



# **ANNUAL TARIFF REVIEW**

**January 3, 2023**

**BELIZE WATER SERVICES LIMITED**

**7 Central American Boulevard**

**Belize City, Belize**

# BWS Annual Review 2023 Report

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## Belize Water Services Limited

### Annual Review Report to the Public Utilities Commission

Report Date: January 3, 2023

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## **Belize Water Services Limited**

### **Annual Review Report to the Public Utilities Commission**

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## **1 Executive Summary**

### **1.1 Overview**

Belize Water Services Limited (BWS) charges tariffs and miscellaneous fees which are reviewed and approved by the Public Utilities Commission (PUC) through a tariff review process. This regulatory process is based on a Business Plan Review for a five-year review period referred to as a Full Tariff Period (FTP); the regulations also provide for annual reviews based on exceptional circumstances. The current FTP is for the five-year period which commenced April 1, 2020 and will end on March 31, 2025. BWS operates on a fiscal year (FY) basis starting each year April 1 and ending March 31. BWS has now entered FY 2022/23, which is the third fiscal year within the current FTP.

BWS submitted a Full Five-Year Business Plan (FFBP) for this FTP to the PUC as part of the regulated review requirement for the FTP review. The business plan included a financial model and projections based on planned future activity and the expected financial results. The FTP submission included a request for a 10% tariff increase to be effective April 2022. The PUC subsequently issued its Final Decision in March 2020, holding tariffs and rates the same, but approving a 2.25% across the board tariff increase to be effective April 1, 2022.

Due to the negative impacts of the COVID-19 pandemic and costs increases, BWS submitted an Annual Tariff Review request in April 2022. This included proposed changes in the tariff structure which would have resulted in about a 5% increase in revenue for the utility. The PUC subsequently issued its Final Decision on the ATR in June 2022, holding tariffs and rates the same, therefore effectively quashing the 2.25% tariff increase awarded in March 2020.

This submission is requesting an Interim Review by the PUC based on Exceptional Circumstances. It includes updated analysis and forecasts which rely on the last FFBP and the 2022 Annual Review. These also utilise the latest Financial Statements and Independent Auditor's reports, the latest budget and Capital Expenditure plan, and other recent information to forecast key financial and operational elements to for the remainder of the FTP, i.e., from FY 2023/24 through FY 2024/25.

During the remainder of the FTP, BWS is planning to expend approximately BZD \$93 million of capital improvements including sewer collection and treatment systems, water expansion projects, water supply projects, meter replacement, capital renewal and replacement, and similar projects. These projects are funded from a blend of tariff revenue, available reserves, additional debt, and Government of Belize (GOB) assistance. However, several larger projects, which require approval and assistance from Government and one or more International Financial Institutions, are specifically excluded as these have not yet reached definitive agreements.

### **1.2 Revenue Performance and proposed tariffs**

BWS' revenues year-to-date have been similar to those projected in the PUC's Final Decision 2022, with the actual tariff-related revenue being 1.2% higher than the pro-rated Final Decision forecast, using the eight months to November 2022.

In the previous ATR, BWS requested consideration for a restructuring of the tariffs and the differentiation of the customer base into residential and non-residential customers. Whilst BWS is still desirous of these changes, it acknowledges the PUC's decision to defer this review until a full Cost of Service Study has been conducted.

***BWS is therefore proposing to keep the tariffs and the tariff structure the same, pending the completion of the proposed study and the subsequent review.***

BWS stands ready to discuss the submission with the PUC in order to continue to assist in with the development of our country, while continuing to provide the high level of services expected by our customers.

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## **2 Introduction and Background**

Belize Water Services Limited (BWS) submits this formal request for an Annual Review to the national regulator, the Public Utilities Commission (PUC), based on exceptional circumstances. The company is currently approaching the fourth year (April 2023 – March 2024) of the current Full Tariff Period (2020-2025). During the first three years of the FTP, the economic effect of COVID-19 has significantly reduced revenues, while at the same time causing huge jumps in prices of materials and services.

This submission is made in accordance with Statutory Instrument 67 of 2002, Part IV subsection 27 and subsequent amendments, which stipulates the conditions required for an annual request for a Review to the PUC. It officially commences the proceeding for the company's Annual Tariff Review to determine the tariffs and fees effective as of April 1, 2023.

Belize Water Services Limited takes pride in being the foremost water utility in the Caribbean area in terms of efficiency, water loss reduction, continuity and reliability of supply, and overall viability and sustainability. However, adequate revenues are required from tariffs to support investments, provide debt servicing, cover operational costs and to maintain the overall viability of this essential utility.

BWS, as the national water and sewerage provider, is both mandated and committed to assist with the country's overall development in order to provide services to more people even where there is no positive return on the investment required. Water and Sanitation services provide positive social and health benefits which outweigh the normal economic or financial justifications. Financial resources to perform the Capital Investment and Operational works are required to successfully meet the mandate to aid with the development of the water and wastewater sector, while continuing to provide top-class reliable services to the population of Belize.

Due to a number of exceptional circumstances, cost increases outside of its control, and the need to continue to invest in expansion and infrastructure, BWS is submitting this request for review to the PUC. While the company is not requesting any changes in tariff structures and fees, it should be noted that previous revenue shortfalls, combined with continued cost increases and the critical need for Capital Expenditure, all place pressure on attempting to keep the tariffs at the current levels.

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### 3 Tariff History

Belize Water Services Limited (BWS) is operating under a 25-year license, which will expire in March 2026, but will automatically renew for a further 15 years. BWS commenced operations in March 2001. The company was initially mandated to go through a 3-year transition period (2001-2004) with no tariff changes. Since then, the company has since gone through four Full Tariff Reviews and a number of Annual Tariff Reviews. These reviews have sometimes resulted in tariff increases, sometimes in no increase, and, occasionally, in a tariff reduction. It is noteworthy that, despite several requests, the miscellaneous charges and fees have not changed over the last 22 years.

In October 2019, as required by its regulations, Belize Water Services Limited (BWS) submitted its fourth 5-year Full Business Plan Report, for the period April 2020 to March 2025, and a request for a 10% tariff increase at the beginning of Year 3 (April 2022) to cover costs and Capital Expenditure Investments. After conducting its review, the PUC made a Final Decision, reducing the Capital Expenditure from \$327 million to **\$94 million** and reducing the Tariff increase from 10% to **2.25%**.

Due to the negative impacts of the COVID-19 pandemic and costs increases, BWS submitted an Annual Tariff Review request in April 2022. This included proposed changes in the tariff structure which would have resulted in about a 5% increase in revenue for the utility. The PUC subsequently issued its Final Decision on the ATR in June 2022, holding tariffs and rates the same, therefore effectively quashing the 2.25% tariff increase awarded in March 2020.

Subsequently, being cognizant of the social and economic conditions, BWS' Board has sought ways to improve the company's efficiency and therefore profitability and cash flow other than tariff increases. The company continues to seek grants and low interest loans to help finance Capital projects.

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## **4 Justification for Annual Review**

### **4.1 Legal Basis**

This document and its submission to the Public Utilities Commission (PUC) is requesting an Annual Tariff Review Proceeding based on Exceptional Circumstances in accordance with Part IV of the Water and Sewerage (Tariff) Byelaws (Statutory Instrument No. 67 of 2002) and its amendments (Statutory Instruments 102 of 2004 and 89 of 2008), and the procedures and programme as set out.

In making this submission, the licensee, Belize Water Services Limited, has included proposals relating to income, operating expenses, assets and investment for consideration by the PUC to modify the previous decision relating to the Fourth Full Tariff Period (April 1, 2020 to March 31, 2025).

### **4.2 Exceptional Circumstances**

SI 67/2002 defines Exceptional Circumstances as *“any act, event or circumstance beyond the reasonable control of a licensee, which has a material effect on the financial position of the licensee.”* The main significant event which has triggered this application is the COVID-19 Pandemic and its economic impact. However, there are some other factors which require both capital and operational expenditure to address or mitigate.

Due to these, BWS has experienced severe adverse financial and cash circumstances including the following:

1. Shortfalls in Returns of some \$6.8 million over the first two years of the Full Business Plan Period (2020-2025) when compared to the PUC Final Decision 2020.
2. Increases in the costs of materials, equipment and services required for both operational and Capital Investment.
3. Planning for disaster preparedness and climate change resiliency – these require expenditure for additional Capital Investment up front and for cash reserves for expeditious recovery after an event.

As indicated in the 2022 Annual Tariff Review report, BWS continues to experience increases in prices of materials, equipment and services. Whilst inflation within Belize has been maintained at below the international averages, unfortunately, most of BWS purchases are for items sourced internationally, such as chemicals, pipes and appurtenances, heavy equipment, pumps and motors

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etc. The high prices of fuels and shipping have had a domino effect on prices of other goods and services.

Given the company's ongoing and proposed expansions and the requisite increases in production and distribution, such cost increases will cause large increases in the overall expenditures of the company. BWS is especially vulnerable to these increases since many of the products required for operations are spin-offs of the oil industry (e.g. PVC material) or require frequent ordering and shipping due to the volume.

Furthermore, additional staffing and equipment are required for BWS to improve its level of service and meet its targeted expansion works.

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## **5 Capital Expenditure Requirement**

BWS, as the national water and sewerage provider, is both mandated and committed to assist with the country's overall development, even, as in some expansions, where there is no positive return on the investment required. Water and Sanitation has clear social and health benefits which oftentimes outweigh economic or financial justifications.

BWS' Mission Statement and Government's commitment in furtherance of the Sustainable Development Goals for water and sewerage expansion countrywide requiring significant investment and financing, currently estimated at \$49 million for the next financial year and \$93 million over the next two years, being the last two years of the FTP.

BWS is able to cover its operating costs including finance charges from Revenues, but needs to find ways to finance all required Capital Expenditure in the medium to long term. This will necessitate BWS raising additional debt financing of approximately \$52 million.

The planned capital investments over the remainder of the FTP, include new and improvements to sewer collection and treatment systems, water expansion projects, water supply projects, meter replacement, plant renewal and replacement, and similar projects. These projects are to be funded from a blend of tariff revenue, available reserves, additional debt, and Government of Belize (GOB) assistance.

Areas for investments which have been identified to expand services or to improve services or secure supply, include, among others:

1. Water System Expansions within service areas to reach new customers
2. Improved Water Treatment extraction and treatment
3. Storage Reservoir at Belize District Water Treatment Plant
4. New Storage and additional Water Treatment Plant for Caye Caulker
5. Expansion and Improvement of existing Sewage Treatment Systems

Added to this is the need to maintain, replace or acquire new assets to ensure safe and continuous supply of services.

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Taking the above into consideration, along with the necessary investments to ensure a safe, secure supply of services and adequate operational viability and response, BWS has identified a number of Capital Expenditure requirements over the next few years.

Adequate Water Expansion is critical to the health and well-being of the population. Unfortunately, many expansion areas are not subject to formal planning. BWS currently has a large number of pending water connection applications, totalling over \$14 million in estimated cost to construct, as shown in the table below.

*Table – Pending Water Connection Applications*

Location	Customers		Estimated Total
	Immediate	Future	
Belize	273	719	\$4,257,103
Cayo (SI/SE/BV)	213	272	\$2,880,571
Belmopan	157	265	\$2,545,325
Corozal	82	300	\$1,047,561
San Pedro	56	107	\$967,270
Punta Gorda	37	144	\$775,381
Caye Caulker	35	77	\$539,548
Dangriga	30	29	\$476,929
Orange Walk	24	60	\$369,582
Placencia	16	11	\$144,932
<b>Total</b>	<b>923</b>	<b>1984</b>	<b>\$14,004,201</b>

The level of Capital Expenditure required to meet the demand for water connections is extremely high.

BWS has requested assistance with regulations to ensure that private developments are responsible for implementing the necessary utility infrastructure to ensure that new property owners have access to the necessary utilities. BWS is hopeful of obtaining loan financing and some grant funding to assist with providing this infrastructure to lower income residential customers.

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The detailed listing of proposed Capital Expenditure is included in the electronic files shared with the PUC. The Proposed Capital Expenditure is summarised in the tables below.

Table of Proposed Capital Expenditure by Category (BZ\$'000)

CapEx Category	2022/23	2023/24	2024/25	2Yr Total
<b><i>Water Production and Distribution</i></b>				
Resource Development and Protection	2,250	2,225	1,220	3,445
Water Treatment Works	1,550	3,210	2,900	6,110
Reservoirs and boosters	5,675	4,100	3,500	7,600
Distribution Expansion -water	3,665	3,200	5,450	8,650
Water mains & services	8,630	11,948	7,023	18,971
New Connections-water	735	735	735	1,470
<b>Sub Total</b>	<b>22,505</b>	<b>25,418</b>	<b>20,828</b>	<b>46,246</b>
<b><i>Wastewater Systems</i></b>				
Wastewater Systems	1,590	3,100	4,440	7,540
Wastewater Expansion	190	190	190	380
<b>Sub Total</b>	<b>1,780</b>	<b>3,290</b>	<b>4,630</b>	<b>7,920</b>
<b><i>Major Developments</i></b>				
New Water and/or Sewer Systems	1,722	14,480	10,810	25,290
<b>Sub Total</b>	<b>1,722</b>	<b>14,480</b>	<b>10,810</b>	<b>25,290</b>
<b><i>Other Capex</i></b>				
Heavy Duty Equipment/Mobile Plant	2,078	2,700	2,300	5,000
Office Buildings, Furniture & Equipment	770	1,055	1,795	2,850
Motor Vehicles	905	500	500	1,000
Computer Equipment & Software	3,196	1,528	2,392	3,919
Other Capex	1,025	150	695	845
<b>Sub Total</b>	<b>7,974</b>	<b>5,933</b>	<b>7,682</b>	<b>13,614</b>
<b>Total Proposed CapEx</b>	<b>33,981</b>	<b>49,121</b>	<b>43,950</b>	<b>93,070</b>

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*Table of Proposed Capital Expenditure by Location (BZ\$'000)*

Location	2022/23	2023/24	2024/25	2Yr Total
All/Multiple Locations	9,454	12,113	12,907	25,019
Belmopan	1,780	4,320	3,185	7,505
Benque Viejo	180	655	905	1,560
Belize City & Mainland	8,095	5,260	5,900	11,160
Caye Caulker	1,430	3,305	2,470	5,775
Corozal	680	680	2,250	2,930
Dangriga	565	960	1,125	2,085
Orange Walk	1,330	1,105	1,250	2,355
Punta Gorda	355	435	1,535	1,970
Placencia	4,840	9,040	3,390	12,430
San Ignacio/Santa Elena	2,900	5,153	4,148	9,301
San Pedro	2,372	6,095	4,885	10,980
<b>Totals:</b>	<b>33,981</b>	<b>49,121</b>	<b>43,950</b>	<b>93,070</b>

However, it should be noted that several larger projects, which require approval and assistance from the Government and one or more International Financial Institutions, are specifically excluded from the Capital Expenditure plan provided, as these have not yet reached definitive agreements. These projects include:

1. Sewerage Collection and Treatment system for south Caye Caulker
2. Expansion and Improvement of existing Sewage Treatment Systems
3. Sewerage Collection and Treatment system for Placencia Peninsula
4. Water and Sewerage systems for North Ambergris Caye.

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## **6 Other Items for Consideration**

### **6.1 Securing against vulnerabilities**

#### **6.1.1 Security of Water Resources and Supply**

In the past, it was taken for granted that Belize has abundant water supply and that there was no danger of water shortage to the population.

However, over the last ten years, BWS has witnessed a number of challenges to water resources and water sources. These include climate change related issues such as droughts and floods which have adversely affected water sources. Additionally, increasingly, the impact of land clearing and agriculture pose danger to supply areas, both from contamination and from changes in the water runoff and retention. Furthermore, increases in population has led to increased water demand, which has created situations where well sources get depleted. In other situations, weather related changes have adversely affected the replenishment rate for well sources and rivers. More and more, these lead to diminishing raw water supplies in the extended dry seasons.

These combination of factors mean that more investment has be placed in finding additional sources and protecting existing sources, as much as is possible. BWS now has to give priority to obtaining a modern well rig and the requisite training in its operation, as well as conduct scientific studies to determine underground water availability and to determine potential well sites.

#### **6.1.2 Climate Change**

BWS, is especially vulnerable to the impacts and potential impacts of climate change. Many of our systems and assets are located in coastal communities which are vulnerable to direct damages from hurricanes, tidal surges, tsunamis, sea-level rise.

There has been a notable increase in the hurricanes in both frequency and strength. This poses a significant risk to the company, as the potential damages could cause major damages and extended interruptions to the supply of the vital services to customers. BWS recognizes that a significant cash reserve is required to properly plan for full business restoration after such events.

The company must therefore invest in measures and improvements to mitigate against this ever-increasing risk, and to be able to recover quickly should adverse events arise. This all comes at additional costs, but also mandates that the company has adequate cash reserves to aid in recovery.

In recent years, BWS has experienced damages due to several tropical waves and storms. Fortunately, Belize has been spared from a major hurricane hit. However, even these smaller storms and the resulting damages have required additional spending of several million dollars.

BWS therefore requests that the PUC includes consideration for the build-up of a disaster reserve of BZ\$6 to \$10 million over the next few years.

### **6.1.3 Protection of land assets**

BWS has a number of outstanding land issues, some dating back to the vesting of the assets of the predecessor entity, the Water and Sewerage Authority (WASA), to BWS in 2001. Some of these issues relate to obtaining proper ownership documentation for existing properties, some to obtaining new properties for use or as protective reserves, and others to protecting lease properties from being amended or cancelled. BWS is also very concerned that previously reserved lands around the sewer lagoons have become privately owned thereby reducing or removing the intended protective buffer zones.

As a result of these issues, BWS' Board has opted to seek full title for all lands required for these purposes and to acquire lands required for expansion or protection of buffer areas. This process will include a number of expenditures for research and surveys as well as the actual acquisition costs, including the conversion of leases to titles. It may also involve legal costs in some cases.

### **6.2 Regulatory changes requested**

As has been documented in several previous submissions, BWS has proposed a number of regulatory changes with a view to improving operational efficiency, reducing costs, or distributing costs or rates based on affordability. BWS has already shared draft regulation with PUC for revised infrastructure charge legislation.

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The company has recommended some regulatory changes to assist with this as well as some of the problems identified in the Full Business Plan. A number of other changes to the regulations are proposed to facilitate the company in performing its functions. These are intended to help to facilitate customers, or to assist in reducing costs, or to add marginally to revenue. These have been previously submitted to the PUC and summarised briefly below.

1. Classification of Customers – to support regulation for the classification of customers including: Residential, Apartments/Condominiums, Government, Essential Services, Hotels/Resorts, Commercial, etc.
2. Infrastructure Costs – As a result of the overwhelming cost associated with water and sewer infrastructure, BWSL would like to repeal SI 42/2001 and amend SI 67/2002 to better allocate the costs of new infrastructure to those who will benefit. BWS has shared draft legislation with the PUC for their review (December 2021).
3. Security Deposits – to allow some changes to these to benefit residential and small business customers and to allow for larger consumption non-residential customers.
4. Late Fees and Finance Charges – to allow the use of these to reduce the requirement for disconnections
5. Backflow Prevention devices – to allow for the use of these to protect the supply from inflow from other sources
6. Commercial Abstraction licenses – to define clear rules with regard to abstraction within service areas
7. Water Theft – to modify the regulations to simplify the processing of cases. Also, there have been continuing increases in water theft by means of illegal connections to BWS water lines or bypassing the meter registration.
8. Leaks – to modify the regulations to reduce the processing time for residential leak complaints
9. Licensing and certification of Plumbers – to allow for the implementation of proper plumbing standards and will help protect customers.

BWS hereby reiterates the request for consideration of the proposed changes, as these can assist with keeping rates affordable. Some of the above are included in the proposed schedule of fees and charges.

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7 **Revenues and Tariffs**

7.1 **Revenue Performance**

BWS' revenues year-to-date have been similar to those projected in the PUC's Final Decision 2022, with the actual tariff related revenue being 1.2% higher than the pro-rated FD forecast, using the eight months to November 2022.

The table below shows the comparison, with total revenues being marginally better than the pro-rated forecast, at 1.7%.

**Table: Revenue Comparison**

<b><u>Revenues</u></b>	<b><i>PUC-FD22 2022/23</i></b>	<b><i>Pro-rated PUC- ID22 8 Mths</i></b>	<b><i>BWS YTD 8- Mths Actual</i></b>	<b><i>Dif. %</i></b>
Tariff related Sales	50,179	33,453	33,861	1.2%
Other Income	1,230	820	988	20.5%
<b>Total Revenue:</b>	<b>51,409</b>	<b>34,272</b>	<b>34,848</b>	<b>1.7%</b>

Unfortunately, BWS is also experiencing unusually high increases in prices of materials and equipment, which has been pushing costs to higher than forecast by the PUC. The table below highlights the impact on BWS Operating Costs year-to-date when compared to the 2022 Final Decision figures (pro-rated to 8 months).

**Table: Operating Costs Comparison**

<b><i>Expense</i></b>	<b><i>PUC-FD22 2022/23</i></b>	<b><i>Pro-rated PUC FD22 8 months</i></b>	<b><i>BWS YTD 8- Months Actual</i></b>	<b><i>Dif. %</i></b>
OPEX	32,476	21,650	24,976	-15%
Depreciation*	7,224	4,816	5,680	-18%
Taxes/License Fees	1,414	942	904	4%
	<b>41,113</b>	<b>27,409</b>	<b>31,560</b>	<b>-15%</b>
<b><i>*Net of contributed capital amortization</i></b>				

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### 7.2 No Proposed Tariff Changes

However, BWS is also very cognizant of the economic strain that COVID-19 and the subsequent increases in prices of goods and services is causing on our population. Taking this into consideration, along with the company's objective of ensuring affordable rates, BWS is therefore proposing to keep the tariffs and the tariff structure the same, pending the completion of the proposed study and the subsequent review.

In the previous ATR, BWS requested consideration for a restructuring of the tariffs and the differentiation of the customer base into residential and non-residential customers. Whilst BWS is still desirous of these changes, it acknowledges the PUC's decision to defer this review until a full Cost of Service Study has been conducted.

\*\*\*\*\* End of Report \*\*\*\*\*