

**THE WATER ACT  
(No. 43 of 2016)  
NAIROBI CITY WATER AND SEWERAGE COMPANY  
APPROVED TARIFF STRUCTURE FOR THE PERIOD 2022/2023 to 2024/2025**

Nairobi City Water and Sewerage Company (NCWSC) applied to the Water Services Regulatory Board (WASREB) for a review of tariffs for water services, for the period 2021/2022 to 2024/2025 as per section 72 (1) b of the Water Act 2016.

Public consultation on the NCWSC application was carried out in accordance to the requirements of section 139 of the Water Act 2016.

After considering the application, the written and oral submissions by all stakeholders during the consultation period, and based on latest available data, WASREB has determined an upward tariff review for NCWSC is justified in order to improve service delivery, operate sustainably and protect consumer interests by meeting the tariff conditions attached to the tariff.

WASREB gives a one (1) months' notice to all existing and potential customers of NCWSC that the approved tariffs for the four financial years 2022/23, 2023/24 and 2024/25 shall be as follows:

**1.0 Approved Tariff Structure**

**1.1 Water Tariff Structure for the period 2022/2023 to 2024/2025**

| Customer Category   | Approved                     |                              |
|---|------------------------------|------------------------------|
|   | Consumption Block            | Tariff (KSh/M <sup>3</sup> ) |
| <b>Domestic/Residential</b>                                       | 1-6                          | 45                           |
|   | 7-20.                        | 67                           |
|   | 21-50                        | 70                           |
|   | 51-100                       | 76                           |
|   | 101-300                      | 78                           |
|   | >300                         | 80                           |
|   | <b>Commercial/Industrial</b> |                              |
|   | 1-50                         | 67                           |
|   | 51-100                       | 76                           |
|   | 101-300                      | 78                           |
|   | >300                         | 80                           |
| <b>Government Institutions</b>                                    |                              |                              |
|   | 1-50                         | 67                           |
|   | 51-100                       | 76                           |
|   | 101-300                      | 78                           |
|   | >300                         | 80                           |
| <b>Schools, Universities &amp; Colleges</b>                       | 1-600                        | 50                           |
|   | 601 - 1200.                  | 55                           |
|   | >1200                        | 60                           |
| <b>Multi dwelling Units (MDU)/<br/>Gated Communities (Per M3)</b> |                              | 67                           |
| <b>Bulk Water Supply to Other Public Utilities (Per M3)</b>       |                              | 32                           |
| <b>Water Kiosk (Per M3)</b>                                       |                              | 22                           |

## 1.2 Sewerage Tariff Structure for the period 2022/2023 to 2024/2025

### a) Consumers with a Water Connection

| Customer Category                                | Approved Tariff   |        |
|--|---|--------|
|  | Consumption Block in m <sup>3</sup><br>(75 % of water consumed) | Tariff |
| <b>Domestic/Residential</b>                      | 1-6   | 43     |
|  | 7-20.   | 56     |
|  | 21-50   | 63     |
|  | 51-100  | 65     |
|  | 101-300   | 68     |
|  | >300  | 72     |
|  |   |        |
| <b>Commercial/industrial/ Government</b>         | 1-50  | 56     |
|  | 51-100  | 65     |
|  | 101-300   | 68     |
|  | >300  | 72     |
|  |   |        |
| <b>Schools, Universities &amp; Colleges</b>      | 1-600   | 43     |
|  | 601 - 1200.   | 45     |
|  | >1200   | 50     |
|  |   |        |
| Multi dwelling Units (MDU)/<br>Gated Communities | (Per M <sup>3</sup> )   | 56     |
| Bulk Sewerage customers<br>(From Public WSPs)    | (Per M <sup>3</sup> )   | 30     |

### b) Consumers without a Water Connection

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

- Domestic customers without a metered source of water (Per Single dwelling unit): Ksh. 350 Per Month
- All other categories: 75% of the volume of water consumed as per the metered source of water including boreholes, at the tariff below: -

| Consumption Block (m3) | Recommended Tariff (Ksh/M3) |
|------------------------|-----------------------------|
| 1-6m3                  | 43                          |
| 7-20m3                 | 56                          |
| 21-50m3                | 63                          |
| 51-100 m3              | 65                          |
| 101-300 M3             | 68                          |
| >300M3                 | 72                          |

Note: All disconnected accounts (water only, sewer only and water + sewer shall be charged based on the average of the last three months' charges before the disconnection.

### 1.3 Indexation of the Approved Tariff

The utility's approved 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 every **July** of the tariff period commencing **July 2024**.

### 1.4 Miscellaneous Charges

These shall be as follows:

| Item/ Service  | Charge (Ksh.)  |
|--|--|
| <b>Water Deposit</b>   |  |
| <b>Category of consumer</b>  |  |
| Domestic   | 2500   |
| Multi Dwelling Units (MDU - Small); 4-10 units   | 5,000  |
| Multi Dwelling Units (MDU - Medium); 11-20 units   | 10,000   |
| Multi Dwelling Units (MDU - Large); > 21 units   | 20,000   |
| Retail shops less than 10m <sup>3</sup>  | 3000   |
| Retail shops more than 10m <sup>3</sup>  | 3,500  |
| Bar, restaurants less than 15 m <sup>3</sup>   | 4,000  |
| Bar, restaurants more than 15 m <sup>3</sup>   | 6,000  |
| Hotel less than 150 m <sup>3</sup>   | 12,000   |
| Hotel more than 150 m <sup>3</sup>   | 15,000   |
| Hospitals more than 150 m <sup>3</sup>   | 20,000   |
| Health centres less than 150 m <sup>3</sup>  | 12,000   |
| Schools less than 200 m <sup>3</sup>   | 10,000   |
| Schools and other institutions more than 200 m <sup>3</sup>                                  | 20,000   |
| Minor construction sites more than 200 m <sup>3</sup>  | 15,000   |
| Major construction sites more than 300 m <sup>3</sup>  | 50,000   |
| Light industries less than 200 m <sup>3</sup>  | 30,000   |
| Medium industrial between 200 m <sup>3</sup> and 300 m <sup>3</sup>                          | 50,000   |
| Heavy industries more than 300 m <sup>3</sup>  | 100,000  |
| Water Kiosks   | 5,000  |
| *Customers with only sewer connection to be charged a deposit equivalent to water connection |  |
| <b>Other Charges</b>   |  |
| <b>Service</b>   |  |
| New water connection fee   | 2,500  |
| Water Reconnection fee – at meter point  | 1,000  |
| Water Reconnection fee – at mains  | 5,000 and double deposit   |
| Tanker – 8000, 16,000 litres   | 2,500, 5,000 respectively per tanker within WSP area for all consumers |
| Sale of water Per M <sup>3</sup> at bowing point (own tanker)                                | 67   |
| Replacement of stolen or damaged meters  | 100% of the market cost of the meter                                   |
| Meter testing on request   | 500  |
| Leak detection services - non customers  | 3,700 for Non-Customers and Free for Customers                         |
| Sewer Connection- Residential/ Domestic  | 2,500  |
| Sewer Connection- Commercial, Government, schools, Universities and Colleges                 | 5,000  |
| Sewer Connection- Industrial   | 15,000   |
| Private sewer unblocking   | 5,000 for private and zero for public                                  |
| Sewer Reconnection fee (At mains)  | 15,000   |
| 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  |

| Item/ Service   | Charge (Ksh.)  |
|---|--|
| Exhauster Services (Company Exhauster)  | 6,000 for other customers and 4,000 for informal settlements (within NCWSC service area) |
| Private Exhausters (Dumping into the company's sewer system)                                | 5,000 per Truck per month  |
| Hiring of flushing unit services by private entities including other WSPs                   | 15,000 per hour  |
| Sales of sludge   | 300 per ton  |
| Dishonored Cheque   | 3,000 per Dishonoured payment  |
| Polluter pay principle fees   | As per WASREB's Sanitation Levy and Trade Effluent Guidelines                            |
| <b>Penalties</b>  |  |
| Illegal water connection, -Commercial, Industry, Construction (Fraud)                       | 100,000 plus estimated consumption during the period of the illegality                   |
| Illegal water connection, (Fraud) – Domestic  | 30,000 plus estimated consumption during the period of the illegality                    |
| Overcharging (fraud) at water kiosk   | 15,000   |
| Illegal sewer connection- Commercial, Industry, Construction                                | 100,000  |
| Illegal sewer connection- Domestic, Government, Schools, Universities & Colleges            | 30,000   |
| Self-reconnection after cut off for non-payment   | 5,000 and billing to be backdated from date of cut off                                   |
| Surcharge for tampering with meters (this to include meter removal, reversing of meter etc) | 5,000  |
| Surcharge for direct suction of water from the supply line using a pump                     | 10,000   |

## 2.0 Analysis of Cost Structure

Below is the summary of the projected **Annual** cost structure that makes up the total costs to be incurred by NCWSC during the tariff period:

|  | Ksh.          | Ksh.           |
|--|---------------|----------------|
| <b>Cost Subject to Annual Indexation</b> |               |                |
| <b>Operations and Maintenance costs</b>  | 8,862,926,697 | 8,862,926,697  |
| <b>Fixed Costs</b>                       |               |                |
| Average Annual Investment Cost           | 616,308,020   |                |
| Debt                                     | 900,330,594   |                |
| <b>Sub Total- Fixed Costs</b>            |               | 1,516,638,614  |
| <b>Total Average Annual Cost</b>         |               | 10,379,565,311 |
| <b>Projected Average Annual revenue</b>  |               | 10,679,074,910 |
| <b>Average Annual Cost Coverage</b>      |               | 103%           |

### Detailed cost summary

| Details                           | Year (2022/23) | Year (2023/24) | Year (2024/25) |
|-----------------------------------|----------------|----------------|----------------|
|                                   | (Kshs)         | (Kshs)         | (Kshs)         |
| <b>Personnel Expenditures</b>     | 5,832,564,961  | 5,832,564,961  | 5,832,564,961  |
| <b>Training - Staff</b>           | 104,156,046    | 104,156,046    | 104,156,046    |
| <b>Administrative Expenses</b>    | 1,224,994,800  | 1,224,994,800  | 1,224,994,800  |
| <b>Board Expenditures</b>         | 85,057,430     | 85,057,430     | 85,057,430     |
| <b>Other Operational Expenses</b> | 642,538,212    | 702,470,704    | 768,396,445    |

| Details  | Year (2022/23)        | Year (2023/24)        | Year (2024/25)        |
|--|-----------------------|-----------------------|-----------------------|
|  | (Kshs)                | (Kshs)                | (Kshs)                |
| Maintenance Expenses   | 450,000,000           | 450,000,000           | 450,000,000           |
| Licensing & Regulatory Levy  | 101,790,948           | 101,790,948           | 101,790,948           |
| Other Levies   | 416,624,183           | 425,295,695           | 439,569,111           |
| <b>Operation &amp; Maintenance Expenditures (O&amp;M)</b>                          | <b>8,862,926,697</b>  | <b>8,926,330,583</b>  | <b>9,006,529,740</b>  |
| Investment Costs   | 282,517,775           | 455,311,506           | 1,111,094,780         |
| Debt Repayment   | 942,004,594           | 937,338,467           | 821,648,721           |
| <b>O&amp;M including loan repayment and investments but excluding depreciation</b> | <b>10,087,449,066</b> | <b>10,318,980,555</b> | <b>10,939,273,240</b> |

### 3.0 Conditions attached to the tariff approval

The conditions attached to this approval which shall form part of the license conditions of Nairobi City Water and Sewerage Company are:

#### i. Service Delivery Conditions attached to the Tariff

| Target                            | Current Year 2021/22   | 2022/2023                                    | 2023/2024 | 2024/2025 |
|-----------------------------------|--|--|-----------|-----------|
| Water Coverage (%)                | 82   | 83   | 84        | 85        |
| Water quality standards (%)       | 91   | 100% Compliance with Water Quality Standards |           |           |
| Maintenance as a % of O&M         | 3%   | 5%   | 5%        | 5%        |
| Personnel Expenditure as % of O&M | 64%  | 66%  | 65%       | 65%       |
| Non-Revenue Water (%)             | 46%  | 44%  | 43%       | 41%       |
| Hours of Supply (Hrs)             | 8.30   | 8.80   | 9.30      | 9.80      |
| Staff per 1000 connections        | 8.08   | 7.58   | 7.08      | 6.58      |
| Metering ratio (%)                | 100%   | 100%   | 100%      | 100%      |
| Collection Efficiency (%)         | 95%  | 95%  | 95%       | 95%       |
| Resale at Kiosk                   | Ksh.2/= per 20 Litres Jerrycan at manned Kiosks<br>Ksh.1/= per 20 Litres Jerrycan at ATM Water Dispenser |  |           |           |

- ii. **Annual budgets:** The utility shall adhere to the budgetary levels set in the tariff during the tariff validity period.
- iii. **Surpluses:** The surpluses projected to be realised shall **ONLY** be used in extension/rehabilitation on water /sewer network system to increase coverage/access or quality of service to water and sanitation services.
- iv. **Reporting:** The utility shall submit to WASREB a quarterly performance report in the format provided.
- v. **Customer re- categorisation for billing:** NCWSC will separate individual domestic accounts from Multi-Dwelling Units accounts and migrate consumer billing data within the first 3 months

of tariff approval and implementation of the tariff. The detailed report should be submitted to WASREB.

Pursuant to this, the WSP shall bill all MDU / Gated communities at the recommended MDU/ Gated Community tariff for Water, Sewerage and other Miscellaneous charges specified in this tariff.

- vi. **Ring-Fencing of Capital Expenditure:** The WSP to open a separate account for capital component of the tariff, to deposit the appropriate share of revenue into this account which is only to be used for capital expenditure and repayment of loans as provided for in the approved tariff.
- vii. **Creation of distinct water and sewer cost centres:** NCWSC will ensure it creates separate water and sewer cost centres and maintains distinct record of operations of the two centres.
- viii. **Repayment of Loans:** NCWSC shall remit monthly loan repayments as detailed below: -

| <b>Financing (Kshs.)</b>                   | <b>2022/2023</b>  | <b>2023/2024</b>  | <b>2024/2025</b>  |
|--|-------------------|-------------------|-------------------|
| AFD Loan CKE 3005                          | 9,918,386         | 9,918,386         | 664,624           |
| AFD Loan CKE 1049 on lent @ 2.3%           | 10,790,040        | 10,790,040        | 10,790,040        |
| World bank Loan IDA 4376 KE on lent @ 1.5% | 36,870,547        | 36,870,547        | 36,870,547        |
| AfDB Loan on lent @ 3%                     | 20,921,410        | 20,532,566        | 20,145,516        |
| <b>Total</b>                               | <b>78,500,383</b> | <b>78,111,539</b> | <b>68,470,727</b> |

Evidence of loan repayment to AWWDA shall be submitted to WASREB on a monthly basis by the 10th day of the following month

- ix. **Tariff Assessment:** WASREB will carry out a tariff implementation review within the first 12 months of approval and implementation during which a joint assessment with the utility on the trend in Billing (Ksh) shall be carried out and status of implementation of the tariff evaluated. Additionally, an assessment will be carried out on progress of the separation of the water and sewer cost centres and maintenance of distinct records.
- x. **Personnel Expenditure as a % of O& M:** NCWSC to work towards sector benchmarks.
- xi. **Customer re- categorisation for billing:** NCWSC shall bill all MDU / Gated communities at the Recommended MDU/ Gated Community tariff for Water, Sewerage and other Miscellaneous charges specified in this tariff.
- xii. **Investments:** The utility shall undertake the following investments within the tariff period and submit progress reports on a quarterly Basis. **(See Annex 1 Below)**

## Annex 1: Investments

| <b>ANNEX 1: -RECOMMENDED INVESTMENTS BY NCWSC FOR THE PERIOD 2022/2023 – 2024/2025</b> |  |  |                    |                    |                    |
|--|--|--|--------------------|--------------------|--------------------|
| <b>No.</b>   | <b>Recommended Investment</b>                          | <b>Details</b>   | <b>2022/2023</b>   | <b>2023/2024</b>   | <b>2024/25</b>     |
| <b>A</b>   | <b>Maintenance and Improvement of Water Intakes</b>    | Installation of isolation valve at Kabete                          | 1,461,600          |                    |                    |
|  |  | Fencing of intakes at Sasumua                                      | 41,499,087         |                    |                    |
|  |  | Desilting of Ruiru intake  | 10,554,586         |                    |                    |
|  |  | Maintenance of Intakes at Mwagu, Sasumua, Kiamakia & Kikuyu Inlets | 9,744,000          |                    |                    |
|  |  | Desilting of Mwagu intake  |                    | 55,941,644         |                    |
|  |  | Maintenance Of Mwagu, Sasumua, Kimakia and Kikuyu Intakes          |                    |                    | 9,744,000          |
|  |  | Intake Surveillance  |                    |                    | 15,000,000         |
| <b>Sub Total A</b>   |  |  | <b>63,259,273</b>  | <b>55,941,644</b>  | <b>24,744,000</b>  |
| <b>B</b>   | <b>Construction and Upgrading of Sewer Networks</b>    | 4.19 km of sewer in Kasarani - Mwiki                               | 82,817,652         |                    |                    |
|  |  | 4.7 km of sewer in Kasarani - Mwiki                                |                    | 92,815,787         |                    |
|  |  | 3.1 km of sewer in Kasarani - Mwiki                                |                    |                    | 61,401,541         |
|  |  | 3.5km of sewers in Kawangware                                      | 66,587,126         |                    |                    |
|  |  | 3.5 km of sewers in Kawangware                                     |                    | 66,032,774         |                    |
|  |  | 2.4 km of sewers in Ruai   |                    | 46,500,000         |                    |
|  |  | 5.5 km of sewers in Ruai   |                    |                    | 108,500,000        |
|  |  | 3 km of sewers in Njiru  |                    | 58,333,333         |                    |
|  |  | 6.5 km of sewers in Njiru  |                    |                    | 127,166,667        |
| 3 km of sewers in Utawala  |  |  | 60,000,000         |                    |                    |
| <b>Sub Total B</b>   |  |  | <b>149,404,777</b> | <b>263,681,895</b> | <b>357,068,208</b> |
| <b>C</b>   | <b>Laying last mile connectivity of water networks</b> | 3 km of DN 200 water pipeline in Mwiki                             |                    |                    | 16,770,398         |
|  |  | 2 km of DN 200 water pipeline in Mwiki                             |                    | 11,180,266         |                    |
|  |  | 2.3 km of DN 150 water pipeline in Mwiki                           |                    | 9,274,014          |                    |
|  |  | 1.5 km of DN 150 water pipeline in Mwiki                           |                    |                    | 5,939,263          |
|  |  | 5 km of DN 200 water pipeline in Kawangware                        |                    |                    | 27,950,664         |
|  |  | 3.75 km of DN 150 water pipeline in Kawangware                     |                    |                    | 15,178,868         |
|  |  | 3 km of DN 200 water pipeline in Ruai                              |                    | 16,770,398         |                    |
|  |  | 2.4 km of DN 150 water pipeline in Ruai                            |                    | 9,287,006          |                    |
|  |  | 3.5 km of DN 200 water pipeline in Ruai                            |                    |                    | 25,155,598         |
|  |  | 3.6 km of DN 150 water pipeline in Ruai                            |                    |                    | 13,930,510         |
|  |  | 5 km of DN 200 water pipeline in Njiru                             |                    |                    | 27,950,664         |
| 4 km of DN 150 water pipeline in Njiru   |  |  | 16,087,344         |                    |                    |

| <b>ANNEX 1: -RECOMMENDED INVESTMENTS BY NCWSC FOR THE PERIOD 2022/2023 – 2024/2025</b> |   |  |                    |                    |                      |
|--|---|--|--------------------|--------------------|----------------------|
| <b>No.</b>   | <b>Recommended Investment</b>                                       | <b>Details</b>   | <b>2022/2023</b>   | <b>2023/2024</b>   | <b>2024/25</b>       |
|  |   | 7.5km of DN 200 water pipeline in Utawala  |                    |                    | 41,925,996           |
|  |   | 7.5km of DN 150 water pipeline in Utawala  |                    |                    | 28,565,145           |
|  | <b>Sub Total C</b>  |  | <b>-</b>           | <b>46,511,684</b>  | <b>219,454,450</b>   |
| <b>D</b>   | <b>Development and rehabilitation of minor water infrastructure</b> | Laying of 10.6 Km (CBD, Maringo, Mbotela, Pumwani & Kariokor)  |                    | 29,206,313         |                      |
|  |   | (CBD, Maringo, Mbotela, Pumwani & Kariokor) - 40 km  |                    |                    | 108,440,023          |
|  | <b>Sub Total D</b>  |  | <b>-</b>           | <b>29,206,313</b>  | <b>108,440,023</b>   |
| <b>E</b>   | <b>Rehabilitation of Sewer Networks</b>                             | Sewer rehabilitation - 15.2 km of simplified sewers in Mukuru Kwa Njenga, Mukuru Kwa Reuben, Dandora, Githurai, Kawagware, Dagoretti, Mathare, Korogocho, Kangemi and Mwhoko |                    |                    | 351,706,748          |
|  | <b>Sub Total E</b>  |  | <b>-</b>           | <b>-</b>           | <b>351,706,748</b>   |
| <b>F</b>   | <b>Non-Revenue Water Reduction Plan</b>                             | High consumer metering - replacement and reinstallation of aged meters   | 69,853,725         | 59,969,970         | 49,681,350           |
|  | <b>Sub Total F</b>  |  | <b>69,853,725</b>  | <b>59,969,970</b>  | <b>49,681,350</b>    |
|  | <b>Grand Total</b>  |  | <b>282,517,775</b> | <b>455,311,506</b> | <b>1,111,094,780</b> |

Date: 27th January 2023

Dr. Julius Itunga, PhD

Ag. Chief Executive Officer

Water Services Regulatory Board