

ANNEX 1
DETAILS OF PUBLIC CONSULTATION FOR GARISSE AND SEWERAGE COMPANY LTD
(FOR THE PERIOD 2025/2026 – 2028/2029)

1.0 Cost and Revenue Structure for the Tariff Period

Proposed Tariff for Garissa Water and Sewerage Co. Ltd.						
Expenditure Item	2023/2024 (Kshs)	2024/2025 (Kshs)	2025/2026 (Kshs)	2026/2027 (Kshs)	2027/2028 (Kshs)	2028/2029 (Kshs)
Operations	208,879,949.61	246,148,404.00	258,787,489.83	265,145,244.18	270,817,594.99	270,459,671.45
Maintenance	24,904,695.84	24,801,886.00	63,343,296.50	69,022,844.83	75,237,608.92	75,237,608.92
Regulatory Levy	10,208,966.40	12,303,499.00	14,743,882.98	17,684,074.08	21,211,444.85	21,242,430.70
Total O&M Costs	243,993,611.85	283,253,789.00	336,874,669.31	351,852,163.09	367,266,648.75	366,939,711.06
Investment Costs	-	-	-	49,078,496.00	63,593,852.00	63,593,852.00
Debt Repayment	-	-	-	20,078,971.84	40,961,102.55	66,890,993.40
Total Costs	243,993,611.85	283,253,789.00	336,874,669.31	421,009,630.93	471,821,603.30	497,424,556.46
Total Billing (KShs)	304,746,356	307,326,833	368,597,075	442,101,852	530,286,121	636,083,634
Collection Efficiency (%)	65%	70%	90%	95%	95%	95%
Projected Revenue	198,822,512	215,128,783	331,737,367	419,996,759	503,771,815	604,279,452
O&M Cost Coverage	81%	76%	98%	119%	137%	165%
Total Cost Coverage	81%	76%	98%	100%	107%	121%

2.0 Proposed Change in Water Tariff Structure for the Period

2.1 Water Tariff

Proposed Tariff for Garissa Water and Sewerage Co. Ltd.				
Consumer Categories	Consumption Block	Current Tariff	Consumption Block	Proposed Tariff
	(m3)	(KSh/M ³)	(m3)	(KSh/M3)
Domestic/Residential	0-6	54	1-6	80
	7-20.	80	7-20	120
	21-50	104	21-50	135
	51-100	128	51-100	160
	101-300	160	101-300	180
	>300	208	>300	220
Multi-Dwelling Units		n/a	Per M3	120
Commercial/Industrial	0-50	104	1-50	135
	51-100	128	51-100	160
	101-300	160	101-300	180
	>300	208	>300	220
Government/Institutions	0-50	104	1-50	135
	51-100	128	51-100	160
	101-300	160	101-300	180
	>300	208	>300	220
Public Schools, Colleges, and Universities	0-600	80	1-600	110
	601-1200	90	601-1200	120
	>1200m3	100	>1200m3	130
Unique Consumer Categories	Water Kiosks	35	Per M3	50

Customers with non-functional meters shall be billed based on the average of the last three months' bills

2.2 Sewerage Tariff Structure for the period 2025/2026 to 2028/2029

a) Consumers with a Water Connection

Sewerage will be charged at 75% of the water volumes, billed at the tariff for water specified (in 2.1) above, for all customer categories

b) Consumers without a Water Connection

Sewerage consumers without a water connection shall be charged as follows:

- Single dwelling Domestic unit: Ksh. 300 Per Month
- All other categories: 75% of the Volume of water consumed as per the metered source at the rates specified in 2.2 (a) above.

3.0 Indexation

The utility's tariffs for water and sewerage shall be eligible for annual indexation as per the regulations of the Water Services Regulatory Board (WASREB). The inflation adjustment shall come into effect after a full year of implementation, on the 15th day of July every year, and shall remain in force until the 14th day of July the following year.

4.0 Miscellaneous Charges

These shall be charged as per the approved miscellaneous charges approved by WASREB.

Item/ Service	Charge (Ksh.)
Water Deposit	
Category of consumer	
Domestic	2500
Retail shops less than 10m ³	3000
Retail shops with more than 10m ³	3,500
Bar and restaurants with less than 15 m ³	4000
Bar and restaurants more than 15 m ³	6,000
Hotel class "A" and "B" with less than 150 m ³	12,000
Hotel class "A" and "B" with more than 150 m ³	15000
Hotel class "C" and 'D' less than 150 m ³	18000
Hotel class "C" and 'D' more than 150 m ³	20,000
Hospitals and Health centres with more than 150 m ³	20,000
Hospitals and Health centres with less than 150 m ³	12,000
Schools and other institutions have more than 200 m ³	20,000
Schools and other institutions with less than 200 m ³	10,000
Minor construction sites of more than 200 m ³	15,000
Major construction sites with more than 300 m ³	50,000
Light industries with less than 200 m ³	30,000
Medium industries between 200 m ³ and 300 m ³	50,000
Heavy industries of more than 300 m ³	100,000
Water Kiosks	5,000
Customers with only a sewer connection are to be charged a deposit equivalent to a water connection	
Other Charges	
Service	
New water connection fee – Connection size: $\frac{1}{2}$ inch to 1 inch	2,500
New water connection fee – Connection size: 1.5 inches to 3 inches	7,500
New water connection fee – Connection size above 3inches	15,000
Water Reconnection fee – at meter point	1,000
Water Reconnection fee – at mains	5,000 and double deposit

Item/ Service	Charge (Ksh.)
Tanker – 8000 & 16,000 litres	2,500 & 5,000, respectively, per tanker within the WSP area for all consumers
Sale of water per M ³ at Browsing Point (own tanker)	120
Replacement of stolen or damaged meters	100% of the market cost of the meter
Meter testing on request	500
Special meter reading under customer's request	500
Sewer Connection- Residential/ Domestic	5,000
Sewer Connection- Commercial, Government, Schools, Universities, and Colleges	7,500
Sewer Connection- Industrial	15,000
Private sewer unblocking	2,500
Leak detection services	1,000
Sewer Reconnection fee	15,000
Printing of the customer's statement on their own request	200
For cutting off the supply at the request of the consumer	200
For turning on the supply otherwise than in respect of a first connection	200
Exhauster Services (Company Exhauster)	5,000 for other customers and 4,000 for informal settlements
Private Exhausters (Dumping into the company's sewer system)	15,000 per Truck per month
Penalties	
Illegal water connection -Commercial, Industry, Construction (Fraud)	100,000 plus estimated consumption during the period of illegality
Illegal water connection (Fraud) – Domestic	30,000 plus estimated consumption during the period of the illegality
Overcharging (fraud) at the water kiosk	15,000
Illegal sewer connection- Commercial, Industry, Construction	100,000
Illegal sewer connection- Domestic, Government, Schools, Universities &	30,000
Self-reconnection after cut-off for non-payment	5,000, and billing to be backdated from the date of the cut-off
Surcharge for tampering with meters (this includes meter removal, reversing	5,000
Surcharge for direct suction of water from the supply line using a pump	10,000

5.0 Service Delivery Conditions attached to the Tariff.

The conditions attached to this approval, which shall form part of the license conditions of Garissa Water and Sewerage Company Ltd, are:

Target	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
Water Coverage (%)	62%	65%	66%	67%	68
Water quality standards (%)			100%		
Personnel Expenditure as % of O&M	37%	31%	31%	31%	32%
Non-Revenue Water	32%	29%	28%	27%	26%
Hours of Supply (Hrs.)	22	22	22	22	23
Staff per 1000 connections	10	9	8	7	7
Metering ratio (%)	64%	80%	90%	100%	100%
Collection Efficiency (%)	65%	90%	95%	95%	95%
Resale at kiosk			Kshs. 5.00 per 20l jerry can		

5.1 Other Conditions

- Annual budgets:** The utility shall adhere to the budgetary levels set in the tariff.
- Surpluses:** The surpluses projected to be realised shall be set aside to implement priority service delivery capital projects. GAWASCO shall be required at the end of every financial year to identify the priority project to be implemented and obtain approval from WASREB.
- Reporting:** The utility shall submit quarterly performance reports to WASREB in the prescribed format.
- Creation of distinct water and sewer cost centres:** GAWASCO shall create separate water and sewer cost centres and maintain a distinct record of operations of the two centres.
- Metering:** GAWASCO shall progressively enhance the metering ratio to attain 100% as per condition (5.0) above
- Investments:** The utility shall undertake the investments as follows: -

S/NO	PROPOSED MINOR INVESTMENTS FOR GARISSA WATER AND SEWERAGE CO. LTD.				
	CAPEX	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29
1.	Metering	0	19,758,816	14,391,432	14,391,432
2.	NRW Reduction plan	0	18,760,000	8,265,000	8,265,000
3.	Rehabilitation Works	0	10,559,680	40,937,420	40,937,420
Total		0.00	49,078,496	63,593,852	63,593,852

Forecast 2-2026/2027

ACTIVITY	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)	
METERING	Water Meters -New Connections + Fittings		7,128	2627	No.	109	7,128	776,952.00
METERING	Water Meters - The Existing Unmetered Connections Fittings		7,128	2627	No.	1,250	7,128	8,910,000.00
METERING	Water Meters -New Connections + Fittings			2627	No.	163	7,128	1,161,864.00
METERING	Water Meters - The Existing Unmetered Connections Fittings			2627	No.	1,250	7,128	8,910,000.00
SUB-TOTAL METERING	SUB-TOTAL METERING	SUB-TOTAL METERING						19,758,816.00
NRW MANAGEMENT	Bulk/ Production Master Meters and Works							
NRW MANAGEMENT	DN 400 Mechanical Water Meter			2627	1	480,000.00	480,000.00	
NRW MANAGEMENT	DN 300 Mechanical Water Meter			2627		1	410,000.00	410,000.00
NRW MANAGEMENT	DN 250 Mechanical Water Meter			2627		2	330,000.00	330,000.00
NRW MANAGEMENT	DN 200 Mechanical Water Meter/to consider changing the type(ultrasonic)			2627		5	300,000.00	600,000.00
NRW MANAGEMENT	DN 250 Mechanical Water Meter			2627				330,000.00
NRW MANAGEMENT	DN 200 Mechanical Water Meter			2627				600,000.00
NRW MANAGEMENT	Construction of 4 bulk water meter chamber	Construction and installation of series bulk meters and production meter chambers (2 Chambers every year)		2627				100,000.00
NRW MANAGEMENT	Construction of 4 bulk water meter chambers	Construction and installation of series bulk meters and production meter chambers (2 Chambers every year)		2627		4	50,000.00	100,000.00
NRW MANAGEMENT	SUB-TOTAL-Bulk/ Production Master Meters and Works			2627				2,950,000.00
NRW MANAGEMENT	DMA Master Meters and Works			2627				
NRW MANAGEMENT	DN 250 Electromagnetic Water Meter	Township Zone (10" 3pcs),		2627				330,000.00
NRW MANAGEMENT	DN 200 Electromagnetic Water Meter	Township Zone (8" 4pcs), Iftin Zone(8" 2pcs)		2627				600,000.00
NRW MANAGEMENT	DN150 Single Jet AMR-Enabled Meter	Township Zone (6" 2pcs), Galbet Zone (6" 1pc), Waberi Zone (6" 2pcs), Iftin Zone(6" 9pcs)		2627				1,250,000.00
NRW MANAGEMENT	DN100 Single Jet AMR-Enabled Meter	Galbet Zone(4" 5pcs), Waberi Zone (4" 5pcs), Iftin Zone(4" 5pcs)		2627				550,000.00
NRW MANAGEMENT	DN75 Single Jet AMR-Enabled Meter	Galbet Zone(3" 3pcs), Waberi Zone (3" 2pcs), Township Zone (3" 1pc)		2627				340,000.00
NRW MANAGEMENT	DN63 Single Jet AMR Enabled Meter			2627				90,000.00
NRW MANAGEMENT	DN50 Single Jet AMR-Enabled Meter			2627				75,000.00

Forecast 2-2026/2027

ACTIVITY	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
NRW MANAGEMENT	Gate valves/ Sluice valves	10 will be bought and installed per year	2627				400,000.00
NRW MANAGEMENT	DMA creation and Isolation physical works	9 DMAs will be created for the three years, with 3 DMAs being created each year	2627				600,000.00
NRW MANAGEMENT	Construction of DMA meter chambers	Construction and installation of DMA Meter chambers	2627				680,000.00
NRW MANAGEMENT	Construction of DMA valve chambers	Construction and installation of DMA Valve chambers	2627				400,000.00
NRW MANAGEMENT	DN 250 Electromagnetic Water Meter	Township Zone (10" 3pcs),	2627		3	330,000.00	330,000.00
NRW MANAGEMENT	DN 200 Electromagnetic Water Meter	Township Zone (8" 4pcs), Iftin Zone(8" 2pcs)	2627		6	300,000.00	600,000.00
NRW MANAGEMENT	DN150 Single Jet AMR-Enabled Meter	Township Zone (6" 2pcs), Galbet Zone (6" 1pc), Waberi Zone (6" 2pcs), Iftin Zone(6" 9pcs)	2627		14	250,000.00	1,000,000.00
NRW MANAGEMENT	DN100 Single Jet AMR-Enabled Meter	Galbet Zone(4" 5pcs), Waberi Zone (4" 5pcs), Iftin Zone(4" 5pcs)	2627		15	110,000.00	550,000.00
NRW MANAGEMENT	DN75 Single Jet AMR-Enabled Meter	Galbet Zone(3" 3pcs), Waberi Zone (3" 2pcs), Township Zone (3" 1pc)	2627		6	170,000.00	340,000.00
NRW MANAGEMENT	DN63 Single Jet AMR Enabled Meter		2627		3	90,000.00	90,000.00
NRW MANAGEMENT	DN50 Single Jet AMR-Enabled Meter		2627		3	75,000.00	75,000.00
NRW MANAGEMENT	DN25 Single Jet AMR-Enabled Meter		2627		1	30,000.00	30,000.00
NRW MANAGEMENT	Gate valves/ Sluice valves	10 will be bought and installed per year	2627		30	40,000.00	400,000.00
NRW MANAGEMENT	DMA creation and Isolation physical works	9 DMAs will be created for the three years, with 3 DMAs being created each year	2627		9	200,000.00	600,000.00
NRW MANAGEMENT	Construction of DMA meter chambers	Construction and installation of DMA Meter chambers	2627		50	40,000.00	640,000.00
NRW MANAGEMENT	Construction of DMA valve chambers	Construction and installation of DMA Valve chambers	2627		30	40,000.00	400,000.00
NRW MANAGEMENT	SUB-TOTAL-DMA Master Meters and Works		2627				10,370,000.00
NRW MANAGEMENT	DMA Consumer Cold water meters & Accessories		2627				
NRW MANAGEMENT	DN 20mm AMR enabled Volumetric Cold-Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters).	900 metres in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged, and faulty meters in the field, which record an inaccurate reading, leading to a loss of revenue per month that would have been collected.	2627				1,800,000.00
NRW MANAGEMENT	Portable Water Meter Test Kit	It is compact, lightweight weight and accurate, which can provide you with the data for a water meter replacement program for the improvement of non-revenue management.	2627				45,000.00

Forecast 2-2026/2027

ACTIVITY	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
NRW MANAGEMENT	Water Meter Anti-Tampering Plastic Seals.	Seal all high-consumer meters with tamper-proof seals	2627				150,000.00
NRW MANAGEMENT	DN 20mm AMR enabled Volumetric Cold-Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters).	900 metres in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged and faulty meters in the field, which record an inaccurate reading, leading to loss of revenue per month that would have been collected.	2627		900	6,000	1,800,000.00
NRW MANAGEMENT	Portable Water Meter Test Kit	It is compact, lightweight weight and accurate, which can provide you with the data for a water meter replacement program for the improvement of non-revenue management.	2627		2	45,000	45,000.00
NRW MANAGEMENT	Water Meter Anti-Tampering Plastic Seals.	Seal all high-consumer meters with tamper-proof seals	2627		1,000	500	200,000.00
NRW MANAGEMENT	SUB-TOTAL-DMA Consumer Cold water meters & Accessories		2627				4,040,000.00
NRW MANAGEMENT	Pressure data loggers, Pressure Gauges & Pressure Reducing Valves						
NRW MANAGEMENT	Pressure data loggers with 2 output channels (max pressure 10 bars)	Currently, the utility does not have pressure loggers essential for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management.	2627		3		300,000.00
NRW MANAGEMENT	Pressure data loggers with 2 output channels (max pressure 20 bars)		2627		3		50,000.00
NRW MANAGEMENT	Veron Moris analogue calibrated Pressure Gauges with up to 20Bars and have plotter paper.	Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.	2627		2		150,000.00
NRW MANAGEMENT	Install Water Pressure Gauges	Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years	2627		120		200,000.00
NRW MANAGEMENT	Pressure data loggers with 2 output channels (max pressure 10 bars)	Currently, the utility does not have pressure loggers, essential for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management.	2627				200,000.00
NRW MANAGEMENT	Pressure data loggers with 2 output channels (max pressure 20 bars)		2627				300,000.00
NRW MANAGEMENT	Veron Moris analogue calibrated Pressure Gauges with up to 20Bars and has plotter paper.	Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.	2627				50,000.00
NRW MANAGEMENT	Install Water Pressure Gauges	Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years	2627				150,000.00
NRW MANAGEMENT	SUB-TOTAL-Pressure data loggers, Pressure Gauges & Pressure Reducing Valves		2627		-	-	1,400,000.00

Forecast 2-2026/2027

ACTIVITY	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
NRW MANAGEMENT	NRW MANAGEMENT TOTAL		2627		-	-	18,760,000.00
REHABILITATION WORKS	Rehabilitation of Boreholes (Flushing, Flood proofing, Disinfecting the borehole draw pipe, pump, and motor replacement)	3,967,740	2627	No.	2	3,967,740	7,935,480.00
	Pipe replacement of 3/4 " uPVC pipe	420	2627	m.	2,000	420	840,000.00
	Replacement Sewerage Manhole covers	15,000	2627	No.	40	15,000	600,000.00
	Inline dosing points for Chlorination	592,100	2627	No.	2	592,100	1,184,200.00
	Total-REHABILITATION WORKS	592,100.00	2627				10,559,680.00
			2627				
GRAND TOTAL			2627		-	-	49,078,496.00

Forecast 3-2027/2028

Activity	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
	Bulk/ Production Master Meters and Works						
NRW MANAGEMENT	DN 200 Mechanical Water Meter		2728				300,000.00
	SUB-TOTAL-Bulk/ Production Master Meters and Works		2728				300,000.00
	DMA Master Meters and Works		2728				
	DN 250 Electromagnetic Water Meter	Township Zone (10" 3pcs),	2728				330,000.00
	DN 200 Electromagnetic Water Meter	Township Zone (8" 4pcs), Iftin Zone(8" 2pcs)	2728				600,000.00
	DN150 Single Jet AMR-Enabled Meter	Township Zone (6" 2pcs), Galbet Zone (6" 1pc), Waberi Zone (6" 2pcs), Iftin Zone(6" 9pcs)	2728				1,250,000.00
	DN100 Single Jet AMR-Enabled Meter	Galbet Zone (4" 5pcs), Waberi Zone (4" 5pcs), Iftin Zone(4" 5pcs)	2728				550,000.00
	DN75 Single Jet AMR-Enabled Meter	Galbet Zone (3" 3pcs), Waberi Zone (3" 2pcs), Township Zone (3" 1pc)	2728				340,000.00
	DN63 Single Jet AMR Enabled Meter		2728				90,000.00
	DN50 Single Jet AMR-Enabled Meter		2728				75,000.00
	Gate valves/ Sluice valves	10 will be bought and installed per year	2728				400,000.00

Forecast 3-2027/2028

Activity	ITEM			Quantity	Unit Price (Ksh)	Amount (KSHS)	
	DMA creation and Isolation physical works	9 DMAs will be created for the three years, with 3 DMAs being created each year	2728			600,000.00	
	Construction of DMA meter chambers	Construction and installation of DMA Meter chambers	2728			680,000.00	
	Construction of DMA valve chambers	Construction and installation of DMA Valve chambers	2728			400,000.00	
	SUB-TOTAL-DMA Master Meters and Works		2728			5,315,000.00	
	DMA Consumer Cold water meters & Accessories		2728				
	DN 20mm AMR enabled Volumetric Cold Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters).	900 metres in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged, and faulty meters in the field, which record an inaccurate reading, leading to a loss of revenue per month that would have been collected.	2728			1,800,000.00	
	Water Meter Anti-Tampering Plastic Seals.	Seal all high-consumer meters with tamper-proof seals	2728			150,000.00	
	SUB-TOTAL-DMA Consumer Cold water meters & Accessories		2728	-	-	1,950,000.00	
	Pressure data loggers, Pressure Gauges & Pressure Reducing Valves		2728				
	Pressure data loggers with 2 output channels (max pressure 10 bars)	Currently, the utility does not have pressure loggers essential for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management.	2728			200,000.00	
	Pressure data loggers with 2 output channels (max pressure 20 bars)		2728			300,000.00	
	Veron Moris analog calibrated Pressure Gauges with up to 20Bars and has plotter paper.	Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.	2728			50,000.00	
	Install Water Pressure Gauges	Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years	2728			150,000.00	
	SUB-TOTAL-Pressure data loggers, Pressure Gauges & Pressure Reducing Valves		2728	-	-	700,000.00	
			2728				
	NRW MANAGEMENT TOTAL		2728	-	-	8,265,000.00	
METERING	Water Meters -New Connections + Fittings	7,128	2728	No.	541	7,128	3,856,248.00
METERING	Water Meters - The Existing Unmetered Connections Fittings	7,128	2728	No.	1,478	7,128	10,535,184.00
SUB-TOTAL METERING	SUB-TOTAL METERING	SUB-TOTAL METERING	2728			14,391,432.00	

Forecast 3-2027/2028

Activity	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
REHABILITATION WORKS	Rehabilitation of Boreholes (Flushing, Flood proofing, Disinfecting the borehole draw pipe, pump, and motor replacement)	3,967,740	2728	No.	2	3,967,740	7,935,480.00
REHABILITATION WORKS	Pipe replacement of 3/4 " uPVC pipe	420	2728	m.	2,000	420	840,000.00
REHABILITATION WORKS	Replacement Sewerage Manhole Covers	15,000	2728	No.	40	15,000	600,000.00
REHABILITATION WORKS	Inline dosing points for Chlorination	592,100	2728	No.	2	592,100	1,184,200.00
REHABILITATION WORKS	Rehabilitation of Boreholes (Flushing, Flood proofing, Disinfecting the borehole draw pipe, pump, and motor replacement)		2728	No.	6	3,967,740	23,806,440.00
REHABILITATION WORKS	Pipe replacement of 3/4 " uPVC pipe		2728	m.	3,000	420	1,260,000.00
REHABILITATION WORKS	Pipe replacement of 1" uPVC pipe		2728	m.	500	420	210,000.00
REHABILITATION WORKS	Pipe replacement of 1 1/2" uPVC pipe		2728	m.	500	840	420,000.00
REHABILITATION WORKS	Pipe replacement of 2" uPVC pipe		2728	m.	1,000	1,210	1,210,000.00
REHABILITATION WORKS	Pipe replacement of 3" uPVC pipe		2728	m.	500	2,490	1,245,000.00
REHABILITATION WORKS	Replacement Sewerage Manhole Covers		2728	No.	30	15,000	450,000.00
REHABILITATION WORKS	Inline dosing points for Chlorination		2728	No.	3	592,100	1,776,300.00
sub-total -REHABILITATION WORKS	sub-total -REHABILITATION WORKS	sub-total -REHABILITATION WORKS	2728				40,937,420.00
GRAND TOTAL			2728				63,593,852.00

Forecast 4-2028/2029

Activity	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
	Bulk/ Production Master Meters and Works						
NRW MANAGEMENT	DN 200 Mechanical Water Meter		2829				300,000.00
	SUB-TOTAL		2829				300,000.00
	DMA Master Meters and Works		2829				
	DN 250 Electromagnetic Water Meter	Township Zone (10" 3pcs),	2829				330,000.00
	DN 200 Electromagnetic Water Meter	Township Zone (8" 4pcs), Iftin Zone(8" 2pcs)	2829				600,000.00
	DN150 Single Jet AMR-Enabled Meter	Township Zone (6" 2pcs), Galbet Zone (6" 1pc), Waberi Zone (6" 2pcs), Iftin Zone(6" 9pcs)	2829				1,250,000.00
	DN100 Single Jet AMR-Enabled Meter	Galbet Zone(4" 5pcs), Waberi Zone (4" 5pcs), Iftin Zone(4" 5pcs)	2829				550,000.00

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Activity	ITEM			Quantity	Unit Price (Ksh)	Amount (KSHS)	
	DN75 Single Jet AMR-Enabled Meter	Galbet Zone (3" 3pcs), Waberi Zone (3" 2pcs), Township Zone (3" 1pc)	2829			340,000.00	
	DN63 Single Jet AMR Enabled Meter		2829			90,000.00	
	DN50 Single Jet AMR-Enabled Meter		2829			75,000.00	
	Gate valves/ Sluice valves	10 will be bought and installed per year	2829			400,000.00	
	DMA creation and Isolation physical works	9 DMAs will be created for the three years, with 3 DMAs being created each year	2829			600,000.00	
	Construction of DMA meter chambers	Construction and installation of DMA Meter chambers	2829			680,000.00	
	Construction of DMA valve chambers	Construction and installation of DMA Valve chambers	2829			400,000.00	
	SUB-TOTAL		2829			5,315,000.00	
	DMA Consumer Cold water meters & Accessories		2829				
	DN 20mm AMR enabled Volumetric Cold Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters).	900 metes in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged, and faulty meters in the field, which record an inaccurate reading, leading to a loss of revenue per month that would have been collected.	2829			1,800,000.00	
	Water Meter Anti-Tampering Plastic Seals.	Seal all high-consumer meters with tamper-proof seals	2829			150,000.00	
	SUB-TOTAL		2829	-	-	1,950,000.00	
	Pressure data loggers, Pressure Gauges & Pressure Reducing Valves		2829				
	Pressure data loggers with 2 output channels (max pressure 10 bars)	Currently, the utility does not have pressure loggers essential for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management.	2829			200,000.00	
	Pressure data loggers with 2 output channels (max pressure 20 bars)		2829			300,000.00	
	Veron Moris analog calibrated Pressure Gauges with up to 20Bars and has plotter paper.	Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.	2829			50,000.00	
	Install Water Pressure Gauges	Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years	2829			150,000.00	
	SUB-TOTAL- Pressure data loggers, Pressure Gauges & Pressure Reducing Valves		2829	-	-	700,000.00	

Forecast 4-2028/2029							
Activity	ITEM				Quantity	Unit Price (Ksh)	Amount (KSHS)
			2829				
	NRW MANAGEMENT TOTAL		2829		-	-	8,265,000.00
METERING	Water Meters -New Connections + Fittings	7,128	2829	No.	541	7,128	3,856,248.00
METERING	Water Meters - The Existing Unmetered Connections Fittings	7,128	2829	No.	1,478	7,128	10,535,184.00
SUB-TOTAL METERING	SUB-TOTAL METERING	SUB-TOTAL METERING	2829				14,391,432.00
REHABILITATION WORKS	Rehabilitation of Boreholes (Flushing, Flood proofing,Disinfecting the borehole draw pipe, pump, and motor replacement)	3,967,740	2829	No.	2	3,967,740	7,935,480.00
REHABILITATION WORKS	Pipe replacement of 3/4 " uPVC pipe	420	2829	m.	2,000	420	840,000.00
REHABILITATION WORKS	Replacement Sewerage Manhole Covers	15,000	2829	No.	40	15,000	600,000.00
REHABILITATION WORKS	Inline dosing points for Chlorination	592,100	2829	No.	2	592,100	1,184,200.00
REHABILITATION WORKS	Rehabilitation of Boreholes (Flushing, Flood proofing,Disinfecting the borehole draw pipe, pump, and motor replacement)		2829	No.	6	3,967,740	23,806,440.00
REHABILITATION WORKS	Pipe replacement of 3/4 " uPVC pipe		2829	m.	3,000	420	1,260,000.00
REHABILITATION WORKS	Pipe replacement of 1" uPVC pipe		2829	m.	500	420	210,000.00
REHABILITATION WORKS	Pipe replacement of 1 1/2" uPVC pipe		2829	m.	500	840	420,000.00
REHABILITATION WORKS	Pipe replacement of 2" uPVC pipe		2829	m.	1,000	1,210	1,210,000.00
REHABILITATION WORKS	Pipe replacement of 3" uPVC pipe		2829	m.	500	2,490	1,245,000.00
REHABILITATION WORKS	Replacement Sewerage Manhole Covers		2829	No.	30	15,000	450,000.00
REHABILITATION WORKS	Inline dosing points for Chlorination		2829	No.	3	592,100	1,776,300.00
sub-total -REHABILITATION WORKS	sub-total -REHABILITATION WORKS	sub-total -REHABILITATION WORKS	2829				40,937,420.00
GRAND TOTAL			2829				63,593,852.00