Capacity Building / Technical Assistance for the Review of the Triennial Tariff Review Application to be submitted by the Water and Sewerage Company Inc. (WASCO)

Task 5: Recommend a New Tariff Scheme

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PRESENTATION

This document constitutes the report for Task 5: "**Recommend a new tariff scheme**" under the contract executed between Econtec Consultores and Castalia (as subcontractor) with the **National Utilities Regulatory Commission** (NURC). This task is part of the consultancy services provided for **Capacity Building and Technical Assistance for the review of the Triennial Tariff Review (TTR) Application submitted by the Water and Sewerage Company Inc. (WASCO)**.

1 INTRODUCTION AND OBJECTIVES

The document focuses on evaluating the Triennial Tariff Review Application submitted by WASCO and recommending a tariff structure that is technically justified, financially sound, and socially equitable.

The main objective is to recommend a tariff level and structure that ensures the financial sustainability of WASCO while promoting efficiency in consumption and safeguarding affordability for users. To achieve this, the task pursues the following specific objectives:

I. Determine the revenue requirement for the upcoming regulatory period using the methodology defined in the Water and Sewerage (Tariff) Regulations, ensuring consistency with cost-of-service principles and the Net Present Value (NPV) approach.

II. Evaluate WASCO's tariff proposal, as submitted in its Triennial Tariff Review (TTR) application, including its projections of operating and capital costs, calculation of the regulatory asset base, discount rate assumptions, investment plan, and the estimated tariff increase and smoothing mechanism (K factor).

III. Identify and address methodological and data-related limitations in WASCO's submission, proposing adjustments to cost projections, capital base valuation, and timing assumptions, justified based on regulatory standards and sound financial practice.

IV. Develop a transparent and replicable methodology for calculating the K factor, to ensure smooth implementation of tariff adjustments while maintaining equivalence between the NPV of required revenues and the NPV of expected tariff revenues.

V. Assess the affordability and social impacts of the proposed tariff adjustments by modelling stylized households across different income groups and service usage

patterns, using indicators such as the Residential Indicator, and proposing mitigation strategies where necessary.

VI. Recommend a technically and socially justified tariff structure, including mechanisms for indexation, service standards, and affordability protection measures that balance cost recovery with equitable service provision.

These objectives are pursued with a dual focus: providing NURC with a technically sound basis for regulatory decision-making and supporting WASCO in implementing a tariff framework that enhances both financial viability and service equity.

On the other hand, and in line with the reviews and comments presented in the document, it is important to highlight the relevance of certain key aspects in the tariff determination process, such as having a detailed and properly justified investment plan, maintaining up-to-date audited financial statements that allow for the review and projection of actual service costs, and, once the calculations have been completed, conducting the corresponding public consultations with the aim of presenting and substantiating the proposed tariff increases.

These elements are essential to ensure the technical soundness, transparency, and legitimacy of the tariff-setting process.

2 REGULATORY METHODOLOGY FOR TARIFF SETTING

The regulatory methodology used in this triennial tariff review is grounded in the legal and technical framework established by the Water and Sewerage Act - Cap. 9.03, particularly Sections 78 and 81, as well as the detailed procedures set out in the Water and Sewerage (Tariff) Regulations, especially Part 3 and Annex 3.

Section 81 of the Act mandates the National Utilities Regulatory Commission (NURC) to carry out a comprehensive review of the tariff scheme and tariff levels applicable to the service licensee, considering new service goals and investment plans for the upcoming triennium. It establishes the timeline, procedural steps, and public consultation requirements for the triennial review. Meanwhile, Section 78 outlines the general principles for tariff setting, including cost recovery, fairness, transparency, and the allowance of reasonable return on capital.

The specific methodological procedures for tariff determination are detailed in the Water and Sewerage (Tariff) Regulations – Part 3, "Triennial Tariff Review", and the Annex 3, "Triennial Tariff Adjustment". Regulation 7 introduces the use of a Net Present Value (NPV) framework to ensure that the present value of tariff revenues is equivalent to the present value of efficiently incurred costs plus a fair and reasonable return on capital. This regulation also establishes the use of a K factor to smooth tariff increases over the regulatory period.

Regulations 8 through 17 outline the specific procedural and analytical requirements for the review, including the submission of audited accounting information (Reg. 9), the assessment and adjustment of capital expenditures (Regs. 10–12), depreciation (Reg. 13), operating and maintenance costs (Regs. 14–15), and other tariff parameters (Reg. 16). Regulation 17 specifies the requirements for publishing the results of the review.

Annex 3 further details the technical methodology, including the calculation of the regulated asset base, permissible return, depreciation, allowed O&M costs, and the determination of the allowed revenue and the K factor. This annex provides the formulaic structure that underpins the entire financial component of the review and forms the backbone of the recommendations developed in this report.

While the Water and Sewerage Act provides the overarching legal basis for the triennial tariff review, it is the Tariff Regulations, particularly Part 3 and Annex 3, that articulate the methodological steps and principles to be followed. This report adheres to both instruments, applying the prescribed methodology to evaluate WASCO's proposal, determine the required revenue, and recommend a new tariff scheme consistent with regulatory and social objectives.

The methodology for calculating rates in a triennial review consists of three steps:

Step 1	Reasonable Cost of Service

This first step focuses on calculating the total cost incurred by the service licensee in providing services efficiently.

<u>The following formula is used:</u>

$$\boldsymbol{C = (RAV \times RoR) + Dep + Opex}$$

The objective of this step is to establish a solid financial basis that represents the real and necessary costs for service provision, including a fair return on invested capital.

Step 2	Allowed Real Revenue

This step aims to determine the total revenue that the service licensee will be allowed to obtain through tariffs over the next three years, ensuring that the Net Present Value (NPV) of the reasonable costs of the service is equal to the NPV of total expected revenues:

$$\boldsymbol{NPV(C) = NPV(R)}$$

The primary goal is to ensure that the service licensee can recover efficiently incurred costs and obtain a reasonable return on capital over the triennial period. The K Factor allows for a gradual implementation of the necessary tariff adjustments.

Step 3	Setting the Tariff Rates

In this final step, the goal is to establish the specific tariffs that customers will pay for services, based on the allowed real revenue determined in the previous step and considering demand forecasts. The allowed real revenue will be converted into a clear and applicable tariff structure for customers, considering equity principles, non-discrimination, and cost recovery, while allowing for direct or cross-subsidies if permitted.

It is important to mention that the formulas and calculation procedures applied throughout this review are directly extracted from Annex 3 of the Tariff Regulations, which provides a standardized methodology for regulatory consistency.

2.1 Reasonable Cost of Service

As shown in step 1, to calculate the Reasonable Cost of Service, it is necessary to consider the following key components: RAV (Regulatory Asset Value), RoR (Allowed Rate of Return), Dep (Depreciation) and Opex (Operating and Maintenance Costs).

Each of these elements must be estimated based on the guidelines set out in the Water and Sewerage (Tariff) Regulations, particularly Annex 3, which defines the triennial tariff adjustment methodology.

2.1.1 Regulatory Asset Value (RAV)

$$C = (RAV \times RoR) + Dep + Opex$$

The formula to determine the Regulatory Asset Value (RAV) is the following:

$$RAV = Opening\ Assets + Forecast\ Capital\ Expenditure - Forecast\ Depreciation - Forecast\ C\&G\ Contributions$$

Each of its components must be estimated with technical rigor and in accordance with regulatory criteria, as explained in detail below.

2.1.1.1 Opening Assets

Opening Assets represent the value of the regulated asset base at the start of the tariff review period and constitute the initial reference point for calculating the Regulatory Asset Value (RAV).

They are calculated as follows:

$$Opening\ Asset\ Value = \left(OA_{t-3} + \sum_{t=1}^{3} ActualCapitalExpenditure\right) - \left(\sum_{t=1}^{3} ActualDepreciation - \sum_{t=1}^{3} ActualC\&GContributions\right)$$

- OA_{t-3}: Opening Asset Value from the previous tariff review.
- $ActualCapitalExpenditure$: Sum of all investments made in the last three years.
- $ActualDepreciation$: Total depreciation recorded over the last three years. It is subtracted because it reflects the loss of asset value due to usage.
- $ActualC\&GContributions$: Assets paid for by external sources (customers/government) over the last three years. These assets should not be included in the tariff base.

If t -3 = 0, the 'Opening Assets' will refer to the Legacy Asset Value of the Service Licensee at the time of the privatization transaction.

2.1.1.2 Forecast Capital Expenditure

This component encompasses the projected capital investments required over the regulatory period. It includes:

- Investments in new infrastructure aimed at expanding or improving service coverage and quality.
- Expenditures for the renewal, replacement, or major maintenance of existing assets to preserve operational integrity.

- Adjustments related to the regulatory treatment of capitalized assets, including any revaluations or disallowances.

The inclusion of forecast capital expenditure ensures that the Regulatory Asset Value (RAV) accurately reflects the anticipated investment needs essential for sustaining and enhancing service delivery in accordance with regulatory standards

2.1.1.3 Forecast Depreciation

Forecast depreciation represents the estimated reduction in asset value over the regulatory period due to physical deterioration, obsolescence, or the passage of time. It is typically calculated using a straight-line method based on the asset's useful life, consistent with regulatory accounting principles.

Deducting forecast depreciation from the RAV ensures that the asset base is not overstated and reflects only the residual value of assets that continue to contribute to service provision. This adjustment is essential to avoid double recovery of capital costs and to maintain intertemporal equity in tariff setting.

$$\sum_{t=1}^{3} Forecast\ Depreciation$$

2.1.1.4 Forecast C&G Contributions

Forecast Customer and Government Contributions (C&G) refer to capital expenditures financed through third-party sources, such as direct payments from customers (e.g., connection fees) or public subsidies and grants.

These contributions are excluded from the Regulatory Asset Value (RAV), as they do not represent costs incurred by the service provider. Deducting forecast C&G contributions ensures that tariffs recover only the capital investments actually financed by the utility, thereby preventing over-remuneration and promoting fairness in cost allocation.

$$\sum_{t=1}^{3} Forecast\ C\&G\ Contributions$$

It is important to mention that RAV ensures that tariffs reflect only the assets used in service provision, balancing investment recovery and cost efficiency.

2.1.2 Allowable Rate of Return (RoR)

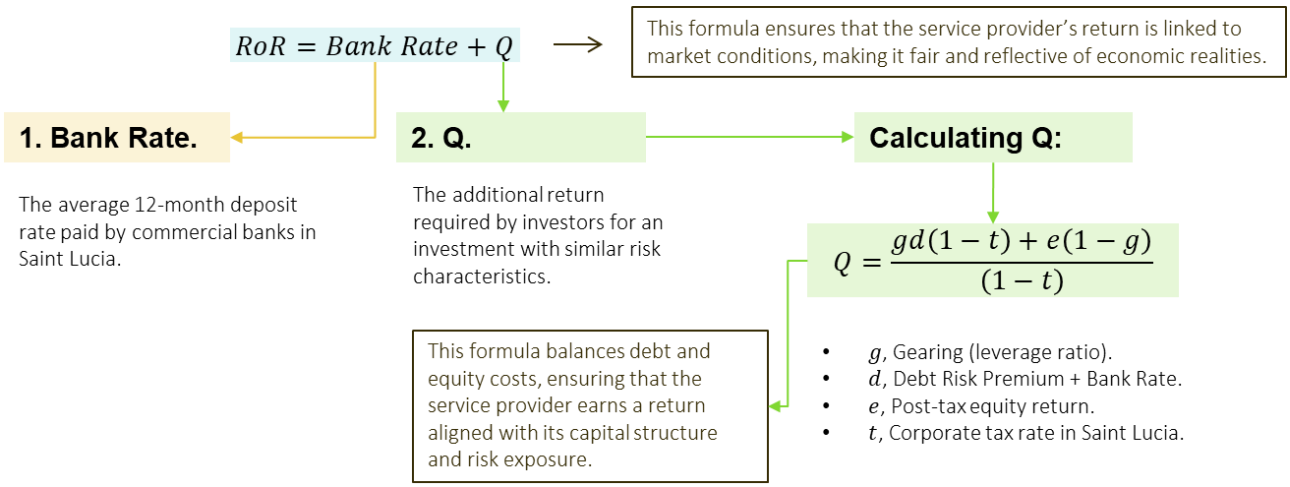
$$C = (RAV \times RoR) + Dep + Opex$$

The Allowable Rate of Return (RoR) is the pre-tax rate of return that the service provider is permitted to earn on its Regulatory Asset Value (RAV). It reflects the opportunity cost of capital invested in the regulated business, considering both debt and equity financing.

- This rate is typically determined using the Weighted Average Cost of Capital (WACC) methodology, which incorporates:
- The cost of equity, based on market risk and sector-specific factors.
- The cost of debt, reflects prevailing interest rates and credit risk.
- The target capital structure (debt/equity ratio) is established by the regulator.

The RoR directly influences the revenue requirement through the term (RAV × RoR) in the cost calculation formula. A properly set RoR ensures that tariffs provide a fair return on investment, incentivizing efficient service provision while avoiding excessive charges to users.

According to the Water and Sewerage Act, the RoR is calculated as:



2.1.3 Depreciation (Dep)

$$C = (RAV \times RoR) + Dep + Opex$$

Depreciation is a fundamental component in the calculation of the Reasonable Cost of Service (C), as it reflects the systematic allocation of an asset's cost over its useful life. This accounting measure captures the wear and tear, obsolescence, or aging of infrastructure assets.

Including depreciation in the tariff structure ensures that the utility recovers the capital invested in assets progressively, enabling asset replacement and long-term financial sustainability. It also aligns with the principle of intergenerational equity, by ensuring that current users contribute to the consumption of assets they benefit from.

According to the regulatory framework, depreciation is calculated using the straight-line method, which means:

$$Annual\ Depreciation = \frac{Asset\ Value}{Asset\ Useful\ Life}$$

This method assumes that assets lose value at a constant rate over their useful life.

2.1.4 Operating and Maintenance Expenditure (Opex)

$$C = (RAV \times RoR) + Dep + Opex$$

The Allowable Operating and Maintenance Expenditure (Opex) represents all operational and maintenance costs that are reasonably incurred by the service provider to ensure the continuous and efficient provision of services to consumers.

- Opex is a critical part of the Reasonable Cost of Service formula, ensuring that tariffs cover the true cost of operations.
- Only necessary and justified expenses are included to maintain fair pricing.
- Unrelated costs (branding, goodwill, and excessive overheads) are excluded to ensure that consumers are only charged for necessary service-related expenses.

Table 1 Regulatory- Understanding Opex: Included vs. Disallowed Costs

Included (Allowed Opex)	Excluded (Disallowed Opex)
Salaries for operational staff	Advertising and marketing
Energy and chemical costs	Sponsorships and goodwill
Maintenance and repairs	Costs unrelated to service provision
Customer service and billing expenses	Excessive executive bonuses
Regulatory compliance costs	Luxury office expenses

2.2 Allowed Real Revenue

The second step of the triennial tariff-setting methodology, as defined in Part 3 and Annex 3 of the Water and Sewerage (Tariff) Regulations, consists of determining the Allowed Real Revenue (ARR) that the service licensee will be permitted to collect over the tariff review period. The fundamental regulatory objective is to ensure that tariff revenues are sufficient to recover the efficient cost of providing service.

2.2.1 Net Present Value (NPV) Condition

To determine the ARR, the regulatory framework requires the application of the Net Present Value (NPV) principle, according to which:

$$NPV(C) = NPV(R)$$

Where:

- NPV(C) is the present value of the Reasonable Cost of Service, which includes the Regulatory Asset Value (RAV) multiplied by the Allowed Rate of Return (RoR), plus depreciation and allowable operating expenses.
- NPV(R) is the present value of the total revenue collected from customers through tariffs over the three-year regulatory period.

This condition ensures that the total projected revenues under the new tariff scheme will be financially equivalent, in present value terms, to the forecasted efficient costs of providing service.

2.2.2 Calculation of NPV(C) and NPV(R)

Table 2 Equations: NPV(C) and NPV(R)

Calculation of NPV(C)	Calculation of NPV (R)
$\boldsymbol{NPV(C) = \sum_{t=1}^{3} \frac{C_t}{(1+r)^t}}$	$NPV(R) = \sum_{t=1}^{3} \frac{RT_t \times Q_t}{(1+r)^t}$
Where: ▪ $\boldsymbol{C_t}$ **-** Reasonable Cost of Service in year t (2025–2027) ▪ $\boldsymbol{r}$ - Allowed Rate of Return (9.68% in Wasco's proposal)	Where: ▪ $\boldsymbol{RT_t}$- Tariff rate applied in year *t* (in current prices) ▪ $\boldsymbol{Q_t}$ - Forecasted demand volume in year t

2.2.3 Application of the K Factor

To avoid abrupt year-on-year tariff fluctuations, the regulatory framework allows for the application of a smoothing mechanism, the K Factor. This parameter ensures that the tariffs, while recovering the full NPV of efficient costs, are implemented in a gradual and predictable manner over the triennium.

The K Factor is determined through the following process:

1. Annual revenue targets are first established to match the Reasonable Cost of Service for each year of the review period.
2. Tariff levels are initially calculated by dividing each year's revenue requirement by the respective demand forecast.
3. If tariff fluctuations between years are deemed excessive, a smoothing process is applied to establish a constant K Factor, which adjusts the tariff path while maintaining the equality between NPV(C) and NPV(R).

4. The result is a uniform percentage adjustment applied to current tariffs (the K Factor), which yields a stable revenue stream equivalent in present value to the projected cost path.

2.3 Setting the Tariff Rates

The final step of the tariff review process consists of the approval of the specific tariff rates to be applied over the upcoming regulatory period. The Commission will review the proposed rates, ensuring consistency with:

- The Allowed Real Revenue previously established,
- The principles set out in Division 5 of Part 3 of the Water and Sewerage Act, including cost recovery, fairness, transparency, and non-discrimination, and
- The procedural requirements under Part 3 of the Water and Sewerage (Tariff) Regulations.

If the proposed tariffs meet these criteria, they are approved and become effective for the triennium. Otherwise, the Commission may request a revised proposal. Once approved, the tariffs are published in the Government Gazette and in at least two widely circulated local newspapers.

3 TECHNICAL ASSESSMENT OF WASCO'S TARIFF REVIEW APPLICATION AND PROPOSED ADJUSTMENTS FOR THE 2024–2027 REGULATORY PERIOD

The assessment of WASCO's tariff review application for the triennial period September 2024 to August 2027 will be conducted using the cost and revenue requirement formulas outlined in the previous chapter. This includes the calculation of the Reasonable Cost of Service (C), based on the Regulatory Asset Value (RAV), the Allowable Rate of Return (RoR), forecast depreciation, and operating expenditures (Opex).

The analysis will be guided by internationally recognized regulatory principles and practices, ensuring transparency, efficiency, cost recovery, and affordability. Particular attention will be given to the consistency of WASCO's underlying assumptions, the accuracy of cost projections, and the justification of proposed adjustments, in alignment with the established tariff framework.

Unless otherwise stated, all tables, figures, and section references cited throughout this chapter refer to the document titled **"2024 Triennial Tariff Review Application – Final Report",** submitted by the Water and Sewerage Company Inc. (WASCO) as part of its official tariff proposal to the National Utilities Regulatory Commission (NURC).

Additionally, for these aspects, we present some findings along with adjustment recommendations and the results of the rate increase applying the proposed adjustments.

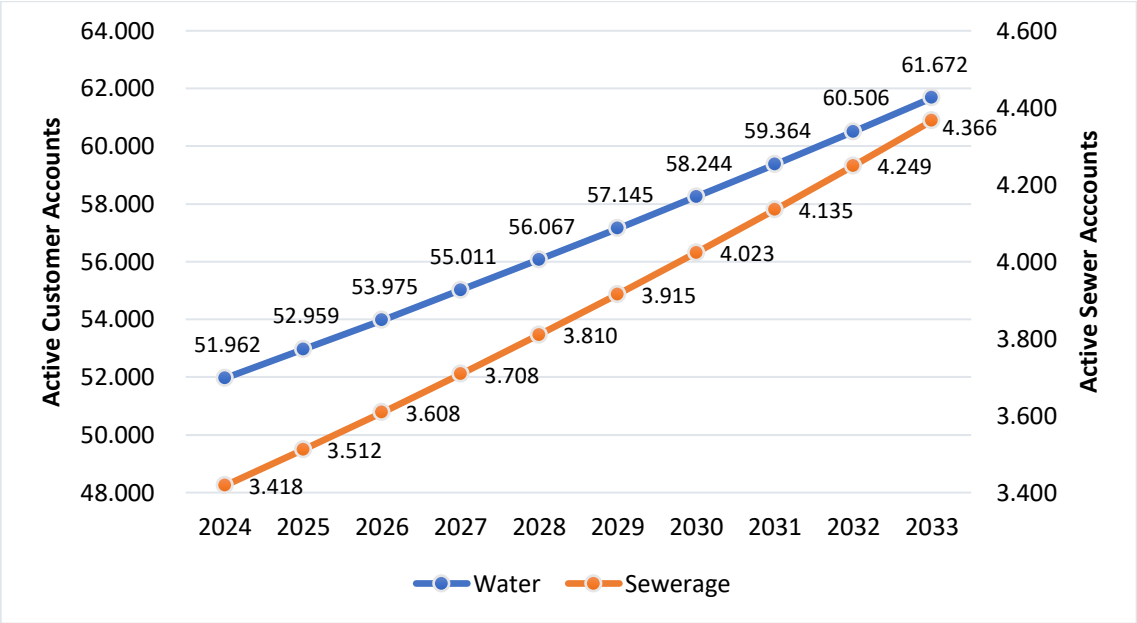
It should be noted that, according to the analysis conducted (and presented later in this section), WASCO does indeed require a rate increase, even if an investment plan were not considered and only the recovery of depreciation and profitability of its initial asset base and its annual administration, operation, and maintenance costs were considered.

3.1 Demand Forecasts: Billed Consumption and Customer Projections

For water services, WASCO forecasts a steady annual increase in the number of active accounts. The company assumes a 2% annual growth rate for domestic users and a 1% rate for commercial customers, with constant assumptions applied to all other categories (Table 23). Under these assumptions, the total number of active water accounts is expected to rise from 51,962 in 2024 to 61,672 in 2033 (representing a cumulative increase of approximately 18.7% over the ten-year forecast period).

In the case of sewerage services, a slightly more dynamic growth trajectory is projected, with customer accounts increasing from 3,418 in 2024 to 4,366 in 2033. This reflects annual growth rates ranging between 2.73% and 2.78% across all customer classes (2024 Triennial Tariff Review Application – Final Report, Table 24), driven by gradual expansion of the sewerage network and improved service coverage.

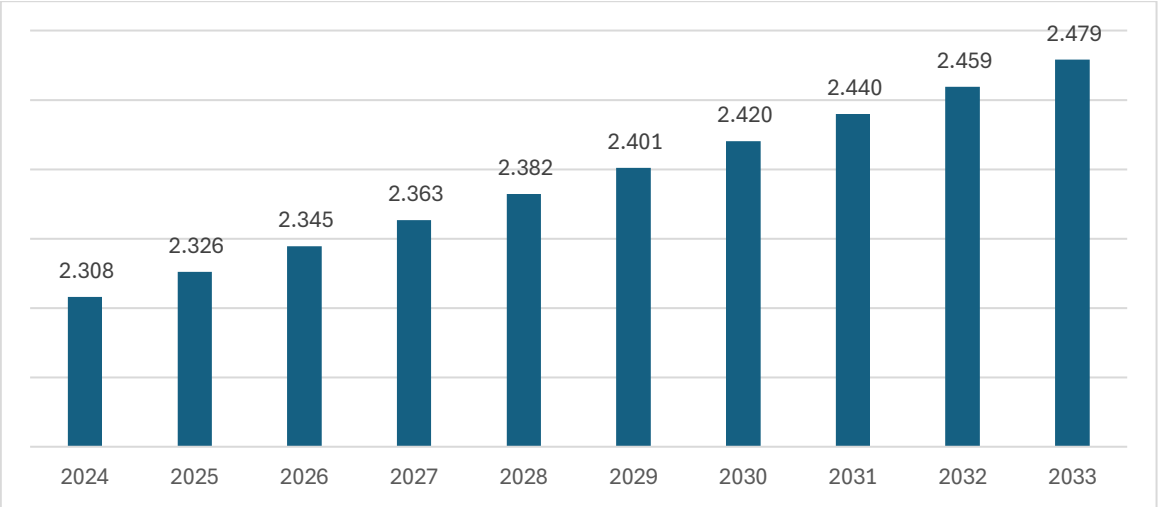
Graph 1 Projected Consumer and Demand for Wasco (2024 – 2033)



Regarding consumption volumes, WASCO projects annual water usage to increase in line with the growth in customer accounts (2% per year for domestic users and 1% for commercial customers (2024 Triennial Tariff Review Application – Final Report, Table 27)). Sewerage volumes are expected to follow a similar pattern, reflecting the close correlation between water consumption and wastewater generation (2024 Triennial Tariff Review Application – Final Report, Table 28).

These projections are further supported by historical data on production and consumption from 2020 to 2023, along with reported non-revenue water (NRW) levels ranging from 47% to 58% during the same period (2024 Triennial Tariff Review Application – Final Report, Table 2).

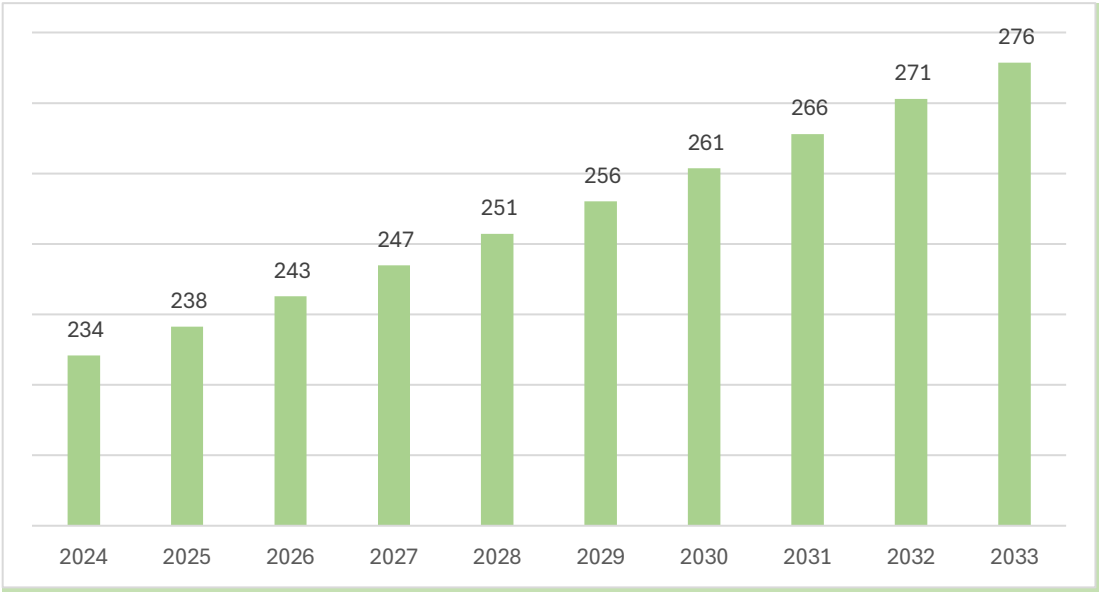
Graph 2 Water: Consumption (millions of gallons)



According to the data, water consumption is expected to grow gradually from approximately 2,308 million gallons in 2024 to 2,479 million gallons in 2033. This consumption trajectory provides the foundation for forecasting revenues and evaluating the sustainability of current tariff structures relative to the utility's cost recovery needs.

Wasco also forecasted that the sewer consumption is expected to rise from approximately 234 million gallons in 2024 to nearly 276 million gallons by 2033.

Graph 3 Sewer: Consumption (millions of gallons)



3.1.1 Issue

Following the review of WASCO's projections for billed water volumes and customer base, no material inconsistencies or methodological concerns were identified. The projections are considered reasonable and consistent with historical trends and expected service expansion.

3.1.2 Proposed adjustment

No adjustments are proposed for this component. The validated projections have been adopted as input for the tariff calculations presented in subsequent sections of this document.

3.2 Opening Assets

The calculation of WASCO's Opening Asset Value for the 2024 - 2027 tariff period relies on a combination of audited financial records and estimated investments made that collectively define the utility's capital base. From a quantitative standpoint, this exercise offers not only a snapshot of WASCO's infrastructure and investment profile but also establishes the foundation for determining the return component of the Reasonable Cost of Service.

Table 1. Opening Asset Value Calculation

Description	Value (XCD)
Opening Asset Value (year 2020)	83.878.557
Capital Expenditures (1/1/21 - 8/31/24)	48.873.862
Less: Depreciation (1/1/22 - 8/31/24)	-16.862.913
Less: Customer & Govt. Contributions (1/1/22 - 8/31/24)	0
Opening Assets (Aug-2024)	**$115.889.506**

The initial valuation point for the Opening Asset Value corresponds to the audited net book value of assets in service as of December 31, 2020, amounting to XCD 83.88 million. This figure, while grounded in the most recent audited data available at the time of report preparation, was adjusted to reflect actual capital additions and accumulated depreciation incurred between January 1, 2022, and August 31, 2024. Capital investments during this period reached nearly XCD 48.87 million, while accumulated depreciation reduced the base by XCD 16.86 million (2024 Triennial Tariff Review Application – Final Report, Table 31).

No customer or government contributions were recorded, which preserved the gross additions in full. Consequently, the adjusted opening asset value as of August 31, 2024, stood at approximately XCD 115.89 million (2024 Triennial Tariff Review Application – Final Report, Table 31).

3.2.1 Issue

Under the Triennial Tariff Review Application, WASCO reported an Opening Asset Value of XCD 115,889,506 for the triennium covering the period from September 2024 to August 2027.

However, a review of the Company's unaudited financial statements for the year ending December 2023—which indicate a net value of property, plant, and equipment assets of XCD 84,122,711—combined with declared capital investments of XCD 6,428,460.76 for the period January to December 2024, revealed substantial inconsistencies in the proposed opening value.

Based on these differences, it is advisable to adjust the Opening Assets according to the available financial information.

3.2.2 Proposed adjustment

In light of the issue identified, and in alignment with international regulatory practices for establishing the Opening Asset Base at the start of a tariff period, it is proposed that WASCO adopt the value of its property, plant, and equipment as reported in its 2023 unaudited financial statements, amounting to XCD 84,122,711.

This approach ensures that the Opening Asset Value used in the calculation of the Regulatory Asset Value (RAV) for Year 1 of the triennium reflects a verifiable and auditable figure grounded in the company's accounting records. It also corrects the previously observed overstatement and reinforces the transparency and accuracy of the tariff-setting process.

The impact of this adjustment is incorporated into the tariff calculations presented in subsequent sections of this document.

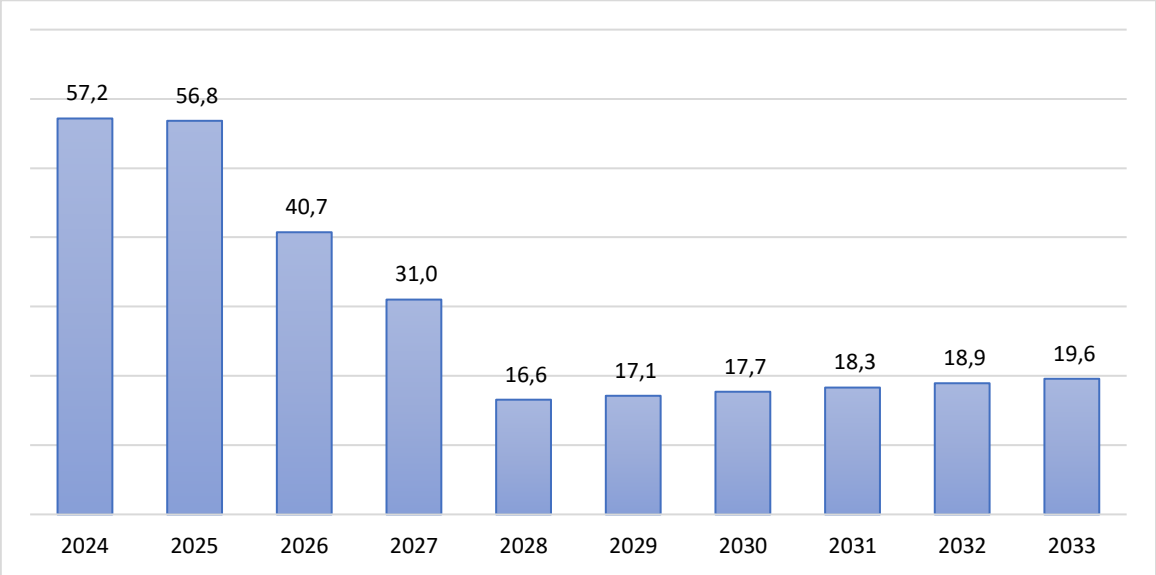
3.3 Investment Plan

The investment plan presented by WASCO constitutes a fundamental pillar of its financial strategy and long-term service sustainability. This plan, as described primarily in Sections 2.2 ("Planned Investment") and 3.1.2 ("Capital Improvements") of the Triennial Tariff

Review, outlines both operational and major capital expenditures anticipated over the forecast period 2024–2033. According to WASCO, these investments are essential not only to maintain and improve existing infrastructure, but also to expand service coverage and enhance operational efficiency across WASCO's water and sewerage networks.

WASCO projected a total investment plan of XCD 293,994,883 for the period 2024–2033, as shown in the following graph:

Graph 4 WASCO: Investment plan 2024-2033
Millions (XCD)



WASCO's investment plan includes a series of major capital projects intended to modernize key segments of the network, address critical vulnerabilities, and respond to increasing service demands. These projects are listed in Table 16 and discussed descriptively in Section 2.2.1 of the Triennial Tariff Review Application – Final Report, where their purpose and anticipated benefits are outlined. While the rationale for each project is provided (typically based on infrastructure aging, efficiency improvements, or service reliability) the documentation does not include a formal cost-benefit analysis (CBA) for each individual project,. which is especially important to have for major projects in order to evaluate their benefit and relevance.

Table 2. WASCO: Investment plan – Major Projects
Millions (XCD)

Major Projects - Future	Funding Source	2024	2025	2026	2027
Raw Water Line - Phase 1	Future Debt	21	21		

Raw Water Line - Phase 2	Future Debt		20,25	20,25	
Northern Pipeline	Future Debt			5	
Sewer projects - One extension and one upgrade	PAYGO	0,6	0,6		
Dredging Costs	Future Debt				
Millet Gravity Pipeline & Intake Replacement	Future Debt				5
Micoud Intake Upgrade	Future Debt				10
Subtotal: Major Projects		**21,6**	**41,8**	**25**	**15**
Others: Rehab and Replacement		18,5	15	15,5	16,02
Others: Work-in-Progress		17,03			
Total		57,1	56,8	40,7	31,02
Raw Water Line / total		36%	73%	50%	

Source: Own elaboration based on data provided by Wasco on its application.

The planned major investments include:

- Raw Water Line Replacement – Phases 1 and 2: With total projected costs of $42.0 million (2024–2025) and $40.5 million (2025–2026) respectively, these projects aim to replace sections of the John Compton Dam raw water pipeline, which is over 40 years old and subject to frequent leaks. Financing is expected to come entirely from future debt.
- Northern Transmission Line Replacement: Scheduled for 2026 with an estimated cost of $5.0 million, this project seeks to reduce leakage and enhance supply reliability in the northern region of the island. Funding is also projected to be sourced through future debt.
- Millet Gravity Main and Intake: Planned for 2027, this $5.0 million investment will allow WASCO to supply water by gravity rather than using electric pumps, thereby improving quality while reducing energy costs.
- Micoud Intake Upgrade: With an investment of $10.0 million in 2027, this project will replace an unreliable intake located on a seasonal tributary with one on the main Troumassee River, providing a more consistent and secure water source.
- Sewerage Network Expansion and Upgrade (Marchand and Cul De Sac): These interventions, scheduled between 2024 and 2025, involve a $1.2 million investment, funded via PAYGO/cash. The goal is to increase efficiency and expand the customer base in underserved areas, contributing to long-term revenue growth.

For the triennium from September 2024 to August 2027, WASCO projected a total investment of XCD 137,304,358, representing approximately 46% of its overall investment plan for the 2024–2033 period.

The annual distribution of this investment plan for the triennium is as follows:

- September 2024 to August 2025: XCD 56,941,848
- September 2025 to August 2026: XCD 46,103,639
- September 2026 to August 2027: XCD 34,258,871

3.3.1 Issue

It is important to highlight that the start of the triennium (September 2024) is currently not aligned with the anticipated effective date of the tariff adjustment. If the proposed tariff increase were to be approved, its implementation would likely not occur until July 2025, leaving only two months before the beginning of Year 2 of the regulatory period (September 2025).

From an investment planning perspective, this misalignment presents a critical issue. WASCO's proposed tariff structure implicitly assumes that XCD 56,941,848 in capital investments will be executed during the first year of the triennium (September 2024 – August 2025).

However, based on additional information provided by the utility, actual capital expenditures from January to December 2024 amounted to XCD 6,428,460, and projected investments from January to June 2025 total only XCD 1,256,608. This results in a combined investment of XCD 7,685,069 by June 2025, which would precede any potential tariff adjustment.

Therefore, WASCO would be required to execute the remaining XCD 49,256,779 of its Year 1 investment plan within the final two months of the period (July–August 2025), a scenario that is clearly infeasible given standard procurement, implementation, and disbursement timelines.

Although the regulatory framework does not mandate that the regulator monitor or enforce compliance with the investment plan (a topic that will not be addressed in this report), it would be technically unsound to approve a tariff based on an investment program that is demonstrably impossible to implement within the proposed timeline. Doing so would compromise the credibility of the tariff-setting process and misalign user contributions with actual capital execution capacity.

3.3.2 Proposed Adjustment

It is proposed to adjust the investment plan incorporated into the tariff for the triennium September 2024 – August 2027 to account for the time lag between the start of the triennium (September 2024), the potential application of tariff increases (July 2025, with approval in June 2025), and the actual investment levels made by WASCO.

For this adjustment, the following data would be considered:

Table 3 Adjustment proposal: Investment plan September 2024 – August 2027 (XCD)

Investment plan	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	Total
Wasco	56,941,848	46,103,639	34,258,871	137,304,358
Proposal	7,685,069	56,941,848	46,103,639	110,730,555

Considering that it is neither advisable from a regulatory nor a social perspective to approve a tariff—potentially effective as of June 2025—that incorporates an investment plan where Year 1 spans from September 2024 to August 2025, with a projected investment of XCD 56.9 million, which WASCO is clearly unable to execute before the start of Year 2 in September 2025, it is proposed to adjust the investment plan for the triennium based on the data presented in the previous table.

This adjustment is grounded in both the principles of realism and financial prudence, and includes the following considerations:

- Year 1 (September 2024 – August 2025): This corresponds to the value of investments in fixed assets executed by WASCO from January 2024 to December 2024 (XCD 6,428,460) and the investments expected between January 2025 and June 2025 (XCD 1,256,608). This results in a total of XCD 7,685,069 for Year 1 of investments.

  This would recognize the actual investments made by WASCO since December 2023, which corresponds to the "Opening Assets" date, and the investments it will effectively make until June 2025, when the tariff approval is expected.

- Year 2 (September 2025 – August 2026): This corresponds to the investment plan that WASCO had for Year 1 of the original plan, i.e., an amount of XCD 56,941,848.

- Year 3 (September 2026 – August 2027): This corresponds to the investment plan that WASCO had for Year 2 of the original plan, i.e., an amount of XCD 46,103,639.

In this way, the tariff would reflect and compensate the actual investments made by WASCO during Year 1 of the triennium, while from Year 2 onwards, the projected investment amounts proposed by WASCO would be incorporated.

This adjustment addresses the timing mismatch between the start of the regulatory period in September 2024 and the effective date of the tariff approval, which could occur as late as June 2025. By aligning investment recognition with the actual availability of tariff revenues, the proposal enhances the internal consistency and financial credibility of the tariff-setting process.

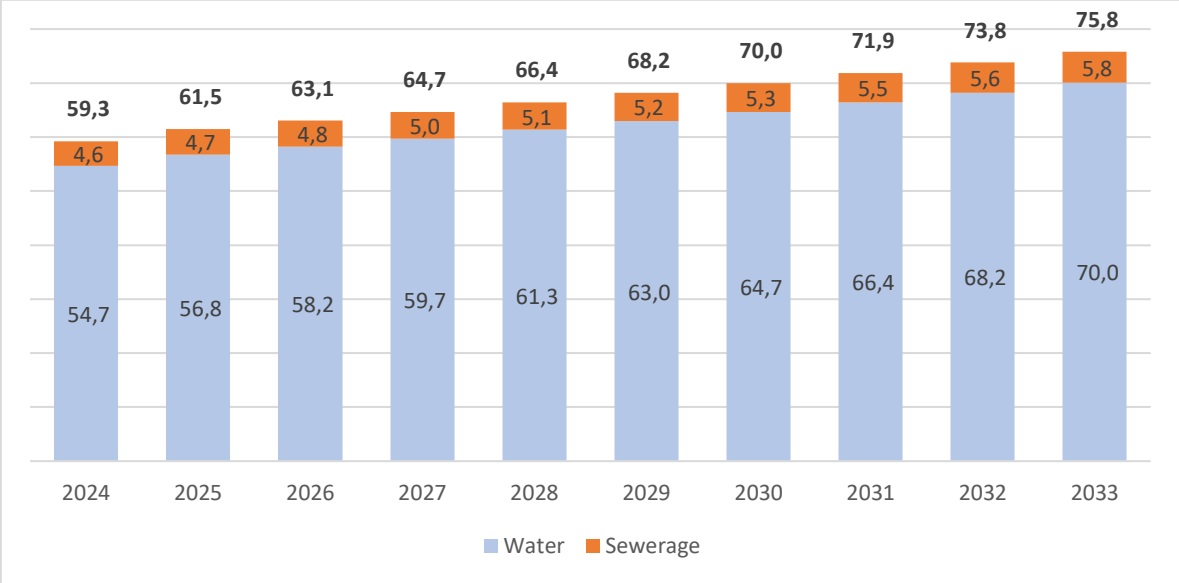
The effect of this adjustment will be included in the tariff calculations presented later in this document.

3.4 Administration, operation, and maintenance costs

WASCO's approach to forecasting OPEX involves applying escalation factors to the 2024 baseline (taken from the 2024 cost Budget), differentiated by cost category. These factors are intended to capture cost inflation due to wage agreements, utility rates, input prices, and macroeconomic trends. Specifically, the application assumes annual increases of 3.0% for labor, 2.0 - 3.0% for electricity, 3.5% for chemicals, and 3.0% for maintenance, while general inflation is assumed at 2.0 - 2.2% (2024 Triennial Tariff Review Application – Final Report, Table 13). Bad debt is modeled as a fixed proportion (5%) of total user revenues (2024 Triennial Tariff Review Application – Final Report, Tables 13 and 14), consistent with WASCO's internal policy and historical experience.

The costs projected by Wasco are as follows:

Graph 5 WASCO: Administration and operating costs 2024-2033
Millions (XCD)



Based on projections made for the period 2024-2033, the total administration, operation, and maintenance costs included by WASCO for the triennial rate adjustment calculation were:

- September 2024 to August 2025: XCD 60,742,367
- September 2025 to August 2026: XCD 62,529,833
- September 2026 to August 2027: XCD 64,148,033

3.4.1 Issue

As previously indicated, WASCO projected its administration, operation, and maintenance (O&M) costs based on the **2024 budgeted costs**, applying escalation factors to extend the projection through **2033**. However, two key issues were identified in the methodology used:

- **Base year costs**: WASCO relied on the **2024 budget** rather than on **actual historical costs**, such as those reported in the **2023 income statement**, which would have provided a more reliable and evidence-based baseline for projections.

- **Escalation factors**: The company applied **nominal growth rates**, including inflationary adjustments, when projections should have been expressed in **constant prices**. This is because the regulatory framework already allows for inflation

adjustments to be applied **separately** from the triennial cost estimation, avoiding double counting.

In line with international regulatory practice, WASCO's cost projections should have been based on objective **cost drivers**, such as **unit cost per subscriber** and **cost per gallon produced or billed**, using 2023 as the reference year (the most recent year with verified actuals). This approach would have enabled the projection of costs based on service demand dynamics, while maintaining price levels constant and free of inflationary distortions.

3.4.2 Proposed adjustment

To correct the administration, operation, and maintenance costs projected by WASCO for the triennium, it is proposed that:

- **Base projection costs**: It is proposed to use the costs recorded in WASCO's income statement for the year 2023 as the base projection costs.
- **Escalation factors**: It should be worked at constant prices. In this case, since the base costs are taken from 2023, they would be in December 2023 prices.

For the projection of each cost and expense category, it is proposed to apply a unit cost methodology (internationally validated for this type of projection) using 2023 subscriber costs as a "driver" to project administrative costs based on the subscriber forecast, and 2023 gallons produced costs to project operation and administration costs based on the forecasted water production volume.

By applying the above considerations, the following unit costs for the year 2023 would be used, assuming a total of 50,985 customers and a total of 4,266 million gallons of water produced:

Table 4 Unit costs for projection

DIRECT EXPENSES	WASCO Income statement 2023 (XCD)	XCD/1000 gallons of water produced
Salaries & wages	15,429,800	3.62
Power	13,361,745	3.13
Chemicals	1,776,655	0.42
Maintenance	6,991,365	1.64
Transport & travelling	1,281,833	0.30
Miscellaneous expenses	137,092	0.03
Total	**38,978,489**	**9.14**

ADMINISTRATIVE EXPENSES	WASCO Income statement 2023 (XCD)	XCD/Customer/month
'Salaries & Wages	9,307,664	15.21
Gratuities & pension	534,051	0.87
Staff related cost	1,444,215	2.36
Stationery & office supplies	406,694	0.66
Maintenance	1,295,708	2.12
Travelling and other expenses	411,074	0.67
Utilities	1,114,102	1.82
Insurances	417,940	0.68
Professional fees	832,232	1.36
Uniforms	195,013	0.32
Training	93,758	0.15
Advertising	106,638	0.17
Rent	198,199	0.32
WASCO's Operation Fees / NWSC	900,000	1.47
Licenses, fees & subscriptions	291,638	0.48
Miscellaneous expenses	418,417	0.68
Total	**17,967,343**	**29.37**

By applying these unit costs to the annual projections of customers and water production volume directly calculated by WASCO, the following results are obtained for the triennium from September 2024 to August 2027:

Table 5 Adjustment proposal: Costs: administration, operation, and maintenance September 2024 – August 2027 (XCD)

Costs: administration, operation, and maintenance	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	Total
Wasco	60,742,367	62,529,833	64,148,033	187,420,233
Proposal	58,051,984	58,322,428	58,600,626	174,975,038
Difference	-2,690,383	-4,207,405	-5,547,407	-12,445,195

By applying the proposed adjustment, the administration, operation, and maintenance costs to be recovered through the tariff would be lower for each year of the projection compared to the calculations initially made by WASCO, which were higher by a total of XCD 12.4 million.

The effect of this adjustment is included in the tariff calculations presented later in this document.

3.5 Other Water and Sewerage Revenues

Regarding the other water and sewerage revenues generated by WASCO, which, within the Company's calculations, help cover part of the reasonable service costs (thus reducing the tariff increase requirement), the Company projects these revenues for the period from September 2024 to August 2027 at a constant value of XCD 2,103,700 for water and XCD 147,300 for sewerage, for a total of XCD 2,251,000. This amount from other revenues would represent, on average, 3.57% of the total projected revenues by WASCO (at current rates) for the triennium.

3.5.1 Issue

Upon reviewing the income statement for the year 2023, other revenues accounted for 3.39% of the total revenues.

Increasing the proportion of other revenues relative to total income may lead to an overestimation of these figures, which could result in a tariff increase calculation that falls short of covering the reasonable costs of the service.

3.5.2 Proposed adjustment

It is considered financially more appropriate to project other revenues while maintaining their proportion relative to total income based on historical data, which in this case would be the financial statements for the year 2023 (as per the information provided by WASCO).

This way, instead of projecting constants (which is not as suitable in a projection model), variables are projected while maintaining the proportion relative to total operational revenues.

Additionally, to keep the items included in the financial statement consistent, it is advisable to project the "Revenue adjustments." These figures can be projected by maintaining their proportion relative to total operational revenues, using the actual data from the 2023 income statement as a reference.

Thus, the following projected figures for other revenues for the triennium would be as follows:

Table 6 Adjustment proposal: Other Water and Sewerage Revenues September 2024 – August 2027 (XCD)

Other revenue	2023	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027
Other revenue - water	1,885,549	1,926,797	1,946,495	1,966,512
Other revenue - waste water	170,078	173,799	175,576	177,381
Revenue adjustments	-586,167	-598,990	-605,113	-611,336

The effect of this adjustment is included in the tariff calculations presented later in this document.

3.6 Requested tariff increase by WASCO

The Water and Sewerage Company Inc. (WASCO) submitted its Triennial Tariff Review (TTR) application for the period 2024 - 2027 to the National Utilities Regulatory Commission (NURC). The primary objective of this proposal is to obtain regulatory approval for an increase in water and sewerage tariffs. WASCO justifies this request on the grounds that no tariff revisions have occurred since 2013, despite cumulative increases in operating and capital costs. WASCO projects that, under current tariffs, it will face a cumulative revenue shortfall of XCD 66. million over the triennium (NPV), putting at risk its ability to meet operating obligations, service existing debt, and invest in infrastructure.

Table 3. Wasco's Financial Situation During the Triennium Under Current Tariffs (XCD)

Concept	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Revenues at Current Rates	**62,491,552**	**63,107,454**	**63,733,355**	**157,731,108**
Water	56,276,289	56,830,556	57,393,039	
Waste water	3,964,263	4,025,898	4,089,316	
Other revenue - water	2,103,700	2,103,700	2,103,700	
Other revenue - waste water	147,300	147,300	147,300	
Reasonable Cost of Service	**84,177,169**	**90,767,665**	**95,221,803**	**224,357,472**
Regulatory Asset Value	165,413,938	202,929,880	228,213,372	
Investments	56,941,848	46,103,639	34,258,871	
Depreciation	**7,417,416**	**8,587,696**	**8,975,380**	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	1,758,570	3,176,781	4,402,888	
RAV x RoR	**16,017,386**	**19,650,135**	**22,098,390**	
Opex (admin + direct operating costs)	**60,742,367**	**62,529,833**	**64,148,033**	
Deficit	**-21,685,617**	**-27,660,211**	**-31,488,448**	**-66,626,364**

The table above illustrates the financial shortfall WASCO would face if current tariff levels remain unchanged over the 2024 - 2027 regulatory period. Estimated annual losses average approximately XCD 27 million, amounting to a cumulative deficit of XCD 66.6 million over the triennium in terms of NPV (estimated by Wasco).

The document follows the regulatory framework established in the Water and Sewerage Act (Cap. 9.03) and the Tariff Regulations, particularly Schedule 3 and Annex 3, which outline the methodology for determining the Reasonable Cost of Service, tariff setting, and the use of the K-Factor as a smoothing mechanism.

To address the gap between the Reasonable Cost of Service and projected revenues under existing tariffs, WASCO proposes a tariff increase of 42.2%, as presented in Table 41 of its submission. This rise is calculated by comparing the Net Present Value (NPV) of the projected revenue requirement with the NPV of tariff revenues under current rates over Sept. 2024 – Aug. 2027.

3.6.1 Issue

As detailed in the preceding sections, several methodological issues were identified in WASCO's tariff review application. These include:

- The estimation of the Opening Asset Base,
- The formulation and phasing of the investment plan for the period September 2024 – August 2027,
- The methodology used for projecting administration, operation, and maintenance (O&M) costs,

The assumptions underlying the projection of other revenues.

In addition to these issues, it is important to note that the tariff increase proposed by WASCO was calculated under the assumption that it would be implemented as of September 2024—the beginning of the triennium. However, based on the current status of the regulatory process, the earliest realistic implementation date is July 2025.

This misalignment between the assumed and actual tariff start dates has significant implications for the timing and feasibility of planned investments and revenue recovery during Year 1 of the regulatory period.

3.6.2 Proposed adjustment

It is necessary to calculate the tariff increase by adjusting for the considerations proposed in this report.

4 TECHNICAL ASSESSMENT OF TARIFF INCREASES WITH PROPOSED ADJUSTMENTS

WASCO's original tariff increase proposal amounted to 42.2%, based on the comparison between the present value of the Reasonable Cost of Service, estimated at XCD 224,357,472, and the net present value (NPV) of revenues under existing tariffs, calculated by the company at XCD 157,731,108.

However, as outlined in the previous sections, several adjustments were proposed to correct methodological and data inconsistencies related to asset valuation, investment timing, cost projections, and tariff implementation dates. These corrections have a material impact on the resulting tariff increase.

The adjusted tariff increases presented below reflect a revised and technically validated scenario, incorporating the necessary modifications to align the tariff structure with the regulatory framework, actual financial data, and implementation feasibility.

4.1 Generality and applied scenarios

The application of the proposed methodological adjustments in the previous section will be further analyzed under three scenarios, in order to determine the range of tariff increases that can be approved for WASCO.

Table 7 Overview of proposed tariff increase scenarios

Scenario	Overview
Scenario 1: Minimum required tariff increase	This scenario presents the minimum rate increase required by WASCO to cover its annual administration, operation, and maintenance costs, as well as the depreciation and profitability of its base assets by 2023.
Scenario 2: Tariff increase with Investment Plan (without Raw Water Project)	This scenario presents the tariff increase required by WASCO to cover its annual administration, operation, and maintenance costs, as well as the depreciation and profitability of both its base assets in 2023 and its three-year investment plan (without the Raw Water Project).
Scenario 3: Tariff increase with Investment Plan (with Raw Water Project)	This scenario presents the tariff increase required by WASCO to cover its annual administration, operation, and maintenance costs, as well as the depreciation and profitability of both its base assets in 2023 and its three-year investment plan (with the Raw Water Project).

4.2 Assumptions applied

General assumptions and specific assumptions have been applied for each scenario, as shown below:

4.2.1 Applicable to all three scenarios

1. The user and water volume projections prepared by WASCO were maintained.
2. The projection of "Other income" was adjusted by maintaining its proportion relative to water and sewerage revenues.
3. The cost projections (administrative and operational) were adjusted based on WASCO's 2023 income statement and projecting forward using unit costs. Projected users were used as the driver for administrative costs, while projected water production volume was used as the driver for operational costs.
4. The initial asset base was taken from the fixed assets included in WASCO's 2023 balance sheet.
5. The discount rate calculated by WASCO of 9,68% is maintained.

4.2.2 Assumptions applied specifically to each scenario

Scenario 1: Minimum required tariff increase

1. Tariff increase required only to recover administrative and operational costs, as well as depreciation and profitability on the initial asset base; that is, no investment plan is included.
2. The projection of operational costs does not include improvements in water losses.

Scenario 2: Tariff increase with Investment Plan (without Raw Water Project)

1. Tariff increase required to recover administrative and operational costs, depreciation and profitability on the initial asset base, and depreciation and profitability on the Investment Plan (without Raw Water Project).
2. The Investment Plan for Year 1 (September 2024 – August 2025) corresponds to the investment made between January 2024 and February 2025 + the investment WASCO actually expects to carry out between March and June 2025.
3. The Investment Plan for Year 2 (September 2025 – August 2026) corresponds to Year 1 of WASCO's original Investment Plan (without Raw Water Project).
4. The Investment Plan for Year 3 (September 2026 – August 2027) corresponds to Year 2 of WASCO's original Investment Plan (without Raw Water Project).
5. The projection of operational costs does not include improvements in water losses.

Scenario 3: Tariff increase with Investment Plan (with Raw Water Project)

1. Tariff increase required to recover administrative and operational costs, depreciation and profitability on the initial asset base, and depreciation and profitability on the Investment Plan (with Raw Water Project).
2. The Investment Plan for Year 1 (September 2024 – August 2025) corresponds to the investment made between January 2024 and February 2025 + the investment WASCO actually expects to carry out between March and June 2025.
3. The Investment Plan for Year 2 (September 2025 – August 2026) corresponds to Year 1 of WASCO's original Investment Plan (with Raw Water Project).
4. The Investment Plan for Year 3 (September 2026 – August 2027) corresponds to Year 2 of WASCO's original Investment Plan (with Raw Water Project).
5. The projection of operational costs includes improvements in water losses.

4.3 Scenario 1-Minimum required tariff increase: Result of tariff increase

This scenario presents the minimum rate increase required by WASCO to cover its annual administration, operation, and maintenance costs, as well as the depreciation and profitability of its base assets by 2023.

4.3.1 Step 1: Determination of the Reasonable Cost of Service

Applying the current regulations for the calculation of the triennial tariff increase, the reasonable costs of the service for the period from September 2024 to August 2027 were calculated as follows:

Table 8 Scenario 1: Reasonable Cost of Service (XCD)

Reasonable Cost of Service	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Regulatory Asset Value	78,463,865	73,052,949	68,480,458	
Investments	0	0	0	
Depreciation	5,658,846	5,410,916	4,572,491	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	0	0	0	
RAV x RoR	7,597,824	7,073,874	6,631,109	
Opex (admin + direct operating costs)	58,317,825	58,988,566	59,669,386	
Total	71,574,496	71,473,355	70,872,987	178,376,864
Total recoverable from tariff revenues	**70,072,889**	**69,956,398**	**69,340,430**	**174,585,451**

The reasonable cost of service to be included in the tariff increase calculation corresponds to the "Total recoverable from tariff revenues," with a net present value of XCD 174,585,451.

This value includes a discount for the costs that would be recovered through the projected "Other revenues" for each period, which are shown in the following section.

4.3.2 Step 2: Net Present Value (NPV) Revenue Comparison

Once the reasonable cost of service has been calculated, it is then compared in net present value terms with the revenues obtained under current tariffs. This is done in order to calculate the required tariff increase.

Table 9 Scenario 1: Revenues at Current Rates (XCD)

Revenues at Current Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	56,565,998	57,123,162	57,688,571	
Waste water	3,964,263	4,025,898	4,089,316	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	-598,990	-605,113	-611,336	
Total	**62,031,867**	**62,666,017**	**63,310,444**	**156,624,571**
Total (only Water + waste water)	**60,530,261**	**61,149,060**	**61,777,887**	**152,833,158**

The revenue at current tariffs used in the tariff increase calculation corresponds to the item "Total (only Water + Wastewater)", with a Net Present Value (NPV) of XCD 152,833,158. This NPV figure remains constant across all three scenarios presented in this section.

According to the revised methodology and the adjustments discussed in earlier chapters, the updated NPV of the Reasonable Cost of Service amounts to XCD 174,585,451. When compared with the NPV of revenues at current tariffs, this results in a required tariff increase of 14.23% to achieve full cost recovery.

However, it is important to consider that this increase assumes implementation from September 2024, which is no longer feasible given the current status of the regulatory process.

Accounting for the likely approval of the tariff increase in June 2025 and its application from July 2025, the required adjustment to the tariff structure increases to 20.35%, due to the shorter time available to generate the necessary revenue over the remaining duration of the triennium.

The present value verification would correspond to:

Table 10 Scenario 1: Net present value equilibrium check – direct application of tariff increase (XCD)

Revenues at New Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	58,491,043	68,749,400	69,429,886	
Waste water	4,099,424	4,845,286	4,921,611	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	- 598,990	- 605,113	- 611,336	
Total	**64,092,074**	**75,111,643**	**75,884,055**	**178,376,864**
Total (only Water + waste water)	**62,590,467**	**73,594,685**	**74,351,498**	**174,585,451**
Reasonable Cost of Service	**Sep 2024 - Aug 2025**	**Sep 2025 - Aug 2026**	**Sep 2026 - Aug 2027**	**NPV**
Regulatory Asset Value	78,463,865	73,052,949	68,480,458	
Investments	0	0	0	
Depreciation	5,658,846	5,410,916	4,572,491	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	0	0	0	
RAV x RoR	7,597,824	7,073,874	6,631,109	
Opex (admin + direct operating costs)	58,317,825	58,988,566	59,669,386	
Total	71,574,496	71,473,355	70,872,987	178,376,864
Total recoverable from tariff revenues	**70,072,889**	**69,956,398**	**69,340,430**	**174,585,451**

The equilibrium of the reasonable cost of service for the triennium in net present value (NPV) is verified.

It should be clarified that the application of the k-factor is still pending. The k-factor allows for smoothing the tariff increases and distributing them throughout the period, under the condition that the equilibrium between the NPV of revenues and the reasonable cost of service is maintained.

4.3.3 Step 3: Determination of the K Factor

To smooth the required tariff increase of 20.35% applicable starting from July 2025, a K-factor has been calculated with the following tariff increases (applicable to the entire tariff structure):

Table 11 Scenario 1: Softened tariff increase (k-factor)
Month of application

Smoothed	Jul 2025	Jan 2026	Jan 2027
Tariff increase	9.35%	9.35%	9.35%

It is important to clarify that mathematically it is not possible to maintain a net present value by simply dividing the 20.35% increase into three, which would result in an annual increase of 6.78%.

To calculate these percentage increases, specialized Excel functions were used with the condition of maintaining the equilibrium in net present value.

The application of the tariff increases presented in the table above smooths the impact on users and maintains the NPV balance between revenues and the reasonable cost of service for the triennium, as shown below:

Table 12 Scenario 1: Net present value equilibrium check - application of tariff increase with k-factor (XCD)

Revenues at New Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	57,450,155	66,368,374	73,290,839	
Waste water	4,026,341	4,677,991	5,195,891	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	- 598,990	- 605,113	- 611,336	
Total	**62,978,102**	**72,563,322**	**80,019,287**	**178,376,864**
Total (only Water + waste water)	**61,476,496**	**71,046,365**	**78,486,730**	**174,585,451**
Reasonable Cost of Service	**Sep 2024 - Aug 2025**	**Sep 2025 - Aug 2026**	**Sep 2026 - Aug 2027**	**NPV**
Regulatory Asset Value	78,463,865	73,052,949	68,480,458	
Investments	0	0	0	
Depreciation	5,658,846	5,410,916	4,572,491	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	0	0	0	
RAV x RoR	7,597,824	7,073,874	6,631,109	
Opex (admin + direct operating costs)	58,317,825	58,988,566	59,669,386	
Total	**71,574,496**	**71,473,355**	**70,872,987**	**178,376,864**
Total recoverable from tariff revenues	**70,072,889**	**69,956,398**	**69,340,430**	**174,585,451**

4.3.4 Resulting tariff table

According to the previous section, and applying the smoothed tariff increases of 9.35% annually uniformly across the entire tariff structure, the following table would be obtained:

Table 13 Scenario 1: Resulting tariff table
Month of application (XCD)

	Actual	Jul 2025	Jan 2026	Jan 2027
Water Base Charge Rates				
Domestic	24.42	26.70	29.20	31.93
Commercial	66.46	72.67	79.47	86.89
Government	46.52	50.87	55.62	60.82
Hotels	73.10	79.93	87.41	95.58
Boats	0.00	0.00	0.00	0.00
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Sewer Base Charge Rates				
Domestic	16.44	17.98	19.66	21.49
Commercial	41.32	45.18	49.41	54.02
Government	25.64	28.04	30.66	33.52
Hotels	44.04	48.16	52.66	57.58
Boats				
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Water: Consumption Charge Rates				
Domestic				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
Tier 1 (2,000-3,000 gal)	12.21	13.35	14.60	15.96
Tier 2 (>3,000 gal)	24.92	27.25	29.80	32.58
Commercial				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	33.23	36.34	39.73	43.45
Government				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	23.26	25.43	27.81	30.41
Hotels				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	36.55	39.97	43.70	47.79
Boats (All Usage)	66.46	72.67	79.47	86.89
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Sewer: Consumption Charge Rates				
Domestic				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
Tier 1 (2,000-3,000 gal)	8.22	8.99	9.83	10.75
Tier 2 (>3,000 gal)	15.61	17.07	18.66	20.41
Commercial				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	20.66	22.59	24.70	27.01

Government				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	12.82	14.02	15.33	16.76
Hotels				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	22.02	24.08	26.33	28.79

4.4 Scenario 2- Tariff increase with Investment Plan (without Raw Water Project)

This scenario presents the tariff increase required by WASCO to cover its annual administration, operation, and maintenance costs, as well as the depreciation and profitability of both its base assets in 2023 and its three-year investment plan (without the Raw Water Project).

4.4.1 Step 1: Determination of the Reasonable Cost of Service

Applying the current regulations for the calculation of the triennial tariff increase, the reasonable costs of the service for the period from September 2024 to August 2027 were calculated as follows:

Table 14 Scenario 2: Reasonable Cost of Service (XCD)

Reasonable Cost of Service	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Regulatory Asset Value	85,764,680	100,932,789	112,622,902	
Investments	7,685,069	22,441,848	18,853,639	
Depreciation	6,043,100	7,273,739	7,163,525	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	384,253	1,862,823	2,591,034	
RAV x RoR	8,304,778	9,773,538	10,905,517	
Opex (admin + direct operating costs)	58,317,825	58,988,566	59,669,386	
Total	72,665,703	76,035,843	77,738,429	188,367,129
Total recoverable from tariff revenues	**71,164,096**	**74,518,886**	**76,205,872**	**184,575,716**

The reasonable cost of the service that will be included in the calculation of the tariff increase corresponds to the "Total recoverable from tariff revenues" with a net present value of XCD 184,575,716.

This value includes a discount for the costs that will be recovered through the projected "Other revenues" for each period, which are shown in the following section.

4.4.2 Step 2: Net Present Value (NPV) Revenue Comparison

Once the reasonable cost of service has been calculated, it is then compared in net present value terms with the revenues obtained under current tariffs. This is done in order to calculate the required tariff increase.

Table 15 Scenario 2: Revenues at Current Rates (XCD)

Revenues at Current Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	56,565,998	57,123,162	57,688,571	
Waste water	3,964,263	4,025,898	4,089,316	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	-598,990	-605,113	-611,336	
Total	**62,031,867**	**62,666,017**	**63,310,444**	**156,624,571**
Total (only Water + waste water)	**60,530,261**	**61,149,060**	**61,777,887**	**152,833,158**

The revenue at current tariffs to be used in the tariff increase calculation corresponds to the category "Total (only Water + Wastewater)", with a Net Present Value (NPV) of XCD 152,833,158. It is important to clarify that this NPV of revenue under existing tariffs remains constant across the three scenarios presented in this section.

Now, according to the methodology, the NPV of the reasonable cost of the service is XCD 184,575,716 and the NPV of the revenue at current tariffs is XCD 152,833,158. Therefore, the required tariff increase would be 20.77%.

However, it should be taken into account that this increase would need to be applied starting from September 2024, which is no longer possible.

Considering the possibility that the tariff increase may be approved in June 2025 and applied from July 2025, the required tariff increase would be 29.70% across the entire tariff structure of WASCO.

The present value check would correspond to:

Table 16 Scenario 2: Net present value equilibrium check – direct application of tariff increase (XCD)

Revenues at New Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	59,375,167	74,089,029	74,822,368	
Waste water	4,161,500	5,221,610	5,303,863	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	- 598,990	- 605,113	- 611,336	
Total	**65,038,273**	**80,827,596**	**81,658,788**	**188,367,129**
Total (only Water + waste water)	**63,536,667**	**79,310,639**	**80,126,231**	**184,575,716**
Reasonable Cost of Service	**Sep 2024 - Aug 2025**	**Sep 2025 - Aug 2026**	**Sep 2026 - Aug 2027**	**NPV**
Regulatory Asset Value	85,764,680	100,932,789	112,622,902	
Investments	7,685,069	22,441,848	18,853,639	
Depreciation	6,043,100	7,273,739	7,163,525	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	384,253	1,862,823	2,591,034	
RAV x RoR	8,304,778	9,773,538	10,905,517	
Opex (admin + direct operating costs)	58,317,825	58,988,566	59,669,386	
Total	**72,665,703**	**76,035,843**	**77,738,429**	**188,367,129**
Total recoverable from tariff revenues	**71,164,096**	**74,518,886**	**76,205,872**	**184,575,716**

The equilibrium of the reasonable cost of the service for the triennium in net present value (NPV) is verified.

It is important to clarify that the K-factor still needs to be applied, which allows for smoothing the tariff increases and distributing them over the period, under the condition that the balance of the NPV of revenues and the reasonable cost of the service is maintained.

4.4.3 Step 3: Determination of the K Factor

To smooth out the required tariff increase of 29.70%, applicable from July 2025, a K-factor has been calculated with the following tariff increases (applicable to the entire tariff structure):

Table 17 Scenario 2: Softened tariff increase (k-factor)
Month of application

Smoothed	Jul 2025	Jan 2026	Jan 2027
Tariff increase	13.30%	13.30%	13.30%

It is important to clarify that mathematically, it is not possible to maintain a net present value (NPV) by dividing the 29.70% increase into three, which would result in an annual increase of 9.9%.

To calculate these percentage increases, specialized Excel functions were used, with the condition of maintaining the balance in net present value.

The application of the tariff increases presented in the table above smooths the impact on users and maintains the NPV balance between revenues and the reasonable cost of service for the triennium, as shown below:

Table 18 Scenario 2: Net present value equilibrium check - application of tariff increase with k-factor (XCD)

Revenues at New Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	57,824,050	70,478,909	80,643,816	
Waste water	4,052,593	4,967,935	5,717,426	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	- 598,990	- 605,113	- 611,336	
Total	**63,378,249**	**76,963,801**	**87,893,799**	**188,367,129**
Total (only Water + waste water)	**61,876,643**	**75,446,844**	**86,361,242**	**184,575,716**
Reasonable Cost of Service	**Sep 2024 - Aug 2025**	**Sep 2025 - Aug 2026**	**Sep 2026 - Aug 2027**	**NPV**
Regulatory Asset Value	85,764,680	100,932,789	112,622,902	
Investments	7,685,069	22,441,848	18,853,639	
Depreciation	6,043,100	7,273,739	7,163,525	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	384,253	1,862,823	2,591,034	
RAV x RoR	8,304,778	9,773,538	10,905,517	
Opex (admin + direct operating costs)	58,317,825	58,988,566	59,669,386	
Total	**72,665,703**	**76,035,843**	**77,738,429**	**188,367,129**
Total recoverable from tariff revenues	**71,164,096**	**74,518,886**	**76,205,872**	**184,575,716**

4.4.4 Resulting tariff table

According to the previous section, and applying the smoothed tariff increases of 13.30% annually evenly across the entire tariff structure, the following table would be obtained:

Table 19 Scenario 2: Resulting tariff table
Month of application (XCD)

	Actual	Jul 2025	Jan 2026	Jan 2027
Water Base Charge Rates				
Domestic	24.42	27.67	31.35	35.52
Commercial	66.46	75.30	85.32	96.66
Government	46.52	52.71	59.72	67.66
Hotels	73.10	82.82	93.84	106.32
Boats	0.00	0.00	0.00	0.00
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Sewer Base Charge Rates				
Domestic	16.44	18.63	21.10	23.91
Commercial	41.32	46.82	53.04	60.10
Government	25.64	29.05	32.91	37.29
Hotels	44.04	49.90	56.53	64.05
Boats				
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Water: Consumption Charge Rates				
Domestic				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
Tier 1 (2,000-3,000 gal)	12.21	13.83	15.67	17.76
Tier 2 (>3,000 gal)	24.92	28.23	31.99	36.25
Commercial				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	33.23	37.65	42.66	48.33
Government				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	23.26	26.35	29.86	33.83
Hotels				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	36.55	41.41	46.92	53.16
Boats (All Usage)	66.46	75.30	85.32	96.66
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Sewer: Consumption Charge Rates				
Domestic				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
Tier 1 (2,000-3,000 gal)	8.22	9.31	10.55	11.96
Tier 2 (>3,000 gal)	15.61	17.69	20.04	22.70
Commercial				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	20.66	23.41	26.52	30.05

Government				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	12.82	14.53	16.46	18.65
Hotels				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	22.02	24.95	28.27	32.03

4.5 Scenario 3- Tariff increase with Investment Plan (with Raw Water Project)

This scenario presents the tariff increase required by WASCO to cover its annual administration, operation, and maintenance costs, as well as the depreciation and profitability of both its base assets in 2023 and its three-year investment plan (with the Raw Water Project).

4.5.1 Step 1: Determination of the Reasonable Cost of Service

Applying the current regulations for the calculation of the triennial tariff increase, the reasonable costs of the service for the period from September 2024 to August 2027 were calculated as follows:

Table 20 Scenario 3: Reasonable Cost of Service (XCD)

Reasonable Cost of Service	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Regulatory Asset Value	85,764,680	135,152,789	173,122,902	
Investments	7,685,069	56,941,848	46,103,639	
Depreciation	6,043,100	7,553,739	8,133,525	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	384,253	2,142,823	3,561,034	
RAV x RoR	8,304,778	13,087,134	16,763,862	
Opex (admin + direct operating costs)	58,051,984	58,322,428	58,600,626	
Total	72,399,861	78,963,301	83,498,013	194,923,003
Total recoverable from tariff revenues	**70,898,255**	**77,446,344**	**81,965,457**	**191,131,590**

The reasonable cost of service to be included in the tariff increase calculation corresponds to the "Total recoverable from tariff revenues," with a net present value (NPV) of XCD 191,131,590.

This amount includes a deduction for the costs expected to be recovered through "Other revenues" projected for each period, which are presented in the following section.

4.5.2 Step 2: Net Present Value (NPV) Revenue Comparison

Once the reasonable cost of service has been calculated, it is then compared in net present value terms with the revenues obtained under current tariffs. This is done in order to calculate the required tariff increase.

Table 21 Scenario 3: Revenues at Current Rates (XCD)

Revenues at Current Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	56,565,998	57,123,162	57,688,571	
Waste water	3,964,263	4,025,898	4,089,316	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	-598,990	-605,113	-611,336	
Total	**62,031,867**	**62,666,017**	**63,310,444**	**156,624,571**
Total (only Water + waste water)	**60,530,261**	**61,149,060**	**61,777,887**	**152,833,158**

The revenue under current tariffs to be included in the calculation of the tariff increase corresponds to the "Total (only Water + Waste Water)" with a net present value (NPV) of XCD 152,833,158.

It should be noted that this revenue calculation under current tariffs is the same for all three scenarios presented.

According to the methodology, the NPV of the reasonable cost of service is XCD 191,131,590, and the NPV of revenues under current tariffs is XCD 152,833,158. Therefore, the required tariff increase would be 25.06%.

However, it must be considered that this increase was supposed to be applied starting in September 2024, which is no longer feasible.

Taking into account the effect of a possible tariff increase being approved in June 2025 and applied from July 2025, the required tariff increase would be 35.83% across the company's entire tariff structure.

The present value verification would correspond to:

Table 22 Scenario 3: Net present value equilibrium check – direct application of tariff increase (XCD)

Revenues at New Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	59.955.352	77.593.034	78.361.056	
Waste water	4.202.236	5.468.563	5.554.707	
Other revenue - water	1.926.797	1.946.495	1.966.512	
Other revenue - waste water	173.799	175.576	177.381	
Revenue adjustments	- 598.990	- 605.113	- 611.336	
Total	**65.659.194**	**84.578.555**	**85.448.320**	**194.923.003**
Total (only Water + waste water)	**64.157.588**	**83.061.597**	**83.915.763**	**191.131.590**
Reasonable Cost of Service	**Sep 2024 - Aug 2025**	**Sep 2025 - Aug 2026**	**Sep 2026 - Aug 2027**	**NPV**
Regulatory Asset Value	85,764,680	135,152,789	173,122,902	
Investments	7,685,069	56,941,848	46,103,639	
Depreciation	6,043,100	7,553,739	8,133,525	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	384,253	2,142,823	3,561,034	
RAV x RoR	8,304,778	13,087,134	16,763,862	
Opex (admin + direct operating costs)	58,051,984	58,322,428	58,600,626	
Total	72,399,861	78,963,301	83,498,013	194,923,003
Total recoverable from tariff revenues	**70,898,255**	**77,446,344**	**81,965,457**	**191,131,590**

The balance of the reasonable service costs for the triennium is verified in net present value.

It should be clarified that the application of the k-factor is still pending, which allows the tariff increases to be smoothed and distributed over the period, under the condition that the balance between the NPV of revenues and the reasonable service costs is maintained.

4.5.3 Step 3: Determination of the K Factor

To smooth the required tariff increase of 35.83% applicable from July 2025, a K-factor has been calculated with the following tariff increases (applicable to the entire tariff structure):

Table 23 Scenario 3: Softened tariff increase (k-factor)
Month of application

Smoothed	Jul 2025	Jan 2026	Jan 2027
Tariff increase	15.80%	15.80%	15.80%

It is important to note that mathematically it is not possible to maintain the net present

value (NPV) balance by simply dividing the 35.83% increase into three equal parts, which would imply an annual increase of 11.94%.

To calculate these percentage increases, specialized Excel functions were used with the condition of maintaining the NPV balance.

The application of the tariff increases presented in the previous table helps to smooth the impact on users while maintaining the NPV balance between revenues and the reasonable cost of service for the triennium, as shown below:

Table 24 Scenario 3: Net present value equilibrium check - application of tariff increase with k-factor (XCD)

Revenues at New Rates	Sep 2024 - Aug 2025	Sep 2025 - Aug 2026	Sep 2026 - Aug 2027	NPV
Water	58,060,047	73,134,884	85,525,740	
Waste water	4,069,163	5,155,283	6,063,704	
Other revenue - water	1,926,797	1,946,495	1,966,512	
Other revenue - waste water	173,799	175,576	177,381	
Revenue adjustments	- 598,990	- 605,113	- 611,336	
Total	**63,630,816**	**79,807,124**	**93,122,001**	**194,923,003**
Total (only Water + waste water)	**62,129,210**	**78,290,167**	**91,589,444**	**191,131,590**
Reasonable Cost of Service	**Sep 2024 - Aug 2025**	**Sep 2025 - Aug 2026**	**Sep 2026 - Aug 2027**	**NPV**
Regulatory Asset Value	85,764,680	135,152,789	173,122,902	
Investments	7,685,069	56,941,848	46,103,639	
Depreciation	6,043,100	7,553,739	8,133,525	
Depreciation current assets	5,658,846	5,410,916	4,572,491	
Depreciation new assets	384,253	2,142,823	3,561,034	
RAV x RoR	8,304,778	13,087,134	16,763,862	
Opex (admin + direct operating costs)	58,051,984	58,322,428	58,600,626	
Total	72,399,861	78,963,301	83,498,013	194,923,003
Total recoverable from tariff revenues	**70,898,255**	**77,446,344**	**81,965,457**	**191,131,590**

4.5.4 Resulting tariff table

According to the previous section, and applying the smoothed tariff increases of 15.80% annually across the entire tariff structure, the following table would be obtained:

Table 25 Scenario 3: Resulting tariff table
Month of application (XCD)

	Actual	Jul 2025	Jan 2026	Jan 2027
Water Base Charge Rates				
Domestic	24.42	28.28	32.74	37.92
Commercial	66.46	76.96	89.11	103.19
Government	46.52	53.87	62.38	72.23
Hotels	73.10	84.65	98.02	113.50
Boats	0.00	0.00	0.00	0.00
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Sewer Base Charge Rates				
Domestic	16.44	19.04	22.04	25.53
Commercial	41.32	47.85	55.40	64.16
Government	25.64	29.69	34.38	39.81
Hotels	44.04	51.00	59.05	68.38
Boats				
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Water: Consumption Charge Rates				
Domestic				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
Tier 1 (2,000-3,000 gal)	12.21	14.14	16.37	18.96
Tier 2 (>3,000 gal)	24.92	28.86	33.41	38.69
Commercial				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	33.23	38.48	44.56	51.60
Government				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	23.26	26.93	31.19	36.12
Hotels				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	36.55	42.32	49.01	56.75
Boats (All Usage)	66.46	76.96	89.11	103.19
	Actual	**Jul. 2025**	**Jan 2026**	**Jan 2027**
Sewer: Consumption Charge Rates				
Domestic				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
Tier 1 (2,000-3,000 gal)	8.22	9.52	11.02	12.76
Tier 2 (>3,000 gal)	15.61	18.08	20.93	24.24
Commercial				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	20.66	23.92	27.70	32.08
Government				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00
All Other Usage (>2,000 gal)	12.82	14.85	17.19	19.91
Hotels				
Minimum (0-2,000 gal)	0.00	0.00	0.00	0.00

All Other Usage (>2,000 gal)	22.02	25.50	29.53	34.19

4.6 Summary of proposed tariff increases

As mentioned above, WASCO's original application proposed a required tariff increase of 42.2%. However, after incorporating the technical adjustments detailed in this document—and based on the three evaluated scenarios—the following revised results were obtained:

Table 26 Summary of NPV Reasonable Cost of Service vs NPV Revenues (XCD)

Scenario	NPV Reasonable Cost of Service	NPV Revenues at Current Rates	NPV Revenues at New Rates	Difference with Current Rates
Scenario 1	174,585,451	152,833,158	174,585,451	-21,752,293
Scenario 2	184,575,716		184,575,716	-31,742,558
Scenario 3	191,131,590		191,131,590	-38,298,432

Table 27 Summary of proposed rate increases

Scenario	Direct increase Jul 2025	Smoothed increase		
		Jul 2025	Jan 2026	Jan 2027
Scenario 1	20.35%	9.35%	9.35%	9.35%
Scenario 2	29.70%	13.30%	13.30%	13.30%
Scenario 3	35.83%	15.80%	15.80%	15.80%

These updated results reflect significant corrections to the methodology originally applied by WASCO, addressing critical issues such as:

- The determination of the Opening Asset Base,
- The phasing and feasibility of the investment plan for the 2024–2027 period,
- The selection and use of base-year O&M costs,
- The cost projection methodology, and
- The estimation of "Other Revenues."

Furthermore, the smoothed tariff paths presented above ensure that, in each scenario, the Net Present Value of the Reasonable Cost of Service is fully recovered by the Net Present Value of revenues, thereby maintaining the financial equilibrium required by the regulatory framework over the triennium.

Given the strategic priority that WASCO has assigned to the Raw Project, and although it would be advisable to have more comprehensive and robust cost–benefit analyses

supported by additional quantitative evidence, it is considered both pertinent and reasonable to move forward with the adoption of Tariff Scenario No. 3.

In the event that Scenario 3 cannot be approved for any reason, Scenario 1 should be adopted, as it at least enables the company to cover its O&M costs and ensure remuneration of the asset base as of July 2025, thus preserving basic financial viability.

5 AFFORDABILITY ANALYSIS AND SOCIAL CONSIDERATIONS

Assessing income levels in Saint Lucia can be extremely difficult as accurate and timely data on income levels are not readily available. In order to provide a good proxy for income levels, a number of datasets were utilized namely social security data, information from the 2022 Population and Household Census and the 2016 Survey of Living Conditions (SLC).

The social security data is consistent and represents the incomes from the formal sector, including self-employed individuals and households with employed people. The recently concluded 2022 Population and Household Census estimated the labour force at 93,731 individuals and the employed labour force at 82,608 individuals. The data on social security provides an indication of the extent of employed labour force coverage. Saint Lucia National Insurance Corporation data for 2022 and 2023, as reported by Statista, was used as a baseline to estimate annual per capita income for 2024 and 2025.

In addition, information on household sizes by district was utilized, and adjustments were made to factor in the age dependency ratio for a more accurate picture of total household incomes. The average household size for Saint Lucia has fallen from 2.8 persons (2010 Census) to 2.6 persons (2022 Census), and the average dependency ratio (measuring population 0-4 years and over 65 years) fell from 48.6 (Census 2010) to 44.5 percent (Census 2022).

The data on income quintiles was only available for the 2016 SLC. The 2025 SLC data will not be available until late 2026, as the survey is in its early stages. The movements in the social security data were applied to income quintiles because the database represents over 63 percent of the labour force, and therefore, movements in the social security data should be similar to the movements in the SLC data and should also facilitate the analysis.

5.1 Annual Individual Income

Average annual income per employee was estimated at $42,479 in 2018/19 and fell by 5.7 percent in 2019/20 and 4.4 percent in 2020/21 due to the effects of the COVID pandemic during that period. However, the average annual income recovered in 2021/22 due to the resurgence of economic activity and other salary increases for both Government and private sector employees.

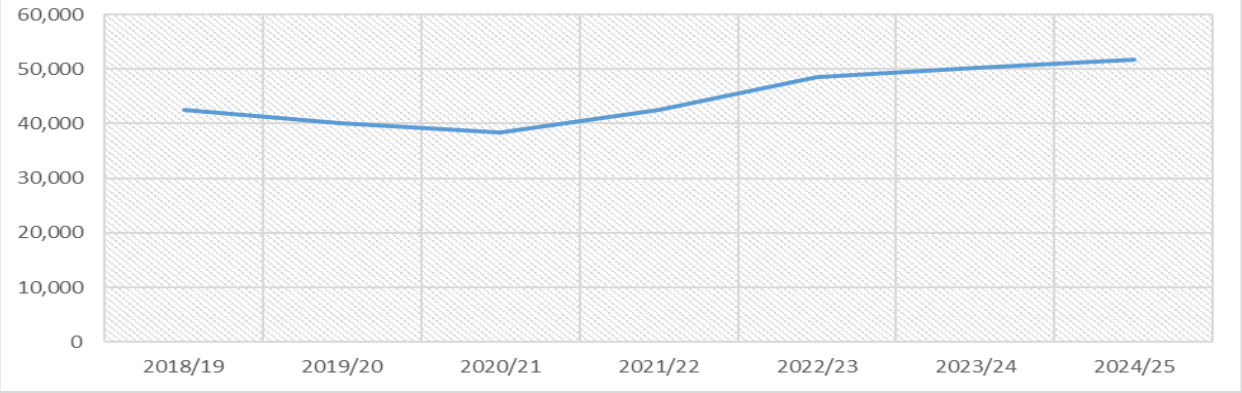
Table 28 - Average Annual Income in XCD Per Employee Per Administrative District

Administrative Districts	Financial Year						
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Central Castries	32,117	30,290	28,963	32,190	36,694	37,956	39,159
Castries Suburban	43,412	40,941	39,148	43,510	49,598	51,304	52,930
Castries Rural	49,198	46,398	44,366	49,310	56,208	58,142	59,985
Anse La Raye	40,429	38,129	36,459	40,521	46,190	47,779	49,294
Canaries	49,659	46,834	44,783	49,772	56,736	58,687	60,548
Soufriere	50,921	48,024	45,920	51,037	58,177	60,179	62,086
Choiseul	44,351	41,827	39,995	44,452	50,671	52,414	54,075
Laborie	35,826	33,787	32,308	35,907	40,931	42,339	43,681
Vieux Fort	46,689	44,033	42,104	46,795	53,342	55,177	56,926
Micoud	33,338	31,441	30,064	33,413	38,088	39,398	40,647
Dennery	28,399	26,783	25,610	28,463	32,445	33,561	34,625
Gros Islet	55,404	52,251	49,963	55,529	63,298	65,476	67,551
Average Income Per Year	**42,479**	**40,061**	**38,307**	**42,575**	**48,532**	**50,201**	**51,792**

Source: Saint Lucia National Insurance Corporation; Saint Lucia Central Statistical Office

In 2024/25, average annual income per employee was estimated at $51,792 representing an increase of 29.1 percent over the income recorded in 2018/19.

Graph 6 - Average annual income by individuals



Source: Economic and Social Review 2024: Saint Lucia Central Statistical Office

In addition to other salary increases, the Government legislated a national monthly minimum wage of $1,131 which is expected to increase wages at the lower levels. While levels have increased, five districts remained below the average: Dennery, Central Castries, Micoud, Laborie, and Anse La Raye.

5.2 Annual Household Income

Similarly, annual household income was computed after adjusting for the dependency ratio at the district level.

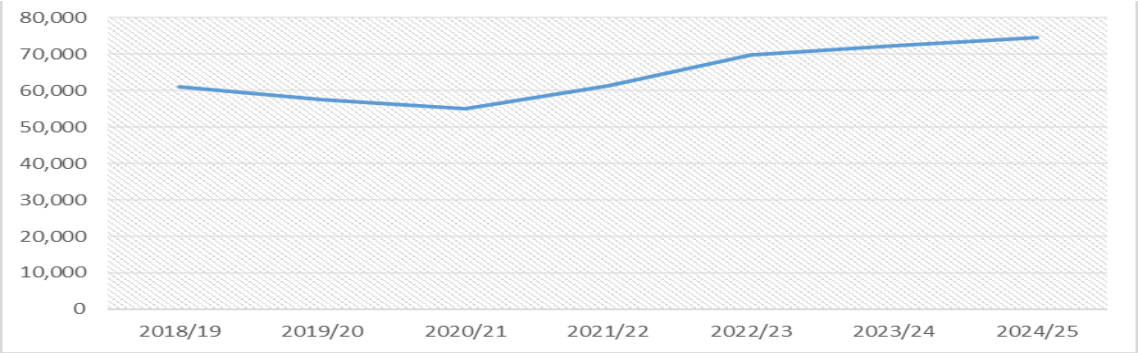
Table 29 - Average Annual Income Per Household Per Administrative District

Administrative Districts Household Incomes	Financial Year						
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Central Castries	47,598	44,889	42,923	47,706	54,380	56,251	58,034
Castries Suburban	64,336	60,675	58,018	64,482	73,504	76,032	78,443
Castries Rural	72,911	68,762	65,751	73,077	83,301	86,166	88,898
Anse La Raye	61,238	57,753	55,224	61,377	69,964	72,371	74,665
Canaries	65,054	61,352	58,665	65,202	74,324	76,881	79,318
Soufriere	78,561	74,091	70,846	78,740	89,756	92,843	95,787
Choiseul	62,987	59,403	56,802	63,130	71,963	74,438	76,798
Laborie	49,555	46,735	44,688	49,667	56,616	58,563	60,420
Vieux Fort	68,703	64,794	61,956	68,859	78,493	81,193	83,767
Micoud	43,079	40,627	38,848	43,177	49,217	50,910	52,524
Dennery	39,281	37,046	35,423	39,370	44,878	46,422	47,894
Gros Islet	80,474	75,895	72,571	80,657	91,941	95,104	98,119
Average Income Per Year	**61,148**	**57,669**	**55,143**	**61,287**	**69,861**	**72,265**	**74,555**

Source: Economic and Social Review 2024: Saint Lucia Central Statistical Office

The average household size across all districts was estimated at 2.6 persons by household. However, there are slight fluctuations in household sizes by district. The dependency ratio by district also varies, and this was factored into the final estimated annual household income.

Graph 7 - Average annual household income



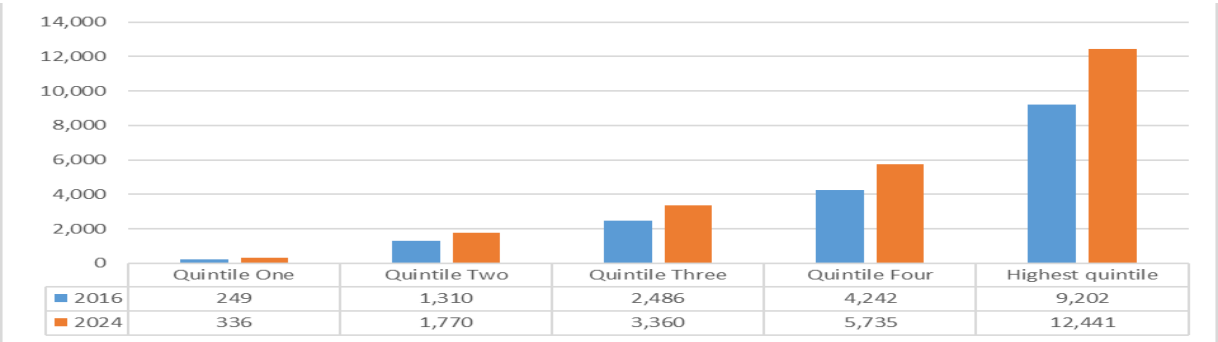
Source: Economic and Social Review 2024; Saint Lucia Central Statistical Office; Saint Lucia SLC 2016 Report

In 2018/19, the annual average household income was estimated at $61,148. Only four districts fell below this average, namely Dennery, Micoud, Laborie, and Central Castries. Similarly, the annual incomes of individuals, household incomes fell in 2019/20 and 2020/21 but picked up in 2021/22. In 2024/25, the average annual household income was estimated at $74,555.

5.3 Income Distribution Across Quintiles

The data on quintiles was found only in the dataset for the SLC. However, movements in the income data were applied to the quintiles for consistency in the analysis. Quintiles divide the income data into five equal parts, where each quintile represents twenty percent (20%) of the data or the population.

Graph 8- Income quintiles 2016 vs 2024



Source: Saint Lucia SLC 2016; Saint Lucia Central Statistical Office; Saint Lucia Economic and Social Review 2024.

Twenty percent of the targeted population in 2016 received a mean per capita income per month of $249.00, compared to $336.00 in 2024. The highest quintile moved from $9,202 in 2016 to $12,441 in 2024. Although there was a general increase of 35.2 percent across all five quintiles, only 40 percent of the targeted population earned above $4,316 in 2024, which is the average mean per capita income calculated above.

5.4 Purchasing Power

The data shows that incomes have increased across all districts and across quintiles. However, inflation has remained high for Saint Lucia since the COVID period due to supply chain issues. Saint Lucia's inflation is mostly imported, and with the uncertainty regarding the imposition of tariffs on trading partners, it is anticipated that the purchasing power of households will continue to be constrained in the near to medium term.

Purchasing Power measures the impact of inflation on households and individuals. It is measured by CPI (current)/Base Year x 100. In Saint Lucia, the base year is 2018, which is also the same timeline that we are observing for the annual incomes for individuals and households.

Table 30 - Average Inflation and Purchasing Power

	CPI Base	Years					
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Average Inflation	100	101.8	100	102.4	108.9	113.8	113.2
Purchasing Power		1.8	0	2.4	8.9	13.8	13.2

Source; Saint Lucia Central Statistical Office; Saint Lucia Economic and Social Review 2024

The CPI data indicates that relative to 2018, the purchasing power of individuals and households has eroded over time. Prices peaked in 2023 at 13.8 and remained high in 2024, although at a slight decline of 4.3 percent.

Table 31 - Assessing Real Incomes

	2018	2019	2020	2021	2022	2023	2024
Annual Ind Income	42,479	40,061	38,307	42,575	48,532	50,201	51,792
Real Incomes	42,479	39,353	38,307	41,577	44,565	44,113	45,753
Annual HH Income	61,148	57,669	55,143	61,287	69,861	72,265	74,555
Real Incomes	61,148	56,649	55,143	59,850	64,152	63,501	65,862

In an attempt to measure the impact of inflation on real incomes, both the average individual and average household incomes were deflated by the CPI. The increase in real income for individuals and households when comparing 2018 and 2024 was only 7.7 percent. This analysis can be similarly applied to the various income quintile groups. The first three groups may be in danger of not meeting their basic necessities, and this must be taken into consideration in determining affordability and the potential economic and social impacts of increases in water tariffs.

The following table outlines aspects of the application request for an increase in WASCO's water tariff. It highlights insights into affordability, ability to pay bills, and potential positive and negative economic and social impacts.

5.5 Water Tariff Affordability

This section provides estimates of water tariff affordability in Saint Lucia for each quintile using household income data and under three tariff increase scenarios.

5.5.1 Water Expenditure in Saint Lucia

WASCO's current monthly billing to customers on average is $53.08 based on the current tariff structure:

- Tier 1 is the minimum charge for up to 2000 gallons
- Tier 2 covers the first 3000 gallons, with a charge per additional 1,000 gallons
- Tier 3 applies to usage above 3,000 gallons, with a charge per additional 1,000 gallons

As shown in Table *32*, customers on average consume 3,660 gallons per month. Under the current tariff structure, Tier 1 represents water usage in gallons from 0-2000 costing $24.42 (base rate); Tier 2: 2000 to 3000 at $12.21 and Tier 3: over 3000 gallons costing $16.45.

Table 32 - Estimated water expenditure at the monthly average consumption of 3660 gallons under the current tariffs

Domestic customer class by tiers	Tariff	Quantity (Gallons)	Cost (EC$)
Tier 1 (0-2,000 gallons)	Base Charge	2000	24.42
Tier 2 (2,000 – 3,000 gallons)	$0.01221	1000	12.21
Tier 3 (3,000+ gallons)	$0.02482	660	16.45
Average quantity consumed		**3,660**	
Total Estimated Monthly Billing to Customer			**53.08**

It is important to note that this volume of consumption is slightly above what is considered basic water consumption needs. The WHO minimum guidelines for basic needs is 50–100 liters per person per day (13–26 gallons). As such, 30.5 gallons per person per day (3,660 gallons per month for a household of 4) is slightly above the basic needs. The total billed amount is calculated under the tiered domestic tariff structure, which applies different rates to different blocks of water consumption. For a household using 3,660 gallons per month, the first 2,000 gallons have a flat charge of EC$24.42, the next 1,000 gallons are charged a 0.01221 per gallon, (EC$12.21), and the remaining 660 gallons at EC$0.02482 per gallon (EC$16.45).

5.5.2 Methodology to estimate water affordability

Water tariff affordability is measured as the percentage of a household's income that is spent on basic water and sanitation services, and is calculated using the formula:

Affordability ratio= (Monthly water and sanitation bill/ Monthly household income) ×100

This is a methodology recommended by the United Nations Development Programme (UNDP) and the World Health Organization (WHO). They recommend that water and sanitation services should not exceed 3% to 5% of a household's income to be considered affordable.

Using current and proposed tariffs and the basic monthly volume of 2,060, the monthly water bill was estimated. The affordability ratio is calculated by dividing the monthly water bill by the monthly household income for each quintile. Where the ratio exceeds the 3% threshold, the result will indicate TRUE, which means that the cost is unaffordable. A FALSE result means that members in the household income quintile exceed the 3% affordability limit, indicating potential affordability concerns.

5.5.3 Proposals for consideration

The increases in the tariffs and the various scenarios are presented below. For the three scenarios, it is preferred for the increases to be gradual over a three-year cycle to reduce the burden on households. Although the increases are lower, the magnitude of the increases is felt overtime and not at once.

Table 33 - Tariff Adjustment Proposals and Proposed Increase

Scenarios	Direct Increase July 2025	Smoothed increase		
		July 2025	Jan 2026	Jan 2027
Scenario 1	20.35%	9.35%	9.35%	9.35%
Scenario 2	29.70%	13.30%	13.30%	13.30%
Scenario 3	35.83%	15.80%	15.80%	15.80%

For Scenario 1, it is recommended that 9.35 percent increase be applied in years 1, 2 and 3. Similarly, for Scenario 2 the proposed increase is 13.30 percent each of the three years. For Scenario 3, the proposed rate is 15.80 percent.

The water affordability will utilize basic consumption level of 2,060 gallons (which corresponds to 2.6 persons consuming 100 liters per capita per day, over 30 days, converted to gallons). The proposed rates are contained in the table below.

Table 34 - Proposed Annual Increase by Scenarios

Scenarios	Actual Cost	Annual Increase (Costs - $)		
		July 2025	Jan 2026	Jan 2027
Scenario 1	24.42	26.70	29.20	31.93
Scenario 2		27.67	31.35	35.52
Scenario 3		28.28	32.74	37.92

5.5.4 Water Affordability by Scenarios

Three scenarios are used to determine water affordability based on increases in the water rates. The analysis will be based on two time periods, the first year of the increase and the third year, to account for the cumulative changes over three years.

- *Scenario One*

Scenario one represents an overall increase of 9.35 percent. The scenario is based on an estimated 2,060 gallons of water being used with increases reflected in the various tiers to a proposed monthly water bill of $26.70 if effected in July 2025 and a bill of $31.93 at the end of the third year.

In determining the water affordability ratio, only Quintile Income Group One is not able to afford this increase proposed for both Year 1 and the accumulated increase up to Year 3.

Table 35 - Water Affordability Scenario one: 9.35% increase in current tariffs

Income Quintile	Monthly household (ECD)	Year 1			Year 3		
		Monthly Water Bill – Year 1 (ECD)	Affordability Ratio (%) – Year 1	Above 3% Threshold	Monthly Water Bill – Year 3 (ECD)	Affordability Ratio (%) – Year 3	Above 3% Threshold
1	336	26.70	7.95	TRUE	31.93	9.50	TRUE
2	1,770	26.70	1.51	FALSE	31.93	1.80	FALSE
3	3.360	26.70	0.79	FALSE	31.93	0.95	FALSE
4	5,735	26.70	0.47	FALSE	31.93	0.56	FALSE
5	12,441	26.70	0.21	FALSE	31.93	0.26	FALSE

Table 35 shows that affordability is possible for the other four quintile groups as their affordability ratios fell below 3.0 percent for Year 1 and up to Year 3.

- *Scenario Two*

This scenario represents 13.30 percent increase in the monthly water bill from $24.42 to $27.67 in Year 1 and a final bill of $35.50 in Year 3.

Table 36 - Water Affordability Scenario two: 13.30% increase in current tariffs

Income Quintile	Monthly household (ECD)	Year 1			Year 3		
		Monthly Water Bill – Year 1 (ECD)	Affordability Ratio (%) – Year 1	Above 3% Threshold	Monthly Water Bill – Year 3 (ECD)	Affordability Ratio (%) – Year 3	Above 3% Threshold
1	336	27.67	8.42	TRUE	35.52	10.57	TRUE
2	1,770	27.67	1.56	FALSE	35.52	2.01	FALSE
3	3,360	27.67	0.82	FALSE	35.52	1.06	FALSE
4	5,735	27.67	0.48	FALSE	35.52	0.62	FALSE
5	12,441	27.67	0.22	FALSE	35.52	0.29	FALSE

As with the previous Scenario, individuals falling in Quintile Group One will have difficulties in paying their monthly bills. Affordability for Quintile Group two is still possible, however the ratio for this group worsen to 2.01, however still in the range of 3 – 5%.

- *Scenario Three*

Scenario 3 computation is based on applying a 15.80 percent in the monthly bill over the three-year period moving from $28.28 in Year 1 to $37.92 in Year 3.

Table 37 - Water Affordability Scenario three: 15.80% increase in current tariffs (Year 1 and Year 3)

Income Quintile	Monthly household (ECD)	Year 1			Year 3		
		Monthly Water Bill – Year 1 (ECD)	Affordability Ratio (%) – Year 1	Above 3% Threshold	Monthly Water Bill – Year 3 (ECD)	Affordability Ratio (%) – Year 3	Above 3% Threshold
1	336	28.28	8.42	TRUE	37.92	11.29	TRUE
2	1,770	28.28	1.60	FALSE	37.92	2.14	FALSE
3	3,360	28.28	0.84	FALSE	37.92	1.13	FALSE
4	5,735	28.28	0.49	FALSE	37.92	0.66	FALSE
5	12,441	28.28	0.23	FALSE	37.92	0.30	FALSE

At Scenario 3, households or individuals in all Income Quintile groups with the exception of Quintile one will be able to afford the proposed increases from Year 1 to Year 3. As indicated previously, the situation worsens slightly for individuals/households in Quintile Group two, however the ratio remains within the 3 – 5% acceptable range.

5.5.5 Affordability and Ability to Pay for Basic Consumption

It appears from the analysis above that the households in the lowest quintile may encounter affordability challenges if there is an increase in water tariffs under the direct increase. Given the potential increasing trends in inflation, there is no guarantee that they could afford the smoothed increase. Furthermore, despite an increase in income, their purchasing power has been eroded due to increasing inflation. On the other hand, the analysis also suggests that individuals/households in the four upper quintiles have the ability to pay smoothed increases under the three scenarios. It is important to note that this is based on water consumption for an average household of 2.6 but where the

households are larger the water use will vary and this will have implications for other households (perhaps poorest 40%)

5.5.6 Social Impacts

An increase in water rates in St. Lucia could have several social impacts, particularly affecting vulnerable populations and potentially exacerbating existing inequalities. According to Kairi (2018), sixty-five percent of urban households benefit from a seven-day supply compared to 48 percent of rural households.

The poorest 20 percent of St. Lucian households are also the most disadvantaged in terms of water provision. Compared to the remaining 80 percent of the population, they face a deficit in having a piped main water supply of 12 percentage points. Instead, they rely on water provision at the public standpipe which does guarantee a regular supply. Forty-four percent of bottom-quintile residents receive a full-week supply compared to an average of 60 percent for residents in the remaining cohorts (Kairi, 2018).

- Health and Sanitation

  - Higher water rates could lead to reduced water consumption, potentially impacting hygiene practices like handwashing and bathing. This could increase the risk of waterborne diseases and sanitation problems, disproportionately affecting low-income communities with less access to alternative water sources or sanitation facilities.

  - Kairi (2018) pointed out the gender differentiation regarding toilet facilities as follows: “In contrast, both poverty- and gender-related differences marked the use of modern toilet facilities, with almost four in every five female-headed households having access to water closets. This was eight percentage points above that for male-headed households. In the richest 20 percent of all households, the rate was even higher (90%), which was eight percentage points above the next lowest quintile and more than double the rate of the poorest 20 percent of households. (p. 184)

- Economic well-being

  In terms of its impact on economic well-being, the increased cost of water bills could put a significant burden on households, particularly those with lower incomes. This could force families to make difficult choices, potentially impacting other essential needs like food, healthcare, or education, thus exacerbating existing inequalities.

- **Reduced Water Consumption**

  There is also the potential for reduced water consumption. Consumers may be less likely to use water for activities like irrigation, gardening, or washing, impacting local agriculture and tourism industries. This could also lead to reduced water consumption overall, potentially impacting WASCO's return on assets.

- **Challenges facing vulnerable populations**

  Vulnerable populations such as the elderly, children, and individuals with disabilities may be particularly vulnerable to the impacts of rising water costs. These groups may face challenges in accessing and affording necessary water resources, potentially leading to health issues and reduced quality of life. Higher water costs could disproportionately affect low-income households, making it harder for them to afford essential needs and potentially pushing them further into poverty.

- **Increasing Inequality**

  At the societal level, an increase in water rates in St. Lucia could negatively impact the social fabric of the island by disproportionately affecting marginalized communities and potentially widening the gap between the rich and poor. This is because water is a basic necessity, and its cost increase could strain the budgets of low-income households, making it harder for them to afford other essentials like food and healthcare. More specifically, gender inequality could worsen given that female-headed households have a higher poverty rate than male-headed households. With fewer financial resources and often more dependents, these households face a greater strain when water costs rise or access becomes unreliable. Additionally, women and girls have disproportionate responsibility for domestic duties many of which require water, thus reducing time for education/economic activities as well as reproductive and maternal health impacts.

- **Reminder: Water is a Human Right**

  Access to safe and clean drinking water is widely recognized as a fundamental human right. The United Nations has explicitly stated that access to safe drinking water and sanitation is essential for the full enjoyment of life and all human rights. This right is not only about having access to water, but also ensuring it is safe, affordable, and accessible to all without discrimination. It's not enough to simply have water available; it needs to be safe, clean, and accessible in a reasonable time and at a reasonable cost. The Sustainable Development Goals (SDGs), particularly SDG 6, specifically address water and sanitation, highlighting the importance of

universal access to clean water and sanitation for all. Water services must be affordable to all. No individual or group should be denied access to safe drinking water because they cannot afford to pay. Source: https://www.ohchr.org/en/water-and-sanitation/about-water-and-sanitation

6 CONCLUSIONS AND RECOMMENDATIONS

- A comprehensive review of the Triennial Tariff Review Application submitted by the Water and Sewerage Company Inc. (WASCO) for the triennium September 2024–August 2027 was carried out in accordance with the applicable regulatory framework.

  WASCO's original tariff increase proposal amounted to 42.2%, based on the comparison between the present value of the Reasonable Cost of Service, estimated at XCD 224,357,472, and the net present value (NPV) of revenues under existing tariffs, calculated by the company at XCD 157,731,108.

  However, this detailed assessment identified several critical issues that require substantive adjustments to ensure the transparency, consistency, and sustainability of the tariff proposal.

- Specifically, issues were identified in relation to the determination of the Opening Asset Base, the phasing and feasibility of the proposed investment plan, the selection and use of base-year Operation and Maintenance (O&M) costs, the cost projection methodology, and the estimation of Other Revenues.

- As a result of the technical analysis carried out, a series of adjustment proposals were formulated to address the deficiencies identified in the application submitted by WASCO.

  First, it was recommended to adopt as the *Opening Asset Base* the value of property, plant, and equipment recorded in WASCO's Balance Sheet as of the end of fiscal year 2023.

  Regarding the investment plan, it was proposed that Year 1 should include both the investments effectively carried out by WASCO between January and December 2024, as well as those expected to be implemented between January and June

2025. Year 2 would be equal to the value of year 1 of the original investment plan and year 3 would be equal to the value of year 2 of the original investment plan of WASCO, for a total value of XCD 110.7 million.

For administrative and Operation and Maintenance (O&M) costs, it was suggested to use the figures reported in the 2023 fiscal year income statement as the base year for projections, with future values estimated through a technical analysis of unit costs.

Finally, it was proposed to adjust the estimation of "Other Revenues" by using as a starting point the actual values reported in the 2023 income statement, in order to avoid overestimations and ensure that complementary revenue sources are aligned with the company's operational reality.

- Based on the application of the proposed adjustments, three tariff increase scenarios were developed with the objective of providing different proposals in light of WASCO's current financial conditions and the potential social opposition to steep tariff increases:

    - Scenario 1 presents the minimum tariff increase required for WASCO to cover its annual administration, operation, and maintenance (O&M) costs, as well as the depreciation and return on its 2023 opening asset base. Under this scenario, a direct increase of 20.35% would be required in July 2025. However, in accordance with regulatory requirements (k-factor), a phased increase of 9.35% would be applied in July 2025, January 2026, and January 2027.
    - Scenario 2 reflects the tariff increase needed for WASCO to cover its administration, operation, and maintenance (O&M) costs, the depreciation and return on its 2023 opening asset base, as well as the depreciation and return associated with a minimum investment plan. This scenario requires a direct increase of 29.70% in July 2025. However, following the regulatory guidelines (k-factor), a phased increase of 13.30% would be applied in July 2025, January 2026, and January 2027.
    - Scenario 3 includes the same elements as Scenario 2, but incorporates the Raw Water Project into the investment plan. As a result, a direct tariff increase of 35.83% would be required in July 2025. However, in line with

the regulatory provisions (k-factor), a phased increase of **15.80%** would be applied in July 2025, January 2026, and January 2027.

- Given the strategic priority that WASCO has assigned to the Raw Project, and although it would be advisable to have more comprehensive and robust cost–benefit analyses supported by additional quantitative evidence, it is considered both pertinent and reasonable to move forward with the adoption of Tariff **Scenario No. 3.**

- At Scenario 3, households or individuals in all Income Quintile groups with the exception of Quintile one will be able to afford the proposed increases from Year 1 to Year 3. As indicated previously, the situation worsens slightly for individuals/households in Quintile Group two, however the ratio remains within the 3 – 5% acceptable range.

- The households in the lowest quintile may encounter affordability challenges if there is an increase in water tariffs under the direct increase even when they use less water from piped sources for basic everyday purposes compared to higher income households. Given the potential increasing trends in inflation, there is no guarantee that they could afford the smoothed increase. Furthermore, despite an increase in income, their purchasing power has been eroded due to increasing inflation. On the other hand, the analysis also suggests that individuals/households in the four upper quintiles have the ability to pay smoothed increases under the three scenarios.

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