

# GRAND BAHAMA UTILITY COMPANY RATE CASE REPORT



## Rate Case Adjustment Application

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#### Prior to the onset of Hurricane Dorian,

tap water provided to the community of Grand Bahama was well below the 1,000 ppm World Health Organization (WHO) standard for consumption. In other jurisdictions, 1,500 ppm is considered an acceptable level. There were also 3 remote water plants, 4 booster stations and approximately 240 wells which supplied the island with water.



# Impact of Hurricane Dorian

- The Grand Bahama Utility Co. (GBUC) suffered unprecedented damage due to Hurricane Dorian in 2019, specifically to several wells including Wellfield 6, which supplied 60% of the island with good quality, potable water.
- The 20-foot surge of seawater which flooded the facility and sat for 3 days, destroyed the entire vertical infrastructure including pumping stations, utility poles, wires, electrical components and control and monitoring systems.
- GBUC's fresh water aquifer, which had been a high quality, abundant and reliable supply of pristine drinking water for the island, was severely compromised and impacted.



## Recovery Efforts



- Initiated a 2-step plan to help bring the island back to potability, which included finding a new fresh water source and flushing existing wells to decrease the saline levels.
- GBUC focused on the continued treating, monitoring and testing of the water and provided potable water at established water depot stations throughout the island, free of charge.
- GBUC developed a COVID-19 Contingency
  Plan and executed preventive safety
  measures at local water depot distribution
  sites island-wide.



- GBUC had assistance from several NGOs, such as IsraAID, Samaritan's Purse, Water Mission and Engineers Without Borders, to look at the impact of the storm and to trend and forecast the long-term effects.
- In 2019, GBUC implemented a 25% discount for customers without potable water that remained in place until the Utility received regulatory approval to officially declare 100% potability in December 2021.

## Recovery Efforts



70% of the island was potable by July 2020. 90% of the wells have been repaired. Approximately 75 new wells have been added to the system, and water plants W1, W4 & W2 are being used to supply the island with potable ground water.

As part of its modernization plan, GBUC has committed to SCADA automation, digitized well monitoring, reserve power supply improvements as well as pipe, valve and meter replacement programs.



In October 2021, GBUC commissioned a 3 million gallon mobile Reverse Osmosis System (RO) at an investment of over \$5M.





#### WHY ARE WE CHANGING OUR RATES?

Over \$15M was spent as a result of the damages caused by Hurricane Dorian in 2019 at a financial burden to the Utility. Therefore a rate adjustment is necessary as the company can not sustain the losses and make the necessary investments to restore water pressure & maintain potable water for our customers.

HOWEVER, 40% OF OUR CUSTOMERS WILL SEE NO INCREASE

\$3M

OF STORM DAMAGE TO GBUC INFRASTRUCTURI

\$2M

IN POST-DORIAN RECOVERY COSTS ABSORBEI (NOT BEING RECOVERED IN RATE CASE)

**INCLUSIVE OF** 

1/2 MILLION DOLLARS

SPENT ON WATER DEPOTS
(DIRECT LOSS TO THE COMPANY,
NOT BEING RECOVERED IN RATE CASE

**OVER** 

\$5M

HAS BEEN INVESTED IN THE REVERSE OSMOSIS SYSTEM

**GBUC IMPLEMENTED A** 

25%

DISCOUNT ON UTILITY BILLS, RESULTING I SIGNIFICANT LOSS OF REVENUE

\$2.5M

IN ADDITIONAL ANNUAL OPERATION COSTS DUE TO



## Financial Impact



GBUC experienced over \$15 million in Hurricane Dorian recovery costs inclusive of:

- Approximately \$2 million in uninsurable losses associated with Dorian including over ½ million dollars in costs to operate the free water depots for residents and 25% discounts given to residents for water usage.
- GBUC's over \$5 million investment in a 3-million-gallon mobile reverse osmosis system, which was commissioned in October of 2021.

• An additional \$2.5 million to the utility's annual operating costs from 2021 as a result of the commissioning of the Reverse Osmosis system which are extremely expensive to operate.

## Present State



- In January 2021, GBUC invested over \$5 million in the new, customized reverse osmosis system.
- The Reverse Osmosis system will ensure that customers will not be without potable water for a prolonged period of time and enabled us to restore the island to 100% potability.
- This investment was critical to ensure full potable water restoration, resilience and storm hardening of GBUC's infrastructure following a disaster like Hurricane Dorian, but are expensive to operate and maintain (an additional \$2.5 million annually in operation costs).







## Present State



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With the completion of the RO system, more of our equipment will be updated with advanced technology which includes digitized well monitoring, reserve power supply, pipe, valve and meter replacement programs, and a leak protection program.

Current Rates & Charges						
Water charge Rate Fee Structure	Sewerage Service Rates					
Minimum Monthly (0 - 2,000 gallons)	\$12.83 Flat Rate					
2,001 - 10,000 gallons	\$4.37 per thousand gallons					
10,001 - 20,000 gallons	\$5.25 per thousand gallons					
Over 20,001 gallons	\$6.16 per thousand gallons					

# Rate Adjustment Application Proposal

The GBUC has proposed a rate change to its utility customers effective May 1, 2023.

40% OF CUSTOMERS WILL SEE NO INCREASE

#### **Current vs Proposed Rate Breakdown**



Customers using less than 2,000 gallons per month - <u>Minimum demand charge</u> (Tier 1)				
		(0-2,000) VAT xempted		
Average Percentage of Customer Base		40%		
Average Consumption per Tier		600		
Tier Change				
		num Demand Flat Rate)		
Current Rate per Tier	\$	12.83		
New Rate per Tier (No Increase)	\$	12.83		
Differential	\$	-		

Customers using more than 2,000 gallons per month (Rates are per thousand gallons)									
	7	Tier 1 (0-2,000)	Tier 2 (2,001 - 10,000) Tier 3 (10,001 - 20,000)			Tier 4 (20,001 +)			
Average Percentage of Customer Base			47%	47% 8%		5%			
Average Consumption per Tier				5,500	14,500		74,000		
Tier Change									
	Mi	nimum Demand (Flat Rate)	Rate per Thousand Gallons		Rate per Thousand Gallons		Thou	Rate per Fhousand Gallons	
Current Rate per Tier	\$	12.83	\$	4.37	\$	5.25	\$	6.16	
New Proposed Rate per Tier	\$	16.55	\$	5.64	\$	6.77	\$	7.95	
Differential	\$	3.72	\$	1.27	\$	1.52	\$	1.79	

# Rate Adjustment Application Proposal

#### **Current vs New Average Bill Breakdown**

Customers using less than 2,000 gallons per month <u>Minimum Demand Charge</u>					
		-2,000 gallons			
Average Percentage of Customer Base		40%			
Average Consumption per Tier		600			
Minimum Demand (Flat Rate	e)				
Average Bill per Tier (CURRENT RATE)	\$	12.83			
Average Bill per Tier (No increase)	\$	12.83			
Differential	\$	-			

Customers using more th	an 2,000	) gallons pe	r month					
(Rates are per thousand gallons)								
	2	,001 - 10,000	10,001 - 20,000		20,001			
		gallons	gallons	+;	gallons			
Average Percentage of Customer Base		47%	8%	5%				
Average Consumption per Tier		5,500	14,500	74,000				
Rate Adjustment								
Average Bill per Tier (CURRENT RATE)	\$	28.13	\$ 71.42	\$	432.93			
Average Bill with Proposed Rate Adjustment	\$	36.29	\$ 92.14	\$	558.67			
Differential	\$	8.16	\$ 20.73	\$	125.74			

- 40% of our customers will see no increase to their monthly bills
- 47% of our customers will on average see an increase of approximately \$8 on their monthly bills.
- 8% of our customers, the higher consuming tiers (between 10,000 to 20,000 gallons a month) will see an increase of approximately \$20.
- 6% of our customers (mostly hotels, industrials and large complexes) will experience an average increase of about \$125.



40% of customers will see no increase in their bills, while the remaining GBUC customers will, on average, experience an increase of approximately \$8 on their bills.

To date, GBUC has spent over \$15M in Hurricane Dorian related recovery costs at a financial burden to the Utility.

GBUC invested over \$5 million in the new, mobile, customized RO system, which was necessary to provide 100% of Grand Bahama residents access to full water potability and ensure resilience and storm hardening of our infrastructure.

Hurricane Dorian flooded the Utility's infrastructure and did unprecedented damage to the freshwater aquifer located at Wellfield 6, which before the storm, provided 60% of residents with a premium supply of drinking water.



RO systems are extremely expensive to operate in comparison to well water plants, adding an additional \$2.5 million to the utility's annual operating costs from 2021 at a financial loss to the utility. This additional operating cost, to date, will not be recouped in rates retroactively.

GBUC also experienced \$3M in Hurricane Dorian related infrastructure storm damage. In addition, there was approximately \$2 million in uninsurable losses associated with Hurricane Dorian including over ½ million dollars in costs to operate the free water depots for residents and 25% discounts given to residents for water usage. These costs were at a financial loss to the Utility and will not be recouped in rates. The 25% discount and free water depots were in place from 2019 to Dec 2022 at a financial cost to GBUC.



GBUC deferred the rate case for 2 years, at a significant financial burden and cost to the utility. To defer any longer will result in higher cost accumulation and consequently rates and jeopardizes the utility's ability to maintain and produce potable water and remain functional. It will also impact the ability to storm harden and make the utility resilient against future storm events and jeopardizes the ability to recover after major storms like Hurricane Dorian.

### Capital Investment & Resiliency



GBUC is focused on creating a financially healthy utility that can meet the growing needs of the island, conserve the already impacted aquifer for future generations and employ mitigative measures to lessen the impact of future storm threats.

GBUC has budgeted over \$6.5 million for the island of Grand Bahama as part of the capital investment plans relating to the rate case application, including:

- The construction of an additional 1.5 million gallon a day mobile reverse osmosis system which will increase island potable water capacity, improve water quality, and address the lower pressure being experienced by residents as a result of the diminished freshwater lens
- A multiyear asset management program where GBUC will strategically upgrade aging infrastructure with an island wide pipe and valve change out program
- A robust leak detection program, using satellite technology to reduce non-revenue water
- Continuation of an island wide meter change out program to smart metering
- Implementation of Scada systems for the automation of our critical systems

