirement			dary We		
and Primary Weighting	Requirements	Sub-requirement		(as % of	Primary	Weight	
			2014	2016	2018	2020	2022
		Provide a detailed water resource balance diagram complete with	0%	10%	10%	10%	10%
(1)	(1.1)	a) current demand,					
	Water Resource	b) available supply as per WUL or SLA,					
WCDM Strategy	Balance Diagram	c) projected (5 year) demand estimates with and					
and planning		d) without implementing WDM.					
		Provide MONTHLY and ANNUAL composite IWA water balance diagrams and supporting	30%	25%	25%	25%	25%
2014: 3% of BDrop		documents for the complete system as part of the water audit (as a component in the	of 3%				
2016: 30%	4	WSDP) as per Reg 509 of 2001 Clause 10 of the Water Supply Regulations. Balance					
2018: 20%	(1.2)	diagram to specify as a minimum the main components of the IWA balance including					
2020: 20%	Water Balance	Water Losses broken down into;					
2022: 20%		a) System input volumes,					
		b) Billed metered and unmetered usage					

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement			dary We Primary	ighting Weight	
			2014	2016	2018	2020	2022
		 c) Unbilled Authorized Consumption, d) Water losses broken down into Real and Apparent Losses, e) Free Basic Water, and f) Non Revenue Water and to be supported by a schematic or layout drawing showing bulk meters, zones and main infrastructure components. 					
	(1.3) WDM Strategy and business plan	 a) Evidence must be provided of a Council approved (or signed by MM, Director or Executive Director or CFO, or included in the IDP) WDM strategy and business plan consisting of at least the following: Background and Context Situation Assessment including a Needs Statement Key Issues and Challenges Focus Areas of Intervention List of Proposed Interventions Set targets for demand, NRW, commercial and real losses. Allocation of responsibilities to specific persons/positions in the organization (not departments) Budget and Multi-year Implementation Timeline b) Provide details on the actions, budgets, timelines and progress of water demand management activities undertaken. Reg. 509 of 2001 Clause 10. 	30% of 3%	25%	25%	25%	25%
	(1.4) Number of metered customers	Percentage of customers who are metered including those who have been supplied with a measuring control device as calculated from the data presented in the summary section:	0%	10%	10%	10%	10%
	(1.5) Percentage of metered connections billed	Number of customers billed against actual meter readings.	0%	10%	10%	10%	10%
	(1.6) Flat rate or deemed consumption billing rate	Households billed on a flat rate or on a deemed consumption method as a percentage of all households (not only metered households) in order to indicate percentage or rate of unconfirmed billing.	0%	10%	10%	10%	10%
	<mark>(1.7)</mark> Tariffs	Provide copy of all DOMESTIC water use tariffs a) for past three years b) indicating rising block tariff that would discourage high water use. Clause 10(2) d of the Water Services Act (Act no. 108 of 1997). Also in terms of Local Water Supply Bylaws	0%	10%	10%	10%	10%

Key Performance Area	Green Drop	Sub-requirement			dary We		\
and Primary Weighting	Requirements				Primary		
			2014	2016	2018	2020	2022
	Criteria 1 Bonus (a):		0%	Up to	Up to	Up to	Up to
	Multi-year water	Water balances for multiple years in line with Reg. 509 of 2001 Clause 10		17% of total	17% of total	17% of total	17% of total
	balances			score-	score-	score-	score-
		Provide details of household leak repair programme for both indigent and non-indigent	0%-	Up to	Up to	Up to	Up to
		households including		17% of	17% of	17% of	17% of
	Criteria 1 Bonus (b):	a) Households visited		total	total	total	total
	Household leak repair	b) Methodology		score-	score-	score-	score-
	programme	c) Policy					
	p g	d) Costs (audited)					
		e) Proof of efficacy of the programme					
	Criteria 1 Penalty (a):	Failing to provide evidence of water source availability through a valid Water Use License	0%	Up to 5%	Up to 5%	Up to 5%	Up to 5%
	WUL Regulatory	(or SLA with a WSP). The penalty will apply to a maximum of 50% of the total score					of total
	compliance	achieved under Criteria 1.1		score	score	score	score
	Criteria 1 Penalty (b):		Up to 5%	Up to 5%	Up to 5%	Up to 5%	Up to 5%
	Inclusion in the IDP	Components under Criteria 1.3 has not been included in the IDP or WSDP	of total	of total	of total	of total	of total
	inclusion in the IDP		score	score	score	score	score
		The Institution must present a complete Asset Register. The asset register must:	0%	15%	15%	15%	15%
(2)		a) detail relevant equipment and infrastructure					
		b) indicate asset description					
Asset Management	(2.1)	c) location					
/ loose management	Asset register	d) condition (remaining life)					
		e) replacement value					
		The asset register must be supported by up-to-date network drawings inclusive of the					
	(0.0)	entire supply and storage system.	00/	450/	4.50/	450/	4.50/
	(2.2)	Provide evidence of a pipe replacement plan with evidence of implementation as	0%	15%	15%	15%	15%
	Mains replacement	measured in terms of length of pipes installed in the previous financial years against the					
2014: 0% of BDrop	programme	overall length of the entire primary and secondary distribution network.	00/	200/	200/	200/	200/
2016: 10%	(2.2)	Provide details of compliance with Reg 509 of 2001 Clause 10(e) (Meter installation and	0%	20%	20%	20%	20%
2018: 10%	(2.3)	testing details), including at least					
	Consumer meter	• number of new meters installed (as a % of total)					
2020: 15%	maintenance and	Meters replaced (as a % of total) Meters tested and results (as a % of total)					
2022: 20%	replacement	Meters tested and results (as a % of total) Permoval of unlawful connections (as a % of total)					
	programme	Removal of unlawful connections (as a % of total) Provide details of both proactive and reactive mater maintenance programme					
		Provide details of both proactive and reactive meter maintenance programme					

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement			dary Wei Primary		
			2014	2016	2018	2020	2022
		Evidence must be presented on responses to exception reports.					
	(2.4)	 a) Provide copy of control valve and bulk meter register and map indicating at least the make, model and size, GPS co-ordinates, 	0%	20%	20%	20%	20%
	(2.4) Control valve and Bulk meter maintenance	 settings, service schedule, and performance monitoring along with b) an associated maintenance plan (cleaned, replaced, tested, etc.) with proof of 					
		implementation.					
	(2.5) Monitoring and analysis of, and response to high water loss supply zones	Provide details in accordance with Reg 509 of 2001 Clause 11 on: a) active monitoring of ALL supply zones in terms of: • flow and pressure logging, • MNF analysis, • pressure analysis, • burst frequencies, • bulk meter readings, • use of SCADA systems and • pipe replacement. b) evaluation of data and c) response protocols and processes when anomalies are identified (excessive pipe leakages, reservoir overflows, illegal or unmetered connections, etc.) (works order will be accepted as evidence that the protocols have been implemented).	0%	20%	20%	20%	20%
	(2.6) O&M Budgets and Expenditure	The Institution must present credible evidence of: a) Maintenance Budget (as part of Operations Budget) b) Maintenance Expenditure (as part of the Operations Expenditure) c) Maintenance Expenditure should be more than 5% of the Operations Expenditure in total for the preceding Financial Year.	0%	10%	10%	10%	10%
	Criteria 2 Bonus: Cathodic Protection	A bonus will be allocated if the WSA can provide evidence and maintenance records of a cathodic protection installed to protect its bulk mains. Evidence is to be presented in the form of a schedule of all bulk mains and the cathodic protection systems installed to protect each system. In addition to this monitoring results must be presented to the efficacy of each of the cathodic protection systems.	0%-	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-
	Criteria 2 Penalty: None	None					

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement			dary Wei Primary	ighting Weight)	
			2014	2016	2018	2020	2022
(3) Technical Skills 2014: % of Bdrop 2016: 10% 2018: 10% 2020: 5% 2022: 5%	(3.1) Availability and competence of the water loss manager and team	a) The Institution must present evidence of a competent Water Loss Management Team indicating the WDM responsible persons (in form of an Organogram) with % vacant in accordance with Clause 66 (Staff matters) of the Municipal Systems Act 32 of 2000. b) Proof required on team manager competency (Qualification & Experience) with the following additional requirement: Manager to have suitable tertiary qualification with suitable experience. c) The Institution must present evidence of a competent structured Maintenance Team (in form of Organogram with well-defined positions and job descriptions; Contract or Invoice). Logbook with maintenance entries will serve as adequate evidence. d) Additional proof required on team competency for the team presented under (c) above (e.g. Qualification & Experience & Trade-test) e) Indicate number of qualified plumbers per 1000 connections.	BONUS up to 17% of total score	40%	40%	40%	40%
		Alternative to a) and b) above: In WSAs where the WDM function is the responsibility of a number of different teams, the following must be provided: * Organograms of all key teams including Financial, Metering, GIS, IT, Reactive and Proactive Maintenance, Asset Management, Risk Management, WDM and others as relevant. Involvement of the sections must be proven. * Competency of the managers.					
	(3.2) Water loss meeting	 a) Provide, for the period under review, minutes and reports of inter-departmental (tech & fin) bi-monthly Physical water loss and Commercial loss meetings as per Municipal Systems (Sec 9: Performance management) Act 32 of 2000. b) Provide evidence that the outcomes of the meetings are actioned. 	0%	30%	30%	30%	30%
	(3.3) Training and capacity building	Provide, for the period under review, details of WCWDM training and capacity building programme for personnel, officials and politicians. Clause 68 (Capacity building) Municipal Systems Act 32 of 2000. a) Provide information on course title, duration, accreditation status. b) Provide evidence on number of individuals (including officials and politicians) attending the training.	0%	15%	15%	15%	15%
	(3.4) Meter Readers	 a) Provide details of the following to meter readers (both in-house and external): qualification criteria, compliance to the criteria, training provided and Performance monitoring. b) The WSI will provide evidence on: 	0%	15%	15%	15%	15%

Key Performance Area	Green Drop Requirements	Sub-requirement			dary We		\
and Primary Weighting	Kequirements		2014	2016	2018	Weight	2022
		 the number of meter reader readers employed and Its meter reading strategy. Refer the Municipal Finance Management Act (56/2003) in this regard. 	2014	2010	2010	2020	2022
	Criteria 3 Bonus: Demonstrated political support	Active involvement of executive council and councilors to promote WCWDM as evidenced by: a) their active promotion of efficiency, b) assisting with disconnections, c) assisting with credit control procedures, d) involvement in steering committees, and e) WUE performance is included in a measurement criteria of the performance assessment of the responsible MMC (Member of Mayoral Committee, MM, City Manager, CFO and Tech Director). f) Other (detail to be provided).	0%	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-
	Criteria 3 Penalty: Performance Targets for Senior Officials	Progressive WUE targets aligned to the latest WDM strategy are included in the performance contracts of the following senior officials: MM, CFO and Technical Director. Non-conformance will attract the following penalties against Criteria 3.1 as per Sec 9: Performance Management of the Municipal Systems Act 32 of 2000.	0%			Up to 5% of total score	Up to 5% of total score
(4) CREDIBILITY 2014: 0% of BDrop 2016: 15%	(4.1) Meter readings and billing system	Provide monthly reports indicating: a) readings, b) consumption (kl) per tariff code, c) summary report of monthly units sold, d) amount in Rand e) Number of journal entries and corrections as per the Chapter 9 (Credit control and debt collection) of the Municipal Systems Act 32 of 2000.	0%	50%	50%	50%	50%
2016: 15% 2018: 15% 2020: 10% 2022: 10%	(4.2) Record keeping	For the preceding 3 year period, provide details on monthly meter readings, calculation sheets, comments on anomalies, etc. to comply with Reg.509 of 2001 Clause 11 (2) "Municipalities must keep record of the quantities of water measured and of the calculations made."	0%	20%	20%	20%	20%
	(4.3) Independent Audit	Provide evidence of an independent investigations (outside of the normal metering and billing process) in order to confirm metering and billing information against a check of unmetered connections, meter accuracy, illegal connections, etc. (e.g. top consumer audits, random consumer audits and indigent consumer audits, etc.) to ensure that all users of the supply system are correctly billed. Investigation reports with	0%	20%	20%	20%	20%

Key Performance Area	Green Drop	Sub-requirement			dary We		
and Primary Weighting	Requirements		2014	2016	Primary 2018	2020	2022
		recommendations and evidence of implementation of findings are to be presented for assessment.					
	(4.4) Flow meter verification	WSA is to present evidence on the flow meter verification or replacement practices employed on all meters excluding consumer's meters. At least 30% of meters need to be evaluated per annum.	0%	10%	10%	10%	10%
	Criteria 4 Bonus: None	None	-	-	-	-	-
	Criteria 4 Penalty: Inaccurate meter readings	The penalty will be applied if an excessive number of corrections are reported under item 4.1 as considered over the full year of the assessment.	0%		Up to 5% of total score	Up to 5% of total score	Up to 5% of total score
(5) Compliance and Performance 2014: 3% of BDrop 2016: 35% 2018: 35% 2020: 35% 2022: 30%	(5.1) Repair of reticulation leaks	Provide details of leak repair schedule indicating a) date reported, b) date fixed, c) repair time, d) backlogs e) % repairs exceeding 48 hours to comply with Reg. 509 of 2001 Clause 12 Target: All reticulation leaks must be repaired within 48 hours of becoming aware thereof.	0%	15%	15%	15%	15%
	(5.2) Physical water losses	Physical (real) water loss key performance in terms of the ILI as per Sec 6. (Performance Management) of the Municipal Systems Act 32 of 2000. • CARL = Current Annual Real Losses • UARL = Unavoidable Annual Real Losses	40% of 3%	20%	20%	20%	20%
	(5.3) Commercial water losses	Commercial water loss key performance indicators as per Sec 6. (Performance Management) of the Municipal Systems Act 32 of 2000.	40% of 3%	20%	20%	20%	20%
	(5.4) Non-revenue water	Non-revenue water key performance indicators as per Sec 6. (Performance Management) of the Municipal Systems Act 32 of 2000. Note: Evidence must be provided that the consumption of informal settlements is included in the non-revenue water calculation.	40% of 3%	15%	15%	15%	15%

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement			dary We Primary)
			2014	2016	2018	2020	2022
	(5.5) Water use efficiency	Water use efficiency key performance indicators as per Sec 6. (Performance Management) of the Municipal Systems Act 32 of 2000. • SIV = System input volume	40% of 3%	15%	15%	15%	15%
	(5.6) Pressure Management	Provide copy of reticulation drawing along with records of pressure monitoring records indicating pressure distribution is not exceeding 900kPa (Reg 509 of 2001 Clause 15).	0%	15%	15%	15%	15%
	Criteria 5 Bonus (a): Performance	Reference to and achieving present and multi-year target of reducing water losses between the period 2014 and 2022. A full bonus to be awarded on achievement on the Presidential target.	0%	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-
	Criteria 5 Bonus (b): Additional pressure management	Bonus on aggressive pressure management	0%	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-
	Criteria 5 Penalty: Section 82	Penalty will apply should the Department find proof during / post assessment that the WSI is guilty of an offence as per Section 82 of the Water Services Act, by only submitting partial information (in any form) in order to present a false impression of WUE Performance and/or compliance. The penalty will apply to a maximum of 70% of the total score achieved under Criteria 5	0%		Up to 5% of total score	Up to 5% of total score	Up to 5% of total score
(6) LOCAL REGULATION	(6.1) Metering, billing and credit control policy	Provide a copy of the municipal metering, billing and credit control policy. The score will be maximised if implementation can be demonstrated by way of evidence.	0%	20%	20%	20%	20%
2014: 0% of BDrop 2016: 0% 2018: 5% 2020: 5% 2022: 5%	(6.2) Consumer meter replacement strategy	Provide evidence of a meter management programme addressing at least the following: • Age at which a meter is replaced, • Testing procedure to be followed for meters that are queried as being faulty by consumers, • Estimated number of meters that are to be replaced per annum with allocated budget, • Procedures followed in managing metering of large consumers, • Adoption and use of an electronic meter management database or system, and • Procedure followed in capturing meter information on the billing system.	0%	15%	15%	15%	15%

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement			dary Wei Primary		
			2014	2016	2018	2020	2022
	<mark>(6.3)</mark> Bylaws	 a) Provide copy of the latest (not older than 10 years) promulgated water supply bylaws highlighting clauses to: promote water use efficiency such as removal of wasteful devices (automatic urinals), Unlawful use of water, Consumers responsibility to repair leaks and conserve water, Use of Measuring Control Devices including Prepayment meters, and Water restrictions in emergency situations b) Provide evidence of implementation of the bylaws (Compliance with Reg. 509 of 2001 Clause 14.) NOTE: If the bylaws are older than 10 years the bylaws may be accepted if proof can be provided that the bylaws have been communicated to customers in the last 5 years. 	0%	30%	30%	30%	30%
	(6.4) Indigent database	Provide copy of latest indigent database and definition of indigent status.	0%	30%	30%	30%	30%
	(6.5) Consumer installations other than meters	The WSA must show commitment to the installation of quality fixtures to all households, particularly low cost housing schemes, by providing evidence that all fittings comply with the requirements below: 1) All plumbing components are to be JASWIC compliant (Joint Acceptance Scheme for Water Installation Components) and/or 2) Every consumer installation must comply with SABS 252: Water Supply and Drainage for Buildings and SABS 254: The Installation of Fixed Electric Storage Water Heating Systems Provide copies of building inspection reports indicating compliance.	0%	5%	5%	5%	5%
	Criteria 6 Bonus: War on wastage	The removal of wasteful devices, such as automatic urinals, is actively pursued by the municipality in line with the requirements of Reg. 509 of 2001 Clause 10(g). The evidence provided must include the following: a) Strategy b) Impact assessment of strategy and prioritization in place c) Proof of implementation d) Proof of achievement of targeted goals	0%	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-	Up to 17% of total score-
	Criteria 6 Penalty: None	None					

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement			dary We Primary		
una i innai y vi cigning	nequirements		2014	2016	2018	2020	2022
(7) Customer Care		 a) Provide a copy of the municipal customer charter as approved by the Exec Director and the Portfolio Committee. The Charter should state the type, nature and 	0%	20%	20%	20%	20%
2014: 0% of BDrop 2016: 0% 2018: 10% 2020: 10% 2022: 10%	7.1 Customer Charter	 timeframe within which a response can be expected from the municipality, by a customer, to queries and complaints (telephonic and written) regarding various service delivery failures and events b) The charter must specifically include: Service level standards The responsibilities of the municipality with respect to WUE The responsibilities of the consumer with respect to WUE 					
	7.2 Customer Care Centre	Provide copy of water related customer service report indicating at least: a) number of queries, b) number resolved, c) outstanding (monthly aging going back 6 months) d) Type of queries. As per Chapter 6 (Performance Management) and Chapter 9 (Credit Control and Debt Collection) of the Municipal System Act 32 of 2000.	0%	20%	20%	20%	20%
	7.3 Information Billing	Provide copy of a typical monthly water bill showing a) at least last two meter readings with dates, b) consumption with measurement unit, c) whether the "readings" actual or estimated, d) 6 month historic usage trends for the specific consumer and e) highlighting of excessive usage against. comparable consumer benchmarks as per Chapter 9. (Credit control and debt collection) of the Municipal System Act 32 of 2000.	0%	20%	20%	20%	20%
	7.4 Community Awareness Campaign	Provide, for the period under review, details of on-going a) public meetings, b) distribution of pamphlets and brochures, c) bill boards,	0%	20%	20%	20%	20%

No Drop Requirements 2016-2024

Key Performance Area and Primary Weighting	Green Drop Requirements	Sub-requirement				eighting y Weigh	
			2014	2016	2018	2020	2022
		d) local newspaper campaigns, articles and ads, e) local radio campaigns, spots and talks, and f) door–to–door education. To promote awareness on wastage, payment for services and leakage control (Reg. R509 of 2001 Clause 3 & Municipal Systems Act 32 of 2000 Chapter 4.)					
	7.5 Schools awareness campaign	Description of programme implemented by the municipality that provides on-going information on water issues at all schools in its jurisdiction by providing: a) a scheduled consultative interaction and awareness generation at at least 20% to 50% of schools in the municipal area, per annum, in order to attract a score. b) copies of materials used and distributed - must include pamphlets or flyers to demonstrate commitment.	0%	20%	20%	20%	20%
	Criteria 7 Bonus (a): Sector awareness campaign and stakeholder forums	Provide details engagement activity schedule with a) industry, b) major consumers and c) institutions (Government, NGOs, etc.) To promote water use efficiency. Minutes of meetings will be accepted as evidence of the above.	0%	Up to 17% of total score	Up to 17% of total score	Up to 17% of total score	Up to 17% of total score
	Criteria 7 Bonus (b): Revenue enhancements	Innovative strategies employed to enhance revenue, for example incentives to pay, amnesty on illegal connections, meter reading by consumer, etc. WSAs are encouraged to report on their out-of-the-box ideas related to WUE improvements.	0%	Up to 17% of total score	Up to 17% of total score	Up to 17% of total score	Up to 17% of total score
	Criteria 7 Bonus (c): Innovative water supply	Innovative strategies and projects aimed at augmenting water supply volumes, at the required standard, through reuse, reclaim, recycle or other means of processed waters from alternative sources. Innovative strategies employed to enhance revenue, for example incentives to pay, amnesty on illegal connections, meter reading by consumer, etc. WSAs are encouraged to report on their out-of-the-box ideas related to WUE improvements.	0%	Up to 17% of total score	Up to 17% of total score	Up to 17% of total score	Up to 17% of total score
	Criteria 7 Penalty: None	None					

No Drop Requirements 2016-2024

Comments or questions on this plan must be sent to:

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