



2018

CENTRAL WATER & SEWERAGE AUTHORITY

ANNUAL REPORT

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Highlights



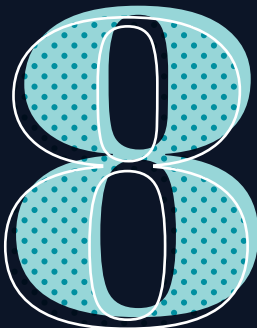
EDITOR'S NOTE

The Editor reminds all to be cognizant of customer relationships



MINISTER'S MESSAGE

Minister, Hon. Robert Browne lauds the CWSA for being the leading utility in the Eastern Caribbean



FROM THE CHAIR

The Chairperson speaks about the CWSA's ability to meet and overcome challenges, in every facet of the company



FROM THE CHIEF EXECUTIVE OFFICER

The Chief Executive Officer recalls the accomplishments of the Authority for the year in review



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The C.W.S.A.'s seven departments present their reports for 2018.



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Remembering our colleagues who have passed



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SYMANTHA GEORGE
EDITOR

EDITOR'S NOTE

RE-EVALUATING CUSTOMER SERVICE

Management theorist Peter Drucker believes that improvements to the internal mechanisms of a business aid with its transformation and lead to innovation and improvements and could represent “the change that creates a new dimension of performance” for organizations. In the same way, an organisation’s customer service offering is not exempt from this transformation and innovation and may in fact be the very catalyst needed to move it to the next level.

Businesses should not only aim to provide customer service, but “effective customer service”, defined by a writer as “the support, assistance and advice provided by a company to those who buy or use its product or services”.

It is this support and assistance, if managed well that can be a great value differentiator between competitors. Even more effective fitting customer service objectives would include developing the ability to fulfil a select range of customer needs recognizing that these needs would ultimately include providing information and problem solving with sincerity, respect and efficiency.

Value also needs to be added to the overall customer experience and this value is very often perceived, determined and enjoyed by the customer. Delivering value to the

customer requires a policy mandate that starts at the top and permeates through the different levels of the organisation and spreads throughout every department as an organisational culture. This in effect makes all employees customer service agents and satisfies the theory that customer service is not only delivered at the waiting line at the time of bill payment and query resolution.

Value creation is also essential when differentiating between competitors in similar fields. Businesses who pride themselves in providing value for money products, affordable services and building relationships and trust will always stand at the top of the ladder of value creation. Customer value is also seen in the consistency in the quality of the product or service that is offered and delivered.

The CWSA’s mission addresses each of these valuation creation principles where top quality efficient and affordable products and services are central planks of our service delivery. This means that the clear mandate of the CWSA is always to ensure that our customers are at the top of our priority list.

I am reminded of a book written by Pete Bradshaw entitled, “Satisfied customers tell three friends, angry customers tell 3000,” this is also evidence that we are living in a consumer driven world, fuelled by instantaneous mass communication and this provides even more reason for keeping customers and consumers happy. The risk of bad publicity being quickly propagated could very easily damage the business’ brand

an image resulting in a negative effect on revenue, profits and relationships.

Brands and image can also be protected by building relationships with customers that are founded on trust and care. This means that for our customer service offerings to stand out, we have to go beyond just listening and responding to customer complaints and

queries and to build relationships based on transparency and honesty. In today’s society with all the advancements in social media platforms being lauded because of technological advancements; it is imperative that businesses understand the “make or break role” customers now carry at their finger-tips, word of mouth and face-to-face. The late Maya Angelou once said that “people will forget what you said, what you did, but will never forget how you made them feel”.

*“...people will forget
what you said, what
you did, but will
never forget how you
made them feel.”*



EDUCATIONAL VISITS



HON. ROBERT BROWNE
MINISTER OF HEALTH, WELLNESS & THE
ENVIRONMENT

MINISTER'S MESSAGE

This annual report makes for compelling reading. It tells a supreme success story of how the Central Water and Sewage Authority (CWSA) registered a strong corporate performance in the financial year 2018, and continued with its sterling stewardship of our nation's water, sewerage and solid waste resources. Our much beloved CWSA maintains its position as leading utility in the Eastern Caribbean. It simply excels in the business of water supply management in terms of product delivery, financial performance and customer services. We are proud of the way this statutory corporation is delivering on its mandate and adhering to the highest standards of excellence. In fact, it can be said that the CWSA sets the standards.

The Authority has the benefit of strong leadership and management at all levels and a skilful, talented, competent, dedicated and hardworking staff. I have profound respect for the men and women who serve the CWSA with distinction, working within the framework established by public policy. They make a positive impact on the entire population of St. Vincent and the Grenadines (SVG) by helping to deliver maximum benefit for the people of this country. This is quite appropriate because the CWSA edifice was designed and built to be at the service of Vincentians.

Notably, the Central Water and Sewage Authority has maintained low and stable water rates over many years, despite rising costs, to ensure that essential services remain accessible and affordable. We expect the CWSA to continue in this vein and also to uphold by strict adherence the government's policy of assisting certain elderly and economically disadvantaged groups of persons with concessions. Additionally, the Authority is charged with the ongoing task of reducing the number of standpipes and public baths across the country by expanding water connection to private dwelling places.

The government applauds the CWSA on its continued thrust at upgrading and improving the resilience of its plant and assets in the face of Climate Change, and its promotion of recycling and sustainable waste management as a response to the environmental stress created by the modern consumer.

"It simply excels in the business of water supply management in terms of product delivery, financial performance and customer service."

In October 2018, I attended the Caribbean Water & Waste Water Association High Level Conference in Jamaica. It proved to be an important and insightful forum with presentations

on topics such as "Climate-Resilient Infrastructure" and "Waste Management and Security." Ideas from that forum would no doubt find expression in public policy and practice in due course. Actually, this is already the case in several areas. In that same October, CWSA General Manager Mr. Garth Saunders was elevated to the much vaunted post of General Secretary of the Caribbean Water and Sewerage Association (CAWASA). We knew from the inception that he was equal to the task. Congrats to Mr. Saunders!

There were a number of other positive developments at the CWSA in the period under review (2018): extension of customer service opening hours; heavy investment

in staff training both here and overseas; significant improvement in electronic capabilities; public awareness exercises on subjects of water, wastewater and solid waste management; free water connections to new government housing projects; plant renewal and upgrade to increase island wide storage capacity and build resilience; and formulation of plans for the expansion of the water supply in the Grenadines starting with Bequia. The CWSA collaborates very closely with government ministries to attain national objectives and I must say that it amply and abundantly shoulders its responsibility for national development.

This report is a tour de force depicting the activities and trajectory of the CWSA. The strong impression of a well-oiled machine fit for purpose would leap at you from its pages, and may even hit you smack in the face! We have every reason to remain confident and optimistic about the future of the CWSA. Accordingly, I take this opportunity as Minister of Health, Wellness and the Environment in whom is vested responsibility for the CWSA to compliment it on a job well done. It has produced another comprehensive annual report of the highest quality as a seal to a productive year. Press on to higher heights.

Cheers.

Hon. Robert Browne

...the **CWSA** edifice was
DESIGNED & BUILT
TO BE AT THE SERVICE OF
VINCENTIANS



GIRLYN MIGUEL
CHAIR
BOARD OF DIRECTORS

FROM THE CHAIR

Another year has rolled around for the Central Water and Sewerage Authority; not only to recap on its workings for the year but this is a very significant period for CWSA and the country. This preamble leads me to express to our nation congratulations on our fortieth (40th) Anniversary of Independence from Great Britain this year of our Lord 2019. Much has been achieved in every aspect of our civilization.

In the year 2020 CWSA will be celebrating fifty (50) years serving our nation and this speaks of our focused and strategic service before we became an independent nation. Thanks to our trail blazers.

It is general knowledge that water is the most common element on earth, and without water, there can be no life. Water has been man's slave and his master. Our demand for water is constantly increasing, but water is used and reused repeatedly; hence our Authority's focus is, how to manage our water supply efficiently for the good of every citizen.

Two years ago, CWSA paused to strategically plan to meet the challenges of the present time under the caption "As

a tree is only as healthy as its roots, so too is a company only as good as its employees". Challenges today are greater than years before as industry and population grow. Staff participation was great and CWSA enjoys excellent rewards in its work.

In St. Vincent and the Grenadines our challenges in the water sector are many, especially dealing with our topography; but I am happy to report that, through the media, customers reports are glowing on good quality water and expediency in handling complaints. We have recently implemented "Helpdesk" software which aids in logging and resolving complaints which are monitored by all Supervisors.

We have been responding to the reality of Water Adequacy by systemically increasing our island-wide storage capacity from 3.2 million gallons to 5.4 million gallons at present. Recent additions to the network include Sandy Bay which is already commissioned, and two (2) other tanks are earmarked for construction in 2020 at Kelbourney and



New Storage Tank at Belle Isle

Peter's Hope. Additionally, two possible new sources would be at Francois in the Vermont Valley and at Fenton. We continue to exhort fellow Vincentians to store adequate quantities of water and this is

done in line with our thrust to improve storage capacity at many strategic locations; our average daily consumption being approximately 4 million gallons per day.

Training of employees is high on our Agenda; scholarships are also offered to children of our staff and we insist on excellence. Our focus is not only on gadgets, but we think of continuity which cannot be enhanced without training.

We are happy to report that 554 scrapped vehicles have

been removed under the derelict vehicle program. We enjoy a hand of co-operation from the Public Health Department and the St Vincent and the Grenadines Police Force in the execution of this initiative. The benefits from this service cannot be over emphasized as we see the reduction in old discarded vehicles blocking our roadways, looking unsightly and being possible health risk.



Derelict Removal Programme under way

Because of CWSA's mandate we work inter-minister-ially for the success of the projects that relate to our work.

The Board acknowledges that it takes a combination of persons working together to achieve national goals; and we are happy to identify with aspirations and goals of our nation. We accept that each worker must be treated with love, respect, dignity and fairness irrespective of status: while we focus on excellence and financial viability for continued success. We face our fiftieth (50th) year with a great level of confidence and enthusiasm despite the challenges of climate change. We vow therefore, to make the good better and the better best for a renewed St. Vincent and the Grenadines.



GARTH SAUNDERS
GENERAL MANAGER

From the Chief Executive Officer

The mission of the CWSA is to provide top quality water supply, sewerage and solid waste management services in an efficient and affordable manner. In 2018 the CWSA continued on its quest to fulfill this mandate by once again turning in a more than satisfactory financial and operational performance. This result was achieved through the combined effort of a very committed and motivated staff at all levels, closely guided by a team of competent managers along with the unwavering support, guidance and oversight of our Board of Directors.



The Belair Storeroom Improvement Project



The Dalaway Transmission Main Relocation and Upgrade Project



The Majorca Inlet Pipeline Improvement Project



The Sandy Bay Storage Tank

The CWSA's 2018 financial performance shows a significant improvement over 2017 in all the important categories. Firstly, there was a reversal of the decline in revenue experienced between 2016 and 2017, where for 2018 there was a 2% increase in water income and a 19% increase in solid waste management income.

Net profit, after adjustments for foreign exchange fluctuations increased from 1.13 million in 2017 to \$2.5 million in 2018 in spite of a 5% increase in production

and maintenance costs. This overall improvement was attributed to a slight gain on foreign exchange valuations when compared to a \$523,000 loss for 2017 and the significant improvement in total revenue. The overall receivables position also improved by 3% with improvements noted in customer compliance in the Grenadines with payments for solid waste management services provided.

Very satisfactory improvements were seen in the performance of the Solid Waste Management Unit which recorded a 226% increase in revenue from \$8 million to \$9.6 million; this was attributed to a 100% increase in disposal fees, occasioned by the addition of new customers and significant increases in the environmental stayover and cruise ship levy payments arising from increased visitor arrivals. In spite of a significant increase in general and administrative costs, due to the write-off of a significant portion of the Grenadines receivables, production and maintenance costs were still kept to only a 7% increase and staffing costs were held at 2017 levels, resulting in the overall positive position.

The departmental reports contained in this publication give an adequate account of the successes and constraints in each area. However, in engineering, we were fortunate to be able to self-finance and complete several capital improvement projects and this trend is expected to continue in 2019 and 2020. Engineering operations and maintenance was also streamlined further to improve efficiencies in responding to emergencies and to customer complaints. We also continue to consolidate our water resources and GIS mapping activities to better serve future engineering and planning.

During 2018 the CWSA increased its total number of connections to 42,000 and will continue to reduce the number of communal facilities and standpipes by providing free water connections. Significant strides were also made in establishing greater collaboration between the information technology, public relations & marketing and the customer care departments to facilitate

more efficient and effective complaints management and responses to customer queries. Still more work is needed to be done in this area as we seek to leverage the available technology and the software and internet based solutions.

The satisfaction that comes with these recent accomplishments will however continue to be tempered by prudence and vigilance as we consider the effects of climate change and the need to build both capacity and resilience in all operational areas. From a human resource standpoint, occupational health and safety will continue to be given priority along with continued staff training as we seek to plan for the retirement and replacement of long-serving senior employees.

In 2019, the CWSA will continue to embark on further important expansion and improvement projects and significant capital expenditure in both the water and solid waste sectors; the significant projects include:

The replacement of vehicles, plant and equipment

The replacement of aging water meters.

The rehabilitation of the major segments of the distribution network

Further expansion of the existing SCADA system.

Investments in technology and software solutions to aid both engineering and customer service departments.

Engineering planning and design of water supply solutions to cater for the imminent increase in tourism related demand on mainland and in the Grenadines.

The CWSA will also continue to work with the various Government Ministries and Agencies in ensuring that capital projects are well served by the CWSA and that ALL citizens in every community have their own private access to a pipe-borne water supply.



ACCOUNTING & FINANCE REPORT



MONIQUE **HULL**
FINANCIAL CONTROLLER

A very important aspect of any organisations good health is the sound management of its finances. For the Central Water and Sewerage Authority (CWSA) the organisation's good financial health is governed by strict policy guidelines and internal control along with a management influence that ensures accountability and the application of checks and balances from our internal auditing processes.

Throughout the year in review, departments initiate programs and projects derived from a budgetary allocation process. Monthly Management and Board of Directors meetings monitor these reports, ensuring that targets are achieved. The following presentation of the audited financial statements gives an in-depth look the Authority's financial health.

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Corporate Information

REGISTERED OFFICE

Leeward Highway
New Montrose
Kingstown
St. Vincent and the Grenadines

DIRECTORS

Mrs. Girlyn Miguel - Chairman
Mr. Crawford Young - Deputy Chairman
Mr. Rudolph Daize
Mr. Cuthbert Knights
Mr. Recardo Fredericks
Mr. Raymond Ryan
Mr. Maxwell Robertson
Mr. Curtis King

SECRETARY

Mr. Garth Saunders

SOLICITORS

Cardinal Law Firm
Regal Chambers
Saunders and Huggins

BANKERS

Bank of St. Vincent and the Grenadines Limited

AUDITORS

Grant Thornton
Chartered Accountants
Sergeant-Jack Drive
Arnos Vale
St. Vincent

INDEPENDENT AUDITORS' REPORT

To the Directors of
Central Water and Sewerage Authority

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Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of **Central Water and Sewerage Authority**, which comprise the statement of financial position as at December 31, 2018, and the statement of changes in equity, statement of profit or loss, and statement of cash flows for the year then ended, and notes to the financial statements, including significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of **Central Water and Sewerage Authority** as at December 31, 2018, and its financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Authority in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the financial statements in the Eastern Caribbean, and we have fulfilled our ethical responsibilities in accordance with these requirements and IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Authority or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Authority's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. "Reasonable assurance" is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.



Grant Thornton

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purposes of expressing an opinion on the effectiveness of the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditors' report is Floyd A. Patterson.

May 27, 2019

Partners:
Anthony Adkinson – Managing Partner
Richard Peterkin
Rosilyn Novela
Malaka Felix
Sharon Raoul
Floyd Patterson

Audit, Tax, Advisory
Member of Grant Thornton International Ltd

Central Water and Sewerage Authority


Statement of Financial Position As of December 31, 2018

(in Eastern Caribbean dollars)

	Notes	2018 \$	2017 \$
ASSETS			
Current Assets			
Cash and cash equivalents	7	1,373,264	889,246
Trade receivables	8	7,327,600	7,575,830
Other receivables	9	1,118,003	1,112,713
Investments securities	10	2,598,707	2,535,104
Inventories	11	5,277,464	5,354,118
Prepayments		291,004	509,068
		<u>17,986,042</u>	<u>17,976,079</u>
Property, Plant and Equipment	12	<u>77,727,264</u>	<u>77,924,054</u>
		95,713,306	95,900,133
LIABILITIES AND GOVERNMENT'S EQUITY			
Current Liabilities			
Borrowings	13	452,632	3,782,462
Trade and other payables	14	3,327,558	3,126,483
		<u>3,780,190</u>	<u>6,908,945</u>
Borrowings	13	2,935,653	2,498,765
Employee Benefits	15	93,290	97,249
Obligations to Customers	16	39,921	52,960
		<u>6,849,054</u>	<u>9,557,919</u>
Government's Equity			
Contributed capital	17	41,694,220	41,694,220
Accumulated other comprehensive income	18	18,977,734	18,977,734
Retained earnings		28,192,298	25,670,260
		<u>88,864,252</u>	<u>86,342,214</u>
		95,713,306	95,900,133

APPROVED BY THE BOARD OF DIRECTORS ON MAY 27, 2019.


Girlyn Miguel
Chairman


Crawford Young
Deputy Chairman


Garth Saunders
Secretary

The accompanying notes form an integral part of these financial statements.

Central Water and Sewerage Authority

Statement of Changes in Equity For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

	Contributed Capital \$	Accumulated Other Comprehensive Income \$	Retained Earnings \$	Total \$
Balance as of December 31, 2016	41,031,696	18,977,734	24,540,331	84,549,761
Government contributions (Note 17)	662,524	0	0	662,524
Net profit for the year	0	0	1,129,929	1,129,929
Balance as of December 31, 2017	41,694,220	18,977,734	25,670,260	86,342,214
Net profit for the year	0	0	2,522,038	2,522,038
Balance as of December 31, 2018	41,694,220	18,977,734	28,192,298	88,864,252

The accompanying notes form an integral part of these financial statements.

Central Water and Sewerage Authority

Statement of Profit or Loss

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

	Notes	2018 \$	2017 \$
Revenue			
Water income		18,584,081	18,193,094
Sewerage income		711,419	784,314
Solid waste income	19	9,551,317	8,006,808
Other water and sewerage related revenue		572,864	536,960
Other income		471,534	203,325
		<u>29,891,215</u>	<u>27,724,501</u>
Operational Costs			
Production and maintenance costs	20	(16,293,573)	(15,476,932)
Selling, general and administrative expenses	21	(10,866,364)	(10,354,631)
Foreign exchange gain (loss)		1,727	(522,883)
		<u>(27,158,210)</u>	<u>(26,354,446)</u>
Operating Profit		2,733,005	1,370,055
Net finance charges		(210,967)	(240,126)
Profit for the Year		<u>2,522,038</u>	<u>1,129,929</u>
The following expense is included in the foregoing:-			
Depreciation	12	3,807,509	3,503,905

The accompanying notes form an integral part of these financial statements.

The accompanying notes form an integral part of these financial statements.

Central Water and Sewerage Authority

Statement of Cash Flows

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

	Note	2018 \$	2017 \$
Cash Flows from Operating Activities			
Profit for the year		2,522,038	1,129,929
Adjustments for			
Depreciation expense		3,807,509	3,503,905
Interest income		(81,345)	(77,002)
Finance charges		210,967	240,126
Foreign exchange (gain) loss		(1,727)	522,883
Gain on disposal of property, plant and equipment		(305,848)	(50,601)
Property, plant and equipment retired		19,381	0
Profit before Working Capital Changes		6,170,975	5,269,240
Decrease (increase) in trade receivables		248,230	(196,059)
Increase in other receivables		(5,290)	(582,321)
Decrease (increase) in prepayments		218,064	(206,690)
Decrease in inventories		76,654	125,871
Increase in trade and other payables		201,075	308,993
(Decrease) increase in obligations to customers		(13,039)	52,960
Cash Generated from Operations		6,896,669	4,771,994
Interest paid		(228,543)	(233,751)
Interest received		52,497	77,002
Employee benefits paid		(3,959)	(44,653)
Net Cash Generated from Operating Activities		6,716,664	4,570,592
Cash Flows from Investing Activities			
Purchases of property, plant and equipment		(3,699,552)	(2,430,595)
Proceeds from sales of property, plant and equipment		375,300	107,249
Change in investments		(34,755)	(61,582)
Net Cash Used in Investing Activities		(3,359,007)	(2,384,928)
Cash Flows from Financing Activities			
Repayment of long-term loans		(3,268,441)	(3,187,091)
Proceeds from long-term loan		789,500	800,000
Net Cash Used in Financing Activities		(2,478,941)	(2,387,091)
Net Movement in Cash and Cash Equivalents		878,716	(201,427)
Cash and Cash Equivalents – Beginning of Year		286,444	487,871
Cash and Cash Equivalents – End of Year	7	1,165,160	286,444

The accompanying notes form an integral part of these financial statements.

Central Water and Sewerage Authority

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Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

1. Legal Status

The Central Water and Sewerage Authority (the "Authority") is a statutory corporation established in 1969 and continued under the revised Central Water and Sewerage Authority Act of 2007.

2. Principal Activities

The Authority's principal activities are the management, treatment and distribution of water and the management of solid waste and sewerage throughout St. Vincent and the Grenadines.

3. Basis of Preparation

The principal accounting policies adopted in the preparation of these financial statements are set out in Note 4. These policies have been consistently applied to all the years presented, unless otherwise stated.

Statement of Compliance

The financial statements of the Authority have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), under the historical cost convention unless otherwise stated.

Significant Accounting Judgments, Estimates and Assumptions

The preparation of the Authority's financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

In the process of applying the Authority's accounting policies, management made various judgments. Those which management has assessed to have the most significant effect on the amounts recognised in the financial statements have been discussed in the individual notes of the related financial statement line items.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are also described in the individual notes of the related financial statement line items below. The Authority based its assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Authority. Such changes are reflected in the assumptions when they occur.

The Authority carries its investment properties at fair value, with changes in fair value being recognised in the statement of profit or loss. In addition, it measures land and buildings at revalued amounts with changes in fair value being recognised in Other Comprehensive Income (OCI). The Authority engaged an independent valuation specialist to assess fair value for investment property.

Change in Accounting Policies

a. New Standards, Amendments and Interpretations Effective January 1, 2018

IFRS 9 - Financial Instruments

IFRS 9 *Financial Instruments*, became effective for annual periods beginning on or after 1 January 2018, and sets out the requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. IFRS 9 replaces the provisions of IAS 39 *Financial Instruments* that relates to the recognition, classification and measurement of financial assets and liabilities, derecognition of financial instruments impairment of financial assets and hedge accounting.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

3. Basis of PreparationCont'd

Change in Accounting PoliciesCont'd

a. *New Standards, Amendments and Interpretations Effective January 1, 2018.....Cont'd*

IFRS 9 was adopted without the need to restate comparative information. There were no adjustments or reclassifications arising from the new impairment rules.

In accordance with the transitional provisions in IFRS 9, comparative figures have not been restated. The adoption of IFRS 9 did not have an impact on the Authority's retained earnings as at January 1, 2018 and January 1, 2017.

IFRS 15 - Revenue from Contracts with Customers

IFRS 15 *Revenue from Contracts with Customers*, became effective for annual reporting periods beginning on or after 1 January 2018, was issued in May 2014. It establishes a comprehensive framework for determining when to recognise revenue and how much revenue to recognise. The core principle in that framework is that an entity should recognise revenue to depict the transfer of promised goods or services to the customer in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Standard sets out five steps to follow: identify the contract(s) with a customer; identify the performance obligations in the contract; determine the transaction price; allocate the transaction price to the performance obligations in the contract; and recognise revenue when (or as) the entity satisfies a performance obligation. IFRS 15 replaces IAS 11 *Construction Contracts* and IAS 18 *Revenue*, IFRIC 13 *Customer Loyalty Programmes*, IFRIC 15 *Agreement for the Construction of Real Estate* and IFRIC 18 *Transfers of Assets from Customers* and SIC-31 *Revenue—Barter Transactions Involving Advertising Services*.

The company adopted IFRS 15 from January 1, 2018, which resulted in changes in accounting policies, but not in adjustments to the amounts recognised in the financial statements, including retained earnings as at January 1, 2018 and January 1, 2017.

- **Annual improvements 2014 – 2016 cycle**
- **Transfers to Investment Property – Amendments to IAS 40**
- **Interpretation 22 foreign currency transactions and advance consideration**
- **Annual improvements to IFRS standard 2015 – 2017 cycle**

With the exception of IFRS 9 and IFRS 15, the other amendments listed above did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

b. *New Standards, Amendments and Interpretations not yet Effective and have not been Early Adopted*

The following new standards, interpretations and amendments, which are not yet effective and have not been adopted early in these financial statements.

IFRS 16 - Leases

IFRS 16 was issued in January 2016. It will result in almost all leases being recognised on the statement of financial position, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the based item) and a liability to pay rentals are recognised. The only exception are short term and low value leases.

The Authority plans to implement IFRS 16 in the reporting period beginning January 1, 2019. The standard is not expected to have any impact on the Authority's operations.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

4. Significant Accounting Policies

a. Cash, Cash Equivalents and Short-term Investment Securities

Cash equivalents include highly liquid investments with insignificant interest rate risk and original maturities of ninety (90) days or less at the date of purchase. Investments with maturities between ninety (90) days and one year at the date of purchase are considered to be short-term investment securities. Short-term investment securities consist primarily of investment grade commercial paper, bankers' acceptances, and certificates of deposit.

b. Trade Receivables

Trade receivables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method less allowance for impairment. Trade receivables are amounts due from customer for water, sewerage and other services sold in the ordinary course of business. They are generally due for settlement within 30 days and therefore are classified as current. Trade receivables are recognized initially at the amount of consideration that is unconditional unless they contain a significant financing component, when they are recognized at fair value. The authority holds trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method.

A trade receivable is written off when it is established that there is objective evidence that the Authority will not be able to collect all amounts due according to the original terms of the receivable.

Subsequent recoveries of amounts previously written off are credited against selling and distribution costs in the statement of profit or loss.

c. Inventories

Inventories are valued at the lower of cost and net realisable value. In general, cost is determined on an average cost basis and includes expenditures incurred in acquiring the inventories and bringing them to their existing location and condition. Net realisable value is the price at which inventories can be realised in the normal course of business.

An allowance is made for obsolete, slow moving and defective items.

d. Financial Assets

The authority classifies its financial assets in the following categories: -

- (i) Financial Assets at Amortised Cost
- (ii) Financial Assets at Fair Value through Other Comprehensive Income

Management determines the classification of its financial assets at initial recognition.

(i) Financial Assets at Amortised Cost

The authority classifies its financial assets at amortised cost only if both of the following criteria are met: -

- the asset is held within a business model whose objective is to collect the contractual cash flows, and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

(ii) Financial Assets at Fair Value through Other Comprehensive Income

Financial assets at fair value through other comprehensive income (FVOCI) comprise equity securities which are not held for trading, and which the authority has irrevocably elected at initial recognition to recognise in this classification to be more relevant.

On disposal of these equity investments, any related balance within the FVOCI reserve is reclassified to retained earnings.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

4. Significant Accounting PoliciesCont'd

d. Financial AssetsCont'd

The fair value of a financial instrument that is not traded in an active market is determined using valuation techniques. The Authority uses judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period.

Interest income arising on financial investments is accrued using the effective rate method. Dividends are recorded in revenue when due.

The Authority has two types of financial assets that are subject to the expected credit loss model.

- Trade receivables
- Investment securities carried at amortised cost

Trade Receivables

The Authority applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

Trade receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Authority, and a failure to make contractual payments for a period of greater than 120 days past due.

Impairment losses on trade receivables are presented as net impairment losses within selling, general and administrative expenses. Subsequent recoveries of amounts previously written off are credited against the same line item.

Investment Securities carried at Amortised Cost

All of the authority's investments at amortised cost are considered to have low credit risk and the loss allowance is therefore limited to 12 months expected losses.

e. Property, Plant and Equipment

(i) Recognition and Measurement

Land and buildings are recognised at fair value based on periodic, but at least triennial, valuations by external independent valuers, less subsequent depreciation on buildings. A revaluation surplus is credited to other reserves in shareholders' equity. Water and sewerage systems are stated at replacement cost. All other property, plant and equipment are recognised at historical cost less depreciation.

If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment (calculated as the difference between the net proceeds from disposal and the carrying amount of the item) is recognised in profit or loss.

(ii) Subsequent Expenditure

Subsequent expenditure is capitalised only if it is probable that the future economic benefits associated with the expenditure will flow to the Authority.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

4. Significant Accounting PoliciesCont'd

e. Property, Plant and EquipmentCont'd

(iii) Depreciation

Depreciation is calculated to write off the cost of items of property, plant and equipment using a straight-line method over their useful lives, and is generally recognised in the profit or loss. Land is not depreciated.

Landfill	2 - 5 %
Buildings	2%
Water and sewerage systems	2%
Meterisation	10%
Furniture and equipment	10 - 20 %
Heavy equipment	10%
Motor vehicles	20%

Increases in the carrying amount arising on revaluation of property, plant and equipment are recognised in other comprehensive income and accumulated in revaluation surplus in equity. Decreases that offset previous increases of the same asset are recognised in other comprehensive income; all other decreases are charged to profit or loss.

Deprecation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

f. Foreign Currency Translation

These financial statements are expressed in Eastern Caribbean dollars the Authority's functional currency. Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss in the statement of comprehensive income.

Changes in the fair value of monetary securities denominated in foreign currencies classified as available for sale are analysed between translation differences resulting from changes in the amortised cost of the security and other changes in the carrying amount of the security. Translation differences related to changes in the amortised cost are recognised in profit or loss, and other changes in the carrying amount are recognised in equity.

Translation differences on non-monetary items, such as equities held at fair value are recognised through profit or loss, and are reported as part of the fair value gain or loss. Translation differences on non-monetary items, such as equities classified as available-for-sale financial assets, are included in the fair value in other comprehensive income and ultimately accounted for in reserves in equity.

g. Borrowings

Borrowings are recognised initially at fair value, net of transaction cost incurred. Borrowings are subsequently stated at amortised cost and any difference between the net proceeds and the redemption value is recognised in the statement of profit or loss over the period of the borrowings using the effective interest method. Borrowings are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled or expired.

h. Trade and Other Payables

These amounts represent liabilities for goods and services provided to the authority prior to the end of the financial year which are unpaid. These amounts are unsecured and are usually paid within 30 days of recognition. Trade and other payables are presented as current liabilities unless payment is not due within 12 months after the reporting date. They are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

4. Significant Accounting PoliciesCont'd

i. Provisions

Provisions are recognized when the Authority has a present legal or constructive obligation, as a result of past events, if it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amounts can be made.

j. Government Contributions

Government contributions that are not the result of an exchange transaction and are not expected to be repaid in the future are recognised under contributed capital on the fiscal year when the event occurs.

k. Employee Benefits

The Authority operate a defined contribution plan, the assets of which are generally held in a separate trustee-administered fund. Contributions to the plan are made by the Authority and its employees. The Authority's contributions are charged to profit or loss in the period during which related services are rendered by employees.

A defined contribution plan is a pension plan under which the Authority pays fixed contributions into a separate entity. The Authority has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Authority pays contributions to privately administered pension plan on a mandatory contractual basis. The Authority has no further payment obligations once the contributions have been paid. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payment is available.

The Authority carries a provision for employee benefits, to be paid to employees who were employed prior to 1992 and who, upon retirement age, would have served a minimum of thirty consecutive years immediately prior to retirement as a special retirement support benefit.

l. Revenue Recognition

Revenues from provision of services and the delivery of water are recognised in profit or loss during the period in which the services are provided and the supply is consumed by the end user. Because a rotational billing cycle is employed to recognise end users consumption of water and the recording of the provision of services, at each reporting date, unbilled end users consumption of supply are accrued on proportional basis of the last billing period.

Revenues accruing from the extension of transmission and distribution systems are recognised in profit or loss on the stage of completion of the extension project.

m. Income Tax

The Authority is exempt from income tax and import duties under the Central Water and Sewerage Authority Act, 1991.

n. Impairment of Non-Financial Assets

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events and changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less cost to sell and value in use.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

5. Financial Risk Management

a. Risk Management Objectives and Policies

The Authority is exposed to various risks in relation to financial instruments. The Authority's financial assets and liabilities by category. The main types of risks are market risk, credit risk and liquidity risk.

The Authority's risk management is coordinated at its management team, in close cooperation with the board of directors, and focuses on actively securing the Authority's short to medium-term cash flows by minimising the exposure to volatile financial markets. Long-term financial investments are managed to generate lasting returns.

The Authority does not actively engage in the trading of financial assets for speculative purposes nor does it write options. The most significant financial risks to which the Authority is exposed are described below.

i) Market Risk Analysis

The Authority is exposed to market risk through its use of financial instruments and specifically to currency risk, interest rate risk and certain other price risks, which result from both its operating and investing activities.

ii) Credit Risk

The Authority has no significant concentration of credit risk. It has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. Additionally, the Authority has policies that limit its credit exposure to any financial institutions.

The Authority's exposure to credit risk is dependent on the degree of failure of counterparties, including its customers, banks and other debtors, to honour their obligations that could result in losses to it.

	2018	2017
	\$	\$
Cash on hand and at bank	1,373,264	889,246
Trade receivables	6,570,445	6,943,201
Other receivables	2,111,991	1,745,342
Investment securities	2,598,707	2,535,104
	<u>12,654,407</u>	<u>12,112,893</u>

The exposure set out above are based on net carrying amounts as reported in the statement of financial position, and represent a worst case scenario of credit risk exposure at December 31, 2018 and 2017, without taking into account any collateral held or other credit enhancements attached.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

5. Financial Risk ManagementCont'd

a. Risk Management Objectives and PoliciesCont'd

ii) Credit RiskCont'd

The table below presents an analysis of the Authority's cash equivalents (Note 8), trade receivable (Note 9), other receivables (Note 10) and investment securities (Note 11) by rating agency designation at December 31, 2018 and 2017, based on Moody's ratings or equivalent:

	Cash Resources \$	Trade Receivables \$	Other Receivables \$	Investment Securities \$	Total \$
At December 31, 2018					
Lower than A-	447,446	0	0	0	447,446
Unrated	925,818	6,570,445	2,140,839	2,569,859	12,206,961
	1,373,264	6,570,445	2,140,839	2,568,859	12,654,407
	Cash Resources \$	Trade Receivables \$	Other Receivables \$	Investment Securities \$	Total \$
At December 31, 2017					
Lower than A-	437,330	0	0	0	437,330
Unrated	451,916	6,943,201	1,773,867	2,506,579	11,675,563
	889,246	6,943,201	1,773,867	2,506,579	12,112,893

The Authority continuously monitors defaults of customers and other counterparties, identified either individually or by the Company, and incorporates this information into its credit risk controls. Where available at reasonable cost, external credit ratings and/or reports on customers and other counterparties are obtained and used. The Authority's policy is to deal only with creditworthy counterparties.

The Authority's management considers that all of the above financial assets that are not impaired or past due for each of the December 31 reporting dates under review are of good credit quality.

At reporting date, the Authority has certain trade receivables that have not been settled by the contractual due date but are not considered to be impaired. The amounts at reporting date, analysed by the length of time past due, are:

	2018 \$	2017 \$
Not more than 3 months	4,448,188	4,289,278
More than 3 months but not more than 6 months	2,805,246	1,441,068
More than 1 year	5,242,539	7,385,615
Total	12,495,973	13,115,961

In respect of trade and other receivables, the Authority is not exposed to any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. Trade receivables consist of a large number of customers in various sectors. Based on historical information about customer default rates management consider the credit quality of trade receivables that are not past due or impaired to be good.

The credit risk for cash and cash equivalents and short-term investments is considered negligible, since the counterparties are reputable banks with high quality external credit ratings.

The carrying amounts disclosed above are the Authority's maximum possible credit risk exposure in relation to these instruments.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

5. Financial Risk ManagementCont'd

a. Risk Management Objectives and PoliciesCont'd

iii) Liquidity Risk

Liquidity risk is that the Authority might be unable to meet its obligations. The Authority manages its liquidity needs by monitoring scheduled debt servicing payments for long-term financial liabilities as well as forecast cash inflows and outflows due in day-to-day business. The data used for analysing these cash flows is consistent with that used in the contractual maturity analysis below. Liquidity needs are monitored in various time bands, on a day-to-day and week-to-week basis, as well as on the basis of a rolling 30-day projection. Long-term liquidity needs for a 180-day and a 360-day lookout period are identified monthly. Net cash requirements are compared to available borrowing facilities in order to determine headroom or any shortfalls. This analysis shows that available borrowing facilities are expected to be sufficient over the lookout period.

The Authority's objective is to maintain cash and marketable securities to meet its liquidity requirements for 30-day periods at a minimum. This objective was met for the reporting period. Funding for long-term liquidity needs is additionally secured by an adequate amount of committed credit facilities and the ability to sell long-term financial assets.

The Authority considers expected cash flows from financial assets in assessing and managing liquidity risk, in particular its cash resources and trade receivables. The Authority's existing cash resources and trade receivables significantly exceed the current cash outflow requirements. Cash flows from trade and other receivables are all contractually due within six months.

As at December 31, 2018, the Authority's non-derivative financial liabilities have contractual maturities (including interest payments where applicable) as summarised below:

	Carrying Amount	Contractual Cash Flows	2018 1 Year	2-5 Years	More than 5 Years
	\$	\$	\$	\$	\$
Borrowings	3,388,285	(3,171,290)	(1,155,900)	(2,015,390)	0
Employee benefits	93,290	(93,290)	0	0	0
Trade and other payables	3,327,558	(3,327,558)	(3,327,558)	0	0
	6,809,133	(6,592,138)	(4,483,458)	(2,015,390)	0

	Carrying Amount	Contractual Cash Flows	2017 1 Year	2-5 Years	More than 5 Years
	\$	\$	\$	\$	\$
Borrowings	6,281,227	(5,652,110)	(3,153,193)	(2,498,917)	0
Employee benefits	97,249	(97,249)	0	0	(97,249)
Trade and other payables	3,126,483	(3,126,483)	(3,126,483)	0	0
	9,504,959	(8,875,842)	(6,279,676)	(2,498,917)	(97,249)

iv) Interest Rate Risk

The Authority's policy is to minimize interest rate cash flow risk exposure on long-term financing. The Authority's long-term borrowings are therefore usually at fixed rates. The Authority's investment securities in certificates of deposits pay fixed rates of interest. The exposure to interest rate risks for the Authority is considered immaterial.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

5. Financial Risk ManagementCont'd

a. Risk Management Objectives and PoliciesCont'd

iv) Interest Rate RiskCont'd

The Authority's exposure to interest rate sensitivity gap is as follows: -

	Up to One Year \$	One to Five Years \$	Non-Interest Bearing \$	Total \$
Financial Assets	3,355,567	0	9,298,840	12,654,407
Financial Liabilities	(1,372,894)	(2,015,390)	(3,420,849)	(6,809,133)
Interest Sensitivity Gap As at December 31, 2018	1,982,673	(2,015,390)		(32,717)
As at December 31, 2017	(354,157)	(3,139,103)		(3,493,260)

The following illustrates the sensitivity of profits to a reasonably possible change in interest rate of +/-50 bases points (2017: +/-50 bases points). These changes are considered to be reasonable possible based on observation of current market conditions. The calculations are based on a change in the average market interest rate for each period, and the financial instruments held at each reporting date. All other variables are held constant.

	Profit for the Year \$	
	+50 bases points	-50 bases points
2018 Effect of change due to movement	(26,030)	26,030
2017 Effect of change due to movement	(34,858)	34,858

v) Currency Risk

The Authority is subject to foreign currency risks to the extent that it trades in currencies other than Eastern Caribbean currency. The Authority does not use interest rate swaps or foreign currency options, or other derivative instruments to hedge any foreign currency risks exposure. As of reporting date, the Authority's significant currency position was as follows: -

	BDS \$	EUR \$	USD \$	EC \$	Total \$
Financial Assets	0	32,419	175,375	12,446,613	12,654,407
Financial Liabilities	(143,733)	(785,239)	(381,733)	(5,498,428)	(6,809,133)
Currency Sensitivity Gap As at December 31, 2018	(143,733)	(752,820)	(206,358)	6,948,185	5,845,274
As at December 31, 2017	(241,855)	(3,047,474)	(121,653)	6,018,916	2,607,934

To mitigate the Authority's exposure to foreign currency risk, its foreign currency cash flows are monitored on a monthly basis. Generally, the Authority's risk management procedures distinguish short-term foreign currency cash flows (due within six months) from longer-term cash flows (due after six months). The Authority, however, does not employ any hedging strategy to mitigate its foreign exchange exposures.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

5. Financial Risk ManagementCont'd

a. Risk Management Objectives and PoliciesCont'd

v) Currency RiskCont'd

Foreign currency denominated financial assets and liabilities which expose the Authority to currency risk are disclosed below. The amounts shown are translated into Eastern Caribbean dollars at the closing rate:

	Short-term Exposure EC \$	Long-term Exposure EC \$
December 31, 2018		
Financial Assets	207,794	0
Financial Liabilities	(1,319,595)	0
Total Exposure	(1,111,801)	0
	Short-term Exposure EC \$	Long-term Exposure EC \$
December 31, 2017		
Financial Assets	167,258	0
Financial Liabilities	(2,673,822)	(904,419)
Total Exposure	(2,506,564)	(904,419)

The following table illustrates the sensitivity of profits of the Authority's financial assets and financial liabilities of EC exchange rate fluctuations to other currencies, 'all other things being equal'. It assumes a +/- 5% change of the EC exchange rate for the year ended at 31 December 2018 (2017: +/-5%). These percentages have been determined based on the average market volatility in exchange rates in the previous twelve months. The sensitivity analysis is based on the Authority's foreign currency financial instruments held at each reporting date.

Had the EC\$ strengthened against other currencies by 5%, then the effect on profits would have been as follows:

	US \$	EUR \$	BDS \$	Total \$
December 31, 2018	10,318	37,641	7,187	55,146
December 31, 2017	6,083	152,374	12,093	170,550

Had the EC\$ weakened against other currencies by 5%, then the effect on profits would have been as follows:

	US \$	EUR \$	BDS \$	Total \$
December 31, 2018	(10,318)	(37,641)	(7,187)	(55,146)
December 31, 2017	(6,083)	(152,374)	(12,093)	(170,550)

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

5. Financial Risk ManagementCont'd

b. Fair Value of Financial Assets and Liabilities

Fair value amounts represent estimates of the consideration that would currently be agreed upon between knowledgeable, willing parties who are under no compulsion to act and are best evidenced by quoted market value, if one exists.

The Authority's financial assets and financial liabilities as disclosed in the statement of financial position approximate their fair value.

6. Critical Accounting Estimates and Judgements

Judgements and estimates are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Authority makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

a. Estimated Impairment of Assets

The Authority tests each reporting period whether assets have suffered any impairment in accordance with the accounting policy stated in significant accounting policies section.

b. Allowance for Impaired Trade Receivables

The Authority reviews the status of its trade receivables as of each reporting date, after the direct write off of known uncollectible accounts, and assesses the likelihood of recovery, individually and collectively based on historic experience and forward looking data available. The allowance for impaired trade receivables is estimated by applying loss percentages which approximate loss experience to the arrears status of the trade receivable accounts.

7. Cash and Cash Equivalents

	2018	2017
	S	\$
Cash on hand	3,700	3,700
Bank balances and demand deposits	1,369,564	885,546
	1,373,264	889,246

The Authority's cash and cash equivalents are denominated in the following currencies: -

	2018	2017
	S	\$
EUR	32,419	33,434
ECD	1,340,845	855,812
	1,373,264	889,246

Cash and cash equivalents include the following for the purpose of the cash flow statement: -

	2018	2017
	S	\$
Cash and cash equivalents	1,373,264	889,246
Bank overdraft (Note 13)	(208,104)	(602,802)
	1,165,160	286,444

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

8. Trade Receivables

	2018 \$	2017 \$
Un-metered accounts	15,857	6,192
Metered accounts	8,364,634	8,083,220
Grenadines accounts	262,122	1,293,312
Sewerage accounts	48,038	41,713
Bulk water accounts	47,759	25,553
Environmental levy receivable	757,155	632,629
Government of St. Vincent and the Grenadines	3,757,563	3,665,971
	13,253,128	13,748,590
Allowance for impaired receivables	(5,925,528)	(6,172,760)
	7,327,600	7,575,830

Pursuant to an agreement with the Government, the Authority supplies water to standpipes and state-owned institutions for a consideration of \$1,100,000 (2017: \$1,100,000) per annum, payable in quarterly instalments of \$275,000 (2017: \$275,000), due on March 31, June 30, September 30 and December 31, each year.

As of reporting date, trade receivables of \$5,925,528 (2017: \$6,172,760) were considered impaired. The individually impaired receivables mainly relate to consumers which are in unexpected difficult economic situations and or reluctant to pay certain charges.

The aging of those receivables are as follows: -

	2018 \$	2017 \$
91 to 365 days	442,370	720,534
Over 365 days	5,483,158	5,452,226
	5,925,528	6,172,760

Movement in the allowance for impaired trade receivables that are assessed for impairment collectively are as follows: -

	2018 \$	2017 \$
At January 1	6,172,760	6,479,359
Increase in allowance for impaired receivables (Note 21)	1,051,338	369,673
Direct write-offs – Grenadines	(1,298,570)	(676,272)
At December 31	5,925,528	6,172,760

During the year, the following bad debts expense was recognised in profit or loss in relation to impaired receivables: -

	2018 \$	2017 \$
Movement in allowance for impaired receivables (Note 21)	1,051,338	369,673

Due to the short-term nature of the current receivables, the carrying amount is assumed to be the same as their fair value. Trade receivables are denominated in Eastern Caribbean currency.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

9. Other Receivables

	2018 \$	2017 \$
Advanced payment to suppliers	175,376	133,824
Sundry receivables	172,490	98,183
Staff receivables	127,327	327,412
VAT refundable	642,810	553,294
	1,118,003	1,112,713

Other receivables are neither past due nor considered impaired. Based on the historical credit performance of other receivables, it is expected that these amounts will be received as they become due. The Authority does not hold any collateral in relation to other receivables.

The carrying value of other receivables is denominated in the following currencies: -

	2018 \$	2017 \$
USD	175,376	133,824
ECD	942,627	978,889
	1,118,003	1,112,713

10. Investment Securities

At Amortized Cost

	2018 \$	2017 \$
Bank of St. Vincent and the Grenadines Limited, certificate of deposit	1,580,236	1,550,421
General Employees Co-operative Credit Union Limited, certificate of deposit (Note 13)	989,623	956,157
Interest receivable	28,848	28,526
	2,598,707	2,535,104

Movement schedule of carrying values:

	2018 \$	2017 \$
Balance at January 1	2,535,104	2,473,522
Interest capitalised	34,755	33,056
Interest accrued	28,848	28,526
Balance at December 31	2,598,707	2,535,104

Investments are comprised of fixed rate term deposits. Due to the short-term nature of the investment securities, their carrying amount is considered the same as their fair value.

The effective interest rate on held-to-maturity investments at reporting date was as follows: -

	2018 %	2017 %
Term deposits	2.53	2.53

The investment securities of the Authority are denominated in Eastern Caribbean currency.

As disclosed in Note 13, the General Employees Co-operative Credit Union Limited certificate of deposit is pledged as collateral for a term loan.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

11. Inventories

	2018	2017
	\$	\$
Pipes and fittings	4,602,026	4,565,939
Mechanical spares	587,354	713,720
Other	88,084	74,459
	<u>5,277,464</u>	<u>5,354,118</u>

Central Water and Sewerage Authority

Notes to the Financial Statements
For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

12. Property, Plant and Equipment

	Land	Landfills	Buildings	Water System	Sewerage System	Meterisation	Furniture and Equipment	Heavy Equipment	Motor Vehicles	Capital Projects-in-Progress	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
At January 1, 2016											
Operational assets, cost	1,463,493	12,143,127	15,908,853	76,837,667	4,631,967	7,826,579	6,167,002	4,798,797	6,673,599	2,469,431	138,920,515
Accumulated depreciation	0	5,505,127	2,477,667	28,983,826	3,146,340	6,788,557	5,345,576	3,020,255	5,261,679	0	60,529,027
	1,463,493	6,638,000	13,431,186	47,853,841	1,485,627	1,038,022	821,426	1,778,542	1,411,920	2,469,431	78,391,488
NBV at January 1, 2017											
Additions	1,463,493	6,638,000	13,431,186	47,853,841	1,485,627	1,038,022	821,426	1,778,542	1,411,920	2,469,431	78,391,488
Transfers	0	0	0	1,068	0	0	884,960	0	527,802	1,679,289	3,093,119
Disposal	(49,780)	210,052	11,071	916,853	0	0	0	0	0	(1,137,976)	0
Depreciation charge	0	(388,603)	(318,232)	(1,547,080)	(123,185)	(219,023)	(203,768)	(232,996)	(471,018)	0	(56,648)
NBV as December 31, 2017	1,413,713	6,459,449	13,124,025	47,224,682	1,362,442	818,999	1,495,750	1,545,546	1,468,704	3,010,744	77,924,054
At December 31, 2017											
Operational assets, cost	1,413,713	12,353,179	15,919,924	77,755,588	4,631,967	7,826,579	7,045,094	4,798,797	6,558,591	3,010,744	141,314,176
Accumulated depreciation	0	5,893,730	2,795,899	30,530,906	3,269,525	7,007,580	5,549,344	3,253,251	5,089,887	0	63,390,122
Net Book Amount	1,413,713	6,459,449	13,124,025	47,224,682	1,362,442	818,999	1,495,750	1,545,546	1,468,704	3,010,744	77,924,054
NBV January 1, 2018											
Additions	1,413,713	6,459,449	13,124,025	47,224,682	1,362,442	818,999	1,495,750	1,545,546	1,468,704	3,010,744	77,924,054
Transfers	58,434	0	0	0	0	0	179,986	430,900	1,234,849	1,795,383	3,699,552
Disposal	0	0	255,953	1,109,750	0	0	0	0	0	(1,365,703)	0
Depreciation charge	0	(398,724)	(319,248)	(1,569,657)	(117,629)	(192,095)	(413)	(704)	(69,450)	(18,266)	(88,833)
NBV at December 31, 2018	1,472,147	6,060,725	13,060,730	46,764,775	1,244,813	626,904	1,334,715	1,741,849	1,998,448	3,422,158	77,727,264
At December 31, 2018											
Operational assets, cost	1,472,147	12,353,179	16,175,881	78,865,332	4,631,967	7,826,579	7,224,668	5,228,995	6,625,745	3,422,158	143,826,651
Accumulated depreciation	0	6,292,454	3,115,151	32,100,557	3,387,154	7,199,675	5,889,953	3,487,146	4,627,291	0	66,099,387
Net Book Amount	1,472,147	6,060,725	13,060,730	46,764,775	1,244,813	626,904	1,334,715	1,741,849	1,998,448	3,422,158	77,727,264

Depreciation expense of \$3,402,216 (2017: \$3,101,121) and \$405,293 (2017: \$402,784) have been included in the production and maintenance costs and selling and administrative expenses, respectively.

During the year, the Authority gave recognition to the contribution of equipment by the Government of St. Vincent and the Grenadines valued at Nil (2017: \$662,524). These amounts represents non-cash activities and therefore not reflected in the statement of cash flows.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

12. Property, Plant and EquipmentCont'd

In 1984, the water and sewerage system were revalued on a replacement cost basis resulting in a credit of \$12,151,424 to revaluation surplus.

The Authority's commercial buildings were revalued in 2013, on a market basis, by Arthur Guy, an independent valuator, resulting in a credit of \$6,826,310 to revaluation surplus.

13. Borrowings

	2018 \$	2017 \$
Agence Francaise de Développement (AFD)		
The loan which is guaranteed by the Government of St. Vincent and the Grenadines is repayable in 26 equal semi-annual instalments of EUR100,060, plus interest at the rate of 3% per annum, payable on April 30 and October 31 each year commencing October 31, 2006 to maturity on October 31, 2018	0	640,412
Agence Francaise de Développement (AFD)		
The loan which is guaranteed by the Government of St. Vincent and the Grenadines is repayable in 22 equal semi-annual instalments of EUR253,767, plus interest at the rate of 2.5% per annum, payable on April 30 and October 31 each year commencing October 31, 2010. The loan matures on April 30, 2019	783,695	2,440,498
Bank of St. Vincent and the Grenadines Limited		
The loan which is guaranteed by mortgage over a commercial building at New Montrose is repayable in 84 monthly instalments of \$38,966, inclusive of interest at the rate of 5.5% per annum, commencing June 29, 2013. The loan is due to mature on April 4, 2019	136,568	582,376
Bank of St. Vincent and the Grenadines Limited		
The loan which is guaranteed by mortgage over a commercial building at New Montrose is repayable in 72 monthly instalments of \$26,300, inclusive of interest at the rate of 5.5% per annum commencing February 28, 2014. The loan is due to mature on December 28, 2018	0	300,700
General Employees Co-operative Authority Limited		
The loan which is guaranteed by Certificate of deposit is repayable in 96 monthly instalments of \$28,550, inclusive of interest at the rate of 5% per annum. The loan is due to mature on December 29, 2025	2,251,028	1,687,973
Interest payable	8,890	26,466
Bank of St. Vincent and the Grenadines Limited – overdraft (Note 7)	208,104	602,802
	3,388,285	6,281,227
Less: current portion due within one year	(452,632)	(3,782,462)
	2,935,653	2,498,765

The Authority pledged, by way of Continued Legal Mortgage, stamped to cover \$2,500,000, its property at New Montrose having a carrying book value of \$6,507,233 as collateral for its indebtedness to the Bank of St. Vincent and the Grenadines Ltd.

As previously disclosed in **Note 10**, the Authority provided a Certificate of Deposit, having a carrying value of \$989,623 (2017: \$956,157), as collateral for its indebtedness to the General Employees Co-operative Credit Union loan.

Agence Francaise de Développement (AFD) loans are secured by way of Government guarantee.

The fair value of the Authority's borrowings is not materially different to their carrying amounts.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

13. BorrowingsCont'd

The exposure to interest rate charges and the contractual repricing dates at the reporting date are as follows: -

	2018	2017
	\$	\$
Less than one year	443,742	3,755,996
Between one and five years	2,935,653	2,498,765
	3,379,395	6,254,761

The following summarises the effective interest rates on borrowing, using the weighted average method: -

	2018	2017
	%	%
Long-term borrowings	4.50	3.84

Borrowings are denominated in the following currencies: -

	2018	2017
	\$	\$
EUR	792,585	3,080,910
ECD	2,586,810	3,173,851
	3,379,395	6,254,761

14. Trade and Other Payables

	2018	2017
	\$	\$
Trade payable	1,361,433	1,164,700
Accrued liabilities	436,936	407,154
Payroll accruals	1,135,340	1,171,681
Customers' deposits	393,849	382,948
	3,327,558	3,126,483

Trade and other payables are denominated in the following currencies: -

	2018	2017
	\$	\$
ECD	2,580,535	2,629,151
USD	381,733	255,477
EURO	1,544	0
BDS	143,733	241,855
GBP	220,013	0
	3,327,558	3,126,483

Trade payables are unsecured and are usually paid within 30 days of recognition.

The carrying amounts of trade and other payables are assumed to be the same as their fair values, due to their short-term nature.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

15. Employee Benefits

a. Defined Contribution Pension Plan

The Authority provides retirement benefits, under a defined contribution plan administered by Sagacor Life Inc., for substantially all of its employees. Under the provisions of the plan, the Authority is required to contribute 6% of the employees' basic monthly salary towards the plan. Employees are required to contribute 4% of their basic monthly salary.

During the reporting period, the Authority's contributions to the pension plan amounted to \$597,504 (2017: \$592,320).

b. Other Employee Benefits

Effective June 2009, the Authority commenced accruing interest at the rate of 3.5% per annum on the retirement benefit balances due to employees for services rendered prior to the introduction of the defined contribution pension plan in 1992.

16. Obligations to Customers

Subject to connection provisions, consumers may be required to make contributions to water and sewerage systems extensions. The following summarises consumers' contribution to water and sewerage systems connections which were not completed at reporting date.

	2018 \$	2017 \$
Customers contributions	39,921	52,960

17. Contributed Capital

Contributed capital represents contributions received from the Government of St. Vincent and the Grenadines.

	2018 \$	2017 \$
At January 1	41,694,220	41,031,696
Additions	0	662,524
At December 31	41,694,220	41,694,220

18. Accumulated Other Comprehensive Income

Accumulated other comprehensive income comprises: -

	Revaluation Surplus		
	Water and Sewerage System \$	Buildings \$	Total \$
January 1, 2018	12,151,424	6,826,310	18,977,734
December 31, 2018	12,154,424	6,826,310	18,977,734

In 1984, water and sewerage system were revalued on a replacement cost basis, resulting in \$12,151,424 credit to revaluation surplus.

In 2013, the commercial buildings were revalued on a market basis, by Arthur Guy, an independent valuator, resulting in a credit of \$6,826,310 to revaluation surplus.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

19. Solid Waste Management Unit – Schedule of Income

	2018	2017
	\$	\$
Collection fee – fixed	1,493,500	1,493,500
Collection fee – variable	4,985,666	4,936,791
Disposal fees	1,044,218	508,061
Environmental levy – stay over	616,710	467,240
Environmental levy – cruise	1,126,316	345,404
Skip services	173,542	175,913
Other	111,365	79,899
	9,551,317	8,006,808

20. Production and Maintenance Costs

	2018	2017
	\$	\$
Chemicals	17,459	14,173
Depreciation expense - Plant	1,687,286	1,670,265
- Landfills	398,724	388,603
- Equipment	423,666	318,067
- Motor vehicles	892,540	724,186
Disaster preparation and relief	47,714	3,421
Drawing office and laboratory expenses	60,341	20,608
Garbage and waste collection and disposal	2,812,025	2,690,512
Insurance	191,419	193,857
Pension and medical contribution	278,654	273,863
Training	66,375	22,536
Transmission and distribution	1,561,691	1,508,960
Transportation and other equipment expenses	963,889	1,062,565
Salaries, wages, allowances, and NIS contributions	6,891,790	6,585,316
	16,293,573	15,476,932

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

21. Selling, General and Administrative Expenses

	2018 \$	2017 \$
Administration asset expense	28,839	45,717
Advertising and public relations	219,274	161,489
Audit fees	45,678	43,713
Bad debt expense (Note 8)	1,051,338	369,673
Bank charges and commissions	82,654	63,395
Communications	171,097	168,685
Depreciation expense	405,293	402,784
Directors' fees	65,325	64,350
Donations	62,080	56,595
Electricity expense	363,494	342,217
Insurance	73,102	84,778
Legal fees	7,759	11,774
Medical costs	236,833	0
Miscellaneous expenses	35,318	35,074
Membership and subscription	197,354	186,590
Pension and medical	592,140	581,958
Printing, postage and office supplies	286,917	259,539
Professional fees	4,483	19,376
Public liability compensation	4,227	7,699
Repairs and maintenance	8,407	11,935
Salaries, benefits and National Insurance contributions	6,180,077	6,663,980
Scholarships and awards	36,500	40,900
Security services	307,414	237,860
Staff training	64,831	56,370
Travelling allowances	588,589	629,835
	11,119,023	10,546,286
Overheads allocated to projects	(252,659)	(191,655)
	10,866,364	10,354,631

22. Capital Commitments

As of reporting date, the Board of Directors had approved capital expenditure amounting to \$7,648,050 (2017: \$4,810,450).

23. Related Party Transactions

(a) Identification of Related Party

A party is related to the Authority if:

(i) Directly or indirectly the party:

- a. Controls, is controlled by, or is under common control with the Authority;
- b. Has an interest in the Authority that gives it significant influence over the Authority; or
- c. Has joint control over the Authority.

(ii) The party is a member of the key management personnel of the Authority;

(iii) The party is a close member of the family of any individual referred to in (i) or (ii);

(iv) The party is a post-employment benefit plan for the benefit of employees of the Authority or any entity that is a related party of the Authority.

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

23. Related Party TransactionsCont'd

(b) Related Party Transactions and Balances

A number of transactions have been entered into with related parties in the normal course of business.

(c) Transactions with Government of St. Vincent and the Grenadines

The value of transactions and balances with the Government of St. Vincent and the Grenadines were as follows:

	Balances Due by as of Reporting Date		Transaction Values for the Period Ended	
	2018	2017	2018	2017
	\$	\$	\$	\$
Water and sewerage charges	1,100,000	1,100,000	1,053,249	915,408
Solid waste charges	1,493,500	1,493,500	2,704,314	2,750,564

24. Solid Waste Management Unit – Income and Expenditure

	Notes	2018 \$	2017 \$
Income from Services	19	9,551,317	8,006,808
Less: Operational Costs			
- Production and maintenance costs	25	(6,600,898)	(6,466,540)
- General and administrative expenses	26	(2,609,031)	(1,918,118)
Net Profit (Loss) for the Year		341,388	(377,850)

25. Solid Waste Management Unit – Production and Maintenance Costs

	2018 \$	2017 \$
Allowance	112,688	124,936
Contra expense/transfers	219,173	258,682
Land and building expense	530,974	531,738
Motor vehicle/garage expense	1,030,903	948,436
Pension and National Insurance contribution	199,175	189,485
Plant and operating equipment	123,907	121,493
Salaries	1,688,125	1,664,316
Services	24,927	24,337
Supplies	25,268	29,265
Training	3,542	11,627
Waste management	2,642,216	2,562,225
	6,600,898	6,466,540

Central Water and Sewerage Authority

Notes to the Financial Statements

For the Year Ended December 31, 2018

(in Eastern Caribbean dollars)

26. Solid Waste Management Unit – Selling, General and Administrative Expenses

	2018	2017
	\$	\$
Advertising, director and legal fees	33,836	33,612
Allowances	53,029	58,794
Communication expense	48,095	52,720
Employee benefits and National Insurance contributions	93,729	89,170
Bad debts expense	917,885	293,074
IT expense	119,161	97,758
Janitorial services	19,200	19,200
Miscellaneous expense	493	2,620
Office facilities and equipment	252,744	234,636
Office and other supplies	24,321	25,227
PR and marketing expense	9,906	6,266
Salaries	794,412	783,207
Security services	216,334	180,080
Training	1,667	5,471
	2,584,812	1,881,835
Overhead allocated	24,219	36,283
	2,609,031	1,918,118

27. Staff Cost

	2018	2017
	\$	\$
Salaries, wages and allowances	12,566,597	12,489,687
Pension	687,572	677,089
Medical	183,222	178,732
National Insurance Services contribution	582,065	566,160
Other staff costs	70,352	350,908
	14,089,808	14,262,576
Average number of employees at reporting date	292	279



JOAN RYAN
**PUBLIC RELATIONS &
MARKETING MANAGER**

PUBLIC RELATIONS & MARKETING REPORT

The year 2018 saw the Public Relations and Marketing department continuing to expand its role both within the CWSA and in its outreach and collaboration with its stakeholders. The major activities and accomplishments of the department during the year are presented under the following categories:

- *Corporate Responsibility & Image*
- *Stakeholder Collaboration*
- *Communications and Outreach*
- *Internal Relations*
- *Designs and Productions*

1.0 CORPORATE RESPONSIBILITY & IMAGE

During the year 2018, support was given in many different forms to several national organizations and individuals representing sporting, cultural, educational, medical and environmental concerns.

2.0 STAKEHOLDER COLLABORATION

Including:

- *Recycling discussions with the Foreign Minister of the*

Republic of China on Taiwan

- *Discussions on the Inception report for UNDP/GEF funded Conserving Biodiversity and Reducing Land Degradation using the Ridge to Reef approach.*
- *Discussions with the National Parks Authority Reef Guardian Pilot Programme*
- *Coastal Cleanup Discussions with the Caribbean Youth Environment Network (CYEN)*
- *Discussions with the Forestry department on initiatives pertaining to a GEF grant proposal.*
- *Donation of engineering software by the Japan-Caribbean Climate Change Partnership (J-CCCP) to the CWSA water resources management Unit*
- *On-going contributions to the National Assessment Team (NAT)*

3.0 COMMUNICATIONS AND OUTREACH

(A) SOCIAL MEDIA/FACEBOOK OUTREACH

The CWSA's Facebook page was updated to reflect new profiles, office closure notices, disaster preparedness tips, water disruption notices, bereavement notices, videos, information flyers and other special and seasonal campaigns including reminders for the Grenadines environmental fee payment, white goods collection and water storage.

(B) WATER STORAGE CAMPAIGN

The Public Relations and Marketing Department launched a "water storage" campaign at the start of 2018. This initiative was borne out of the need to ensure that customers of the CWSA have their own adequate water storage.

This initiative took the form of radio discussions, placement of relevant information on the CWSA facebook page, exposure through the print media and the placement of messages on the water bill receipts.

(C) ELECTRONIC MEDIA

- *Monthly sponsorship of the newscast on NBC Radio including messages & notices*
- *Discussions on NBC Radio looking at water and environment matters*
- *Morning talk-show appearances on WE FM discussing*

water week activities with emphasis on climate change and its effects on our services and current campaigns

- *Emergency notices of water disruptions sent to all radio stations*
- *Airing of three television infomercials on SVG TV*

(D) WATER WEEK

Another successful Water Week was planned and executed in 2018. Activities included;

1. *A church Service*
2. *A nature hike to the Vermont catchment area with students of the St Joseph Convent Kingstown, Intermediate High and the St Vincent Grammar school*
3. *Television interviews with students on the importance of water and the water treatment and distribution process*
4. *A radio message by our Chairperson, Mrs. Girlyn Miguel*
5. *A Climate Change symposium for stakeholders with several presentations*
6. *Customer Appreciation Day*
7. *Thursday 22nd March World Water Day commemoration along with a nationwide radio message by the CEO, Garth Saunders*
8. *Friday 23rd March, staff creole evening*

WATER WEEK HIGHLIGHTS



CWSA Board Chair Girlyn Miguel & Guest Speaker Dr. Walford Thompson at the Water Week Opening Church Service



Representatives from the IHS, SJCK and SVGs on the Nature Hike to the Dalaway Catchment ad Source.



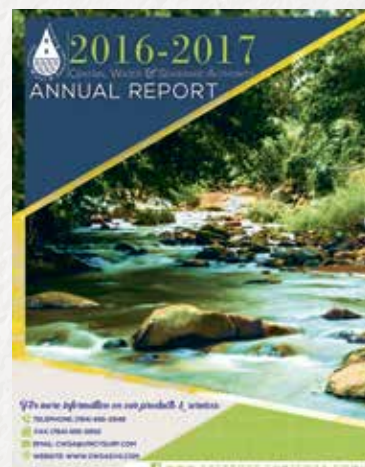
Chief Executive Officer Garth Saunders addressing participants at the Climate Change Symposium.

4.0 INTERNAL RELATIONS

- The Annual Awards event was hosted this year at the Arnos Vale Sporting complex in December, preceded by three quarterly general staff meetings.
- The procurement process for 2019 Uniforms commenced.
- Announcements on the telephone intercom informed staff of various events.
- Representation at engineering and solid waste monthly departmental meetings
- Independence and Christmas celebrations respectively took the form of a creole activity at the New Montrose Headquarters on the 26th October 2018 and the lighting up of the Headquarters after the November 23rd, 2018 staff meeting

5.0 GRAPHIC DESIGN & PRODUCTIONS

The 2016-2017 annual report was completed and distributed



The 2019 wall and desk calendars were completed and distributed in December 2018 under the theme “Appreciating Our Environment; 12 Reasons Why”.

Additionally, the following in-house productions were done by the PR& marketing team led by



Graphic Artist Rae-Anne McDowall, Producer- Symantha George and Manager Joan Ryan;

- *Produced “writing sheets” for frontline staff*
- *Designed ad for Methodist Church Magazine*
- *Printed and distributed flyers for White Goods*
- *Printed CWSA official envelopes and letterheads*
- *Redesigned and Printed copies of the Code of Conduct*
- *Designed “Water Storage Solutions Advert”*



- *Designed shirt advertisement for Sports Club's Heroes day walk*
- *Designed Water Week Agenda flyer and invitations Water Week Church Service*
- *Created tickets for CWSA Sports Club Boat Ride*
- *Created Grenadines payment agencies flyer*
- *Created CWSA Banner*
- *Designed half page newspaper ad for the passing of former Chairman, Mr. Christian Martin*
- *Edited National Sports Council ad*



- *Printed Septage, special waste and grease trap forms for Solid Waste Unit*
- *Created Conservation & Storage Brochures for Customer appreciation day handouts*
- *Created Organization name tags for 2018 Water Week Symposium*
- *Created e-bill view flyer*
- *Created #justwater flyer*
- *Updated and printed Derelict Vehicle forms for Solid Waste Department*
- *Designed Independence 2018 newspaper artwork*



- *Created sympathy cards for the families of L. Tash and R.A. Cummings and a newspaper sympathy advert for the latter.*
- *Designed artwork for Feather and Pull up banners*
- *Created Get Well Soon card for Mr. Grantley Williams, who has since passed away*
- *Edited Skip & Standpipe placement flyer for Canival 2018*
- *Designed and printed invitations, envelopes, RSVP cards and all other media for the CWSA cocktail*





YVETTE DANIEL
HUMAN RESOURCES
MANAGER

HUMAN RESOURCE REPORT

STAFF MATTERS

At December 31, 2018 our total staff numbered 292. Of this 215 represent the Water and Sewerage Section and 77 from the Solid Waste Management Unit. Once again, the situation remained relatively stable as far as staff turnover was concerned.

RECRUITMENT

There were three (3) new recruits appointed on probation: Delron Graham-Meter Reader, Kevin Woods-Mechanic, Kai Toney-Technician Assistant.

CONFIRMATION

Thirty (30) persons were confirmed in their respective posts:

Joel James	Cornelius Emmons	Leonard Charles
Rennie Samuel	Otis Hooper	Mariah Duncan
Andre Patterson	Alwyn Quashie	Arnold Horne
Clementson	Javed Stapleton	Delroy Graham
Williams	Kamali Nanton	Kenneika Matthews
Daren Ragguette	Karanja Bushay	Randy Thomas
Delroy Jack	Kemoll Benjamin	Silvan McLeod
Hywell Myers	Kerven Mathurin	Terrence Williams
Kentish Richards	Sammy Williams	Andre Franklyn

Esroy Lewis	Michael John	Jo Jo Jones
		Sheldon DaSouza

PROMOTION

Ten (10) persons were promoted during the period:

NAME	POST
DaWayne Wilson	<i>Technician Assitant</i>
Joanna John	<i>Information Technology/ Information Systems Officer</i>
Randy Jackson	<i>Senior Information Technology/ Information Systems Officer</i>
Adolphus Alban Williams	<i>Apprentice Pipefitter</i>
Deon Sam	<i>Technician Assistant</i>
Godwin Thomas	<i>Pipefitter</i>
Jamal Gurley	<i>Apprentice Pipe Fitter</i>
Joel Bobb	<i>Apprentice Pipe Fitter</i>
Kiran Bacchus	<i>Pipe Fitter</i>
Raffique Fitzpatrick	<i>Engineering Technician</i>

RETIREMENT

We bade farewell to Mr. Maurice Wright, Mr. Kenrick Providence, Mr. John Jacobs, Mr. Edson Mascoll, Mr. Christopher Bynoe, Mr. Ashley McLean and Mr. Leon Murray. We wish them a long and happy retirement.

DISCIPLINARY MATTERS

Several persons were verbally warned and written to concerning their performance and conduct during the year. One (1) person was dismissed, three (3) persons were suspended without pay and seven (7) persons were otherwise penalized.

LABOUR RELATIONS

The Memorandum of Agreement between the Commercial Technical & Allied Workers Union and the Central Water & Sewerage Authority for the period January 1, 2018



Memorandum of Agreement being signed

– December 31st, 2020 was signed.

TRAINING

One hundred and twenty-two (122) employees also participated in the following training programs locally and overseas during the period under review;

- *World Day for Safety and Health*
- *American Water Works Conference*
- *National Adaptation workshops on “Developing Sectoral Adaptation Strategies and Financing the National Adaptation Plan*
- *Minamata Inception Workshop and Mercury Training*
- *Complying with Credit Reporting Legislation*
- *ICAC Annual Caribbean Conference of Accountants*
- *Basic firefighting training*
- *Best Practices towards Resilient Water Services*
- *National Profile on the Occupational Safety & Health Review*
- *Training of Trainers Planning for the Integration of Climate Resilience in the Water Sector in the Caribbean*
- *Customer Service*
- *Annual Conference and Exhibition of the Caribbean Water and Waste Water Association (CWWA)*
- *XII meeting of the National Committees and focal points of the Integrated Hydrological Programme for Latin America and the Caribbean*
- *Financial Modelling- Budgeting and Forecasting in Excel training*
- *Urban Environmental Management training Course*
- *Hazard Mitigation & Disaster Management*
- *Hydraulics*



Customer Service Excellence Training Workshop

The following employees successfully completed Module 2 “The Management Function” of the University of the West Indies Open Campus Certificate Programme in “*Managing People Effectively*”;

- | | |
|--------------------------|-----------------------------------------------------|
| 1. Mr. Elvin Roberts | <i>District Supervisor
Services Clerk</i> |
| 2. Ms. Heleanor Creese | <i>Accounts Receivable
Supervisor</i> |
| 3. Mr. Danroy Ballantyne | <i>Senior Engineering
Technician- Hydrology</i> |

Mr. Vialley Richards, Gauging Technician, commenced studies leading to a Diploma in Hydrology at the Caribbean Institute for Meteorology and Hydrology in Barbados on January 8, 2018.

Mr. Elvin Roberts, District Supervisor successfully completed the Water Distribution Operators training programmed offered by Associated Board of Certification through the Caribbean Water and Waste Water Association.

Mr. Randy Jackson, Senior Information Technology/ Information Systems Officer successfully completed the requirements to be recognized as CompTIA Server + Certified.

Ms. Heleanor Creese-Accounts Receivable Supervisor, Elvin Roberts-District Supervisor and Danroy Ballantyne-Senior Engineering Technician successfully completed the Certificate in Managing the 21st Century Human Capital Asset Programme

TECHNICAL VISIT

Mr. Michael Creese, Senior Operations Engineer, participated in a Technical visit to South Korea on integrated waste management (IWM).

ON THE JOB ATTACHMENT

Mr. Gareth Vanloo, second year student in the Bachelors of Environmental Design and Planning was granted summer employment in the GIS section of the Engineering Department.

Job attachments were provided for three (3) Students of the St. Vincent and the Grenadines Community College Division of Technical and Vocational studies.

Ms. Mikhailla Matthias, first year student in the Bachelors of Industrial Engineering was granted (4) weeks summer employment in the Garage

Ms. Tyeis Duncan, Diza Joseph and Nickya Alexander, were offered on the job attachments for the months of July and August 2018.

Four (4) plumbing students of the Georgetown Technical Institute completed a four (4) weeks training attachment at the Georgetown District.

Mr. Kamali Cordice and Mr. Donowa completed their one-year internship under the Supportive Education and Training programme (SET) on September 30, 2018.

Mr. Stevan Stephens and Ms. Kenmsha Lewis were assigned to the CWSA under the Youth Empowerment Service Apprentice training program effective December 10, 2018.

LONG TERM TRAINING

Mr. Danrouy Edwards, Welder, proceeded on two (2) years no-pay study leave effective July 20, 2018. He was granted a football scholarship to pursue an Associate of Applied Science Degree-Welding at Ranger College in Texas, U.S.A.

Ms. Susette May successfully completed the Master of Science in Human Resource Management and Training offered by the University of Leicester.

Mrs. Pamela Daniel, Personnel Officer, successfully completed the requirements for the Master of Science Management Studies (Human Resource Management) certification offered by the University of the West Indies Open Campus with distinction.

Mr. Jonathan Francis, Engineer proceeded on eighteen

(18) months study leave effective October 18, 2018 to pursue studies in the Master of Science programme in Urban Water and Sanitation with specialization in Water Supply Engineering offered by the Delft Institute for Water Education (IHE) in the Netherlands.

EDUCATION GRANTS

During the period five (5) students who are children of employees were granted educational grants:

- **Hailee Williams**
- **Deja Henry**
- **Addison Dalrymple**
- **Lemery Roberts**
- **Sakeed Grant**



BRIAN DASILVA
ENGINEERING MANAGER

ENGINEERING REPORT

The Engineering Department within the Central Water & Sewerage Authority is responsible for:

- *Project planning, design and construction*
- *Operations and Maintenance - Water & Sewerage systems*
- *Quality control and laboratory services*
- *Septage and Wastewater treatment*
- *Water Resource Management (WRM)*
- *Geographic Information Mapping*

The 125-member team is comprised of civil and water engineers, engineering technicians in construction and hydrology, project officers, GIS and drafting technicians, water and sewerage superintendents and supervisors, pipe fitters, drivers and skilled and unskilled water and sewerage technicians.

The 2018 reporting year was a relatively routine one with an absence of major climate and rainfall events and emergencies that have recently become the norm in the region and sub-region. These events have consistently had a debilitating effect on the CWSA and its ability to consistently supply top quality services.

In response to this very real threat of service disruption in an era of climate change and weather and climate extremes, the CWSA's engineering initiatives have seen

a greater focus on data and information collection and documentation, closer vigilance and real time system management, increasing plant and pipeline resilience and increasing island wide storage capacity.

For the 2018 reporting period, the following main capital projects were undertaken:

CAPITAL PROJECTS FOR 2018:

- *Dalaway transmission main Relocation and Upgrade*
- *Fair Hall Pipeline Replacement*
- *Majorca Inlet Pipeline Improvement*
- *Belmont Transmission Main Replacement*
- *Sandy Bay/Sion Hill Storage Tank*
- *Belair Storeroom Improvement Project*

DALAWAY TRANSMISSION MAIN IMPROVEMENT PROJECT - PHASE 1

The rationale for this project was two-fold; firstly, to reduce the vulnerability of this major pipeline from the effects of earth movement and flooding in the Vermont Valley and secondly to improve the pipeline hydraulics of the system.

The project involved the re-routing and replacement of 5,800 feet of 12" ductile iron pipelines with 16" diameter pipelines. The installation of pipes began in April 2017 and the new 16" line was eventually commissioned in October 2018. The overall cost of the project was EC\$1.83 million.

FAIR HALL LINE REPLACEMENT

The scope of this project involved the installation of approximately 2,300 feet of 4" ductile iron distribution pipes to replace old 3" galvanized iron pipes. Work began on this project in June 2018 and was completed in November 2018 at an overall cost of EC\$174,000.

MAJORCA INLET PIPELINE IMPROVEMENT

The aim of this project was to reduce the vulnerability of the two intake lines on the Majorca and John Hill water supply systems at two separate sections of the lines; one at a river crossing and the other through a swamp area. Additionally, the size of the pipeline was increased from 6"

to 12” and the material was changed from ductile iron to polyethylene.

The project started in April 2018 and was completed and commission in August 2018. The total cost of this project was EC\$250,000 and approximately 1,200 feet each of 4” and 12” polyethylene pipes were installed including one major river crossing complete with reinforced concrete supports.

BELMONT TRANSMISSION MAIN REPLACEMENT

This project was undertaken as a sub-project of a larger project aimed at vulnerability reduction. It involved the relocation of a 600 ft section of the 6” Montreal transmission main pipeline at Belmont main road using 8” ductile iron pipes. The project commenced in March of 2018 and was completed in July 2018 at an overall cost of \$100,000 including road reinstatement work.

SANDY BAY STORAGE TANK

This tank represents the first phase of the overall improvement of the Sandy Bay water supply system and is a precursor to the installation of a treatment regime. Currently, there is no treatment on the system and the storage tank that existed previously was only able to supply New Sandy Bay Village by gravity due to its low elevation. The construction of this 45,000-gallon tank began in June 2018 and at the end of 2018 all of the reinforced concrete work was completed. Expenditure to date on this project was EC\$ 273,000 with a 90% completion at the end of 2018.

BELAIR STORE ROOM IMPROVEMENT PROJECT

This project was aimed at maximizing the space available in the main storeroom at the Belair complex in order to reduce the incidence of items being stored outside the main building and open to the elements. This was achieved by the addition of a mezzanine floor thus utilizing dead space above the ground storage level. The project comprised the installation of several internal structural steel columns and beams and 2000 square feet of composite flooring consisting of steel sheeting and reinforced concrete. Construction began in January of 2018 and was completed in June 2018 at a overall cost of EC\$256,000.

LABORATORY REPORT

POTABLE WATER TESTING

Throughout 2018 routine water quality monitoring was conducted at different points in the distribution system on all eleven water supply systems. Additionally, water quality testing was done on demand at various health, manufacturing and hospitality services.

The routine tests done included bacteriological sampling where necessary along with PH, turbidity and residual chlorine. WHO and PAHO drinking water quality standards were consistently maintained throughout the reporting period.

RAW WATER TESTING

The lab continued throughout 2018 to collaborate with the Water Resources Management Unit to ensure all raw water from the various sources was monitored.



Raw Water testing being done by the Laboratory

SAND FILTER MAINTENANCE

The sand filters at the Dalaway, Jennings and Perseverance treatment facilities were consistently monitored and cleaned during the 2018 reporting period.

MAPPING – GEOGRAPHIC INFORMATION SYSTEM

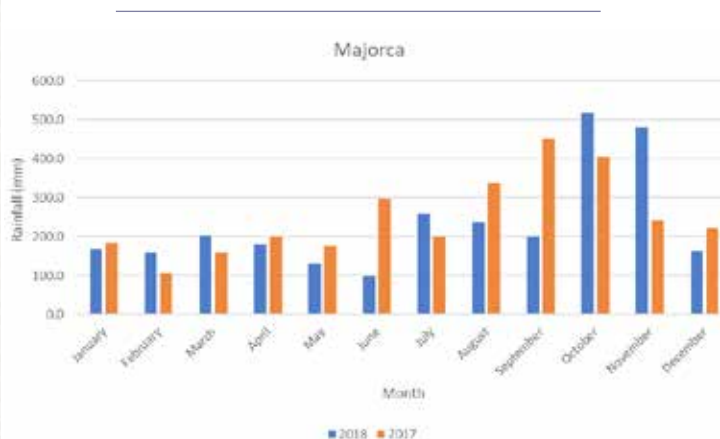
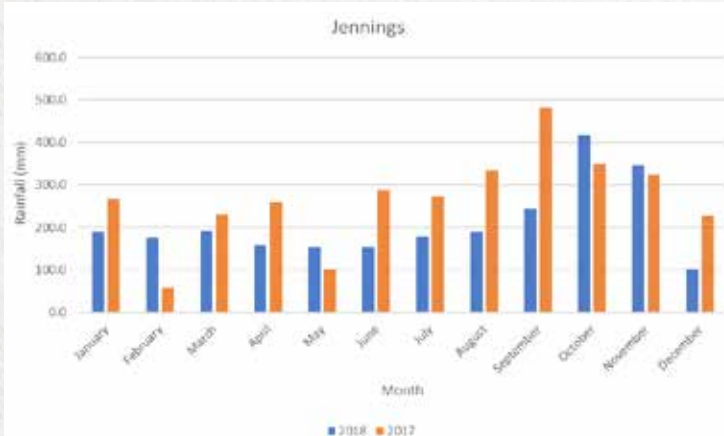
For the reporting year 2018, the department’s efforts were focused on field data collection and the mapping of the distribution lines in South Leeward, North Windward and a portion of North Leeward. The collection of GIS data on these lines by areas are as follows:



CLIMATE SUMMARY

The total rainfall over 2018 was below normal with the Hermitage rainfall station recording 4165.9 mm(164 inches). The month of October was the wettest with 660.8mm (26 inches) of rainfall recorded at Montreal rainfall station. This station had an 18.8 percent rainfall reduction in comparison to 2017. The minium rainfall was recorded in April.

The monthly mean maximum air temperature was 31.4 degrees celcius which was recorded at Rabacca Climate station in September and the minimium monthly mean air temperature was 21.9 degrees celcius which was recorded at Dumbarton agricultural station in February.





MELISSA MCKENZIE
INFORMATION TECHNOLOGY
MANAGER

INFORMATION TECHNOLOGY REPORT

During the year 2018, the information technology department continued to expand its support services to the diverse areas of operations of the solid waste management Unit and the water and sewerage operations.

Quite apart from these support services, the department also continued with its drive of renewal, replacement and upgrade of its hardware and software inventories along with engaging in routine and unplanned maintenance of same.

1.0 ROUTINE OPERATIONS

The following routine operations were consistently carried out during the year;

- Testing of internal and external backup power sources
- Scheduled backups of ALL servers

- Security updates
- Software updates
- Data entry of meter readings, and bank and agency payments
- Monthly billings & postings
- Bill Printing
- 170 repairs & fixes
- Installations of new and replacement hardware and software
- Individual user support

2.0 DEPARTMENTAL SUPPORT

PUBLIC RELATIONS & MARKETING DEPARTMENT

- Updating of CWSA website, to include current information on projects, public relations activities and e-bill service
- Purchase and installation of a new projector unit

ENGINEERING

- SCADA – Upgraded the application software
- Water Resource Unit – Installation of new servers and software programs
- Operations & Maintenance – maintenance of vehicle tracking software

- Operations & Maintenance – Adaption of Helpdesk Software for use by the department

- Electronic surveillance enhancements at all district offices
- Training of staff on the use of Helpdesk



Information Technology Staff

CUSTOMER SERVICE

- Implementation of E-bill view notification
- E-bill service in-house training
- Electronic complaints management

ACCOUNTING

- Service Management (SM) Invoice Transaction Number Changes
- Cash Receipts printer problems investigated
- General Accounting Software Updates – Service Management SM, GL, EF



INFORMATION TECHNOLOGY

- Purchase and installation of upgraded servers and software
- Purchase and installation of dehumidifiers
- Improvement to cooling units in server and printing rooms
- Training of staff using HELPDESK

3.0 ADMINISTRATIVE - POLICY & PROCEDURES

- Re-circulation of System Development Life Cycle (SDLC) Policy
- Review of CWSA Disaster Recovery Plan

The Information technology department will continue, in concert with user departments, to research and leverage new technology for the benefit of all users and departments of the organization.





PHILLIP DALRYMPLE
CUSTOMER SERVICE
MANAGER

CUSTOMER SERVICE REPORT

During 2018 the CWSA consolidated its service offerings in all areas of the customer service spectrum, recognizing that customer service is not only what is experienced in the waiting line at bill payment but includes other important metrics such as;

1. *Water Quality*
2. *System Downtime*
3. *Information & Notices*
4. *Complaints management*
5. *Opening Hours*
6. *Standing in the waiting line*
7. *Meter Reading*
8. *Billing e-bill view*
9. *Rates and charges*
10. *New connections & reconnections*
11. *Customer relations*

WATER QUALITY

During 2018 PAHO/WHO drinking water standards were consistently met by our engineering department and resulted in very few customer complaints. The widest variation came in water turbidity readings that were found

to be outside of the limits on very few occasions in some of the smaller systems, including Sandy Bay , however these were for very short periods.

SYSTEM DOWNTIME

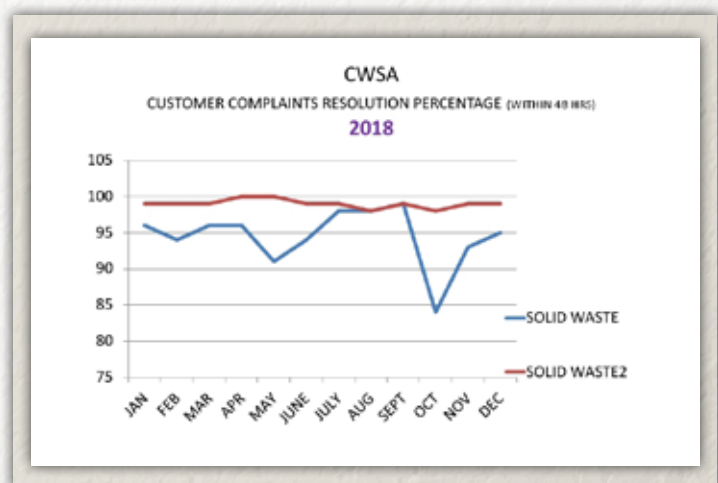
During the period under review, total system downtime was kept to lower than 0.5% on seven of our eleven systems. Downtime in all instances was related to either planned or emergency maintenance due to the effects of adverse weather. No system downtime went beyond 24 hours during the year 2018.

INFORMATION & NOTICES TO THE PUBLIC

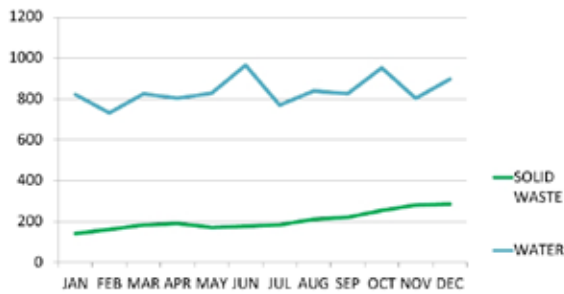
Thanks to the PR and Marketing department and their use of the social and electronic media, information on planned activities within the CWSA was disseminated in almost all instances at least one clear day in advance. That same metric was achieved for all planned outages. All unplanned outages during the year were as a result of the effects of prolonged severe adverse weather conditions.

COMPLAINTS MANAGEMENT

During 2018, water supply complaints were related mainly to leaks, broken lines and blocked lines, the CWSA achieved 99% average resolution of its water supply services complaints within 48 hours. A similar 90% resolution rate was also achieved for solid waste issues.



CWSA – COMPLAINTS LOG REPORT 2018



dedicated crop of meter readers. Meter readers now also provide early warnings to customers who may have leaks and whose consumption pattern is observed to be outside of the normal.

BILLING

Customer billing cycles were maintained 100% of the time during the period under review. Bill distribution in some parts of the mainland and in the Grenadines continue to be problematic during the period due mainly to lack of action by independent distributors and also lack of postal addresses given by customers.

The department will continue to work in 2019 with the marketing department to promote the use of the e-bill view feature along with internet/electronic bill payment.

RATES

The CWSA still boasts the cheapest water rates in the Caribbean area with a 24/7 service in 98% of the Country. These rates were last increased to only \$6.50 per month per household as far back as 2010.

NEW CONNECTIONS/RECONNECTIONS

During the period under review the CWSA was able to complete an average of 85% of its requests for new connections within one week of the customers paying for the service. On average, 48 applications for new connections were received per month. Reconnections continue to meet the 48 hours target 100% of the time, with an average of 81% being reconnected on the same day of payment.

OPENING HOURS

The CWSA continues to offer extended opening hours for bill payment and customer queries from 7:30am. This was done to facilitate the working public who are required to begin their jobs at 8am in Kingstown.

The 'after hours' service, continues to be effective in facilitating customer care, emergency management and complaints resolution at evenings and nights when working conditions are non-ideal, but when service is most appreciated by our customers.

THE WAITING LINE

Although not the sole criteria for judging customer service, the CWSA's paying customers at its Montrose main office still experience an average of 1 minute and 15 seconds per person/transaction. Efforts are continuing towards reducing this time and also to offer several more convenient bill payment alternatives.

METER READING

During 2018, meter readings remained a routine data collection activity performed by a



One of the Customer Care Department's Fleet

CUSTOMER RELATIONS

In recognition of the importance of customer relationships and the customers' experience interacting with the CWSA employee, customer service staff increased the use of electronic mail and social media to enhance customer relationships and improve the efficiency of communication.

The CWSA also continues to resist any move to go the way of the automated telephone answering service, preferring instead the more efficient and intimate form of communication at our reception area.





SOLID WASTE MANAGEMENT REPORT



WINSBERT QUOW
SOLID WASTE MANAGER

1.0 OVERVIEW

The CWSA's most recent vision for the Solid Waste Management Unit (SWMU) is 'to achieve financial viability for the unit while maintaining high quality solid waste management services.' In pursuing this vision in 2018, the SWMU continued to explore ways of making the activities associated with its waste collections and disposal operations more efficient while improving cost recovery particularly in the Grenadines. Additionally, with the passing of the Occupational Safety and Health Act in November 2017, efforts were made to review and upgrade staff accommodations and operations procedures in the interest of promoting a safe work environment and safe working practices.

Vital to the survival and evolution of the solid waste management service in St. Vincent and the Grenadines is the forging and strengthening of partnerships with other governmental and non-governmental stakeholders. Our major stakeholders continue to be the Public Health Department, the Police Force, the Sustainable Development Unit, National Parks, VINLEC and All Islands Recycling Inc (AIR Inc.). To this end, in 2018 the SWMU worked along with these organizations on a number of initiatives aimed at the operationalization of national policy, law enforcement, environmental protection, cost recovery and recycling.

2.0 WASTE COLLECTION OPERATIONS

2.1 VEHICLE ACQUISITION

Two major equipment acquisitions were made in 2018 to achieve a higher level of efficiency and quality in performing the service. A six (6) cubic meter volume capacity Isuzu compactor truck was acquired and fully commissioned in April to service the daily collections routes and a fourteen (14) cubic meter volume capacity Mercedes truck was commissioned in June 2018 to perform functions such as (a) white goods and derelict vehicle collections (b) the transport of green waste and (c) the movement of soil required occasionally at the landfills. This truck is fitted with a crane which has a maximum lifting capacity of 4.5 metric tons suitable for the applications for which it is deployed.



Newly commissioned Mercedes crane truck

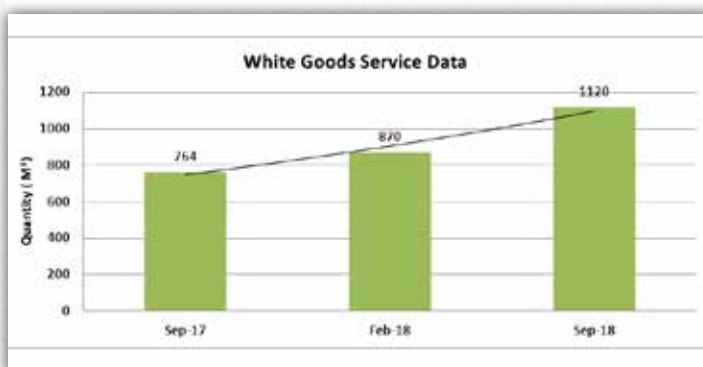


The newly acquired 6 cm³ compactor truck

2.2 WHITE GOODS COLLECTION

The island-wide white goods collections service was performed twice during 2018, the first from February 19th – 24th where 870 cubic meters of material was collected which was a 13% increase from the previous event performed in September 2017. The second instance was from September 24th to 29th 2018 where a total 1,120 cubic meters of material was collected. The September 2018 installment is the 15th island-wide white goods service performed on mainland St. Vincent and the second largest capture of white goods since its introduction in 2011 where 1,922 cubic meters of material was collected. The residents on Bequia, Canouan and Union Island enjoy a once monthly white goods service performed by the private waste collection contractors.

There has also been a steady increasing trend over the last three occasions of the service as shown in the graphic below. The service is thought to have also contributed over years to the reduction of flooding throughout the state owing to the reduction of bulky waste material dumped illegally in drains and other waterways which usually contributes to blockages.



2.3 DERELICT VEHICLE PROGRAMME

At the end of 2018, a total of 460 derelict vehicles were removed from public spaces under the derelict vehicle programme since its beginning in July 2017.

The derelict vehicle programme is a collaboration between the Police, the Public Health Department and the CWSA to enforce the provisions of the Litter Act in an effort to curb the issue of the indiscriminate

dumping of derelict vehicles on public spaces. Priority was given initially to areas along the main highway as these pose the greatest threat to road safety and devalues the aesthetic appeal of the country as a whole.

In August of 2018, a collection of derelict vehicles was done on the Grenadine island of Bequia where a total of twenty-one vehicles were removed. The vehicles were taken to the landfill at Rain Tree and crushed by the heavy equipment in preparation for transport to St. Vincent.

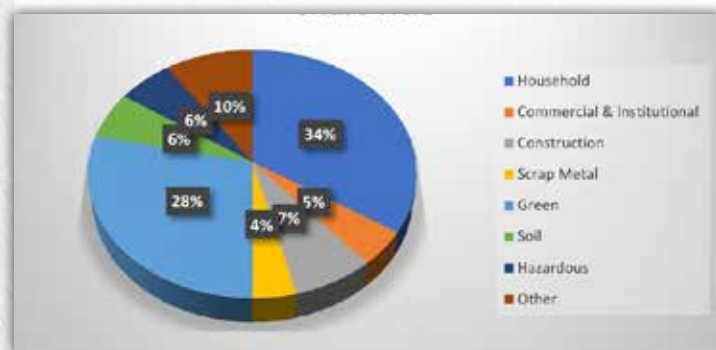


The crane truck in use for the Derelict Collection Initiative

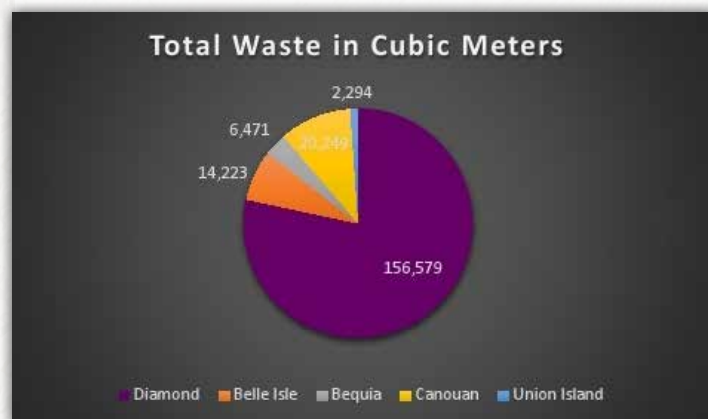
3.0 WASTE DISPOSAL SERVICE

3.1 DISPOSAL STATS

Our records indicate that a total of 199,816 cubic meters of waste was received at the five landfills operated by the SWMU throughout the state. This was 6 % less than the total amount received in 2017, that being 212,776 cubic meters. The distribution of the total waste received at the different landfills is presented in the graphic below.



Commercial and institutional waste, (waste received from businesses and governmental institutions) accounted for the largest percentage of the waste delivered to the landfills in 2018 at 33 %. The second and third highest quantities were attributed to household and green waste at 24% and 20 % respectively. The percentages of waste delivered by category are shown in the following graphic.



3.2 IMPROVEMENTS IN INFRASTRUCTURE

Surveillance cameras were installed at the Diamond Landfill in July to generally improve security and to better monitor operations, particularly disposal activities that occur after regular closing hours such as the use of the septage lagoon and the dumping of commercial waste by contractors who work for late-closing businesses. Work also commenced on the excavation of a new waste cell to be done in-house with the use of the SWMU's fairly recently acquired track loader, bulldozer and dump truck.

Work was also done at the Belle Isle Landfill to improve staff accommodations. This work included the refurbishing of the site kitchen and outfitting it with modern and adequate appliances and the retrofitting of the changing room with lockers so that each worker can have adequate space for the secure storage of personal items.

Similarly, the Bequia landfill site office was renovated and some of the office furnishings upgraded in the interest of creating a more comfortable and safe

working environment. These recommendations were made by the CWSA's Safety and Health Committee following an evaluation of the sites.



The newly refurbished Bequia Landfill Office

4.0 TRANSPORT AND MAINTENANCE

The SWMU through its Senior Operations Engineer oversees the transport and maintenance function for the CWSA and in 2018 this department performed well in guaranteeing the availability of adequate equipment for the execution of projects, customer care and operations and maintenance activities undertaken by the various departments within the organization.

A total of nine hundred and seventy (970) mechanical servicing or repair jobs were done by the department during the period, reflecting an average of 81 jobs per month. Of this total, 75% were adjudged to be completed within a reasonable timeframe while 11% were delayed awaiting the importation of spares and another 5% delayed due to the outsourcing of the repair work to specialist private contractors.

Under the vehicle and equipment replacement programme eight (8) new vehicles were procured in 2018 and eleven (11) sold and at the end of 2018 the

total number of vehicles and heavy equipment in the CWSA's fleet was fifty - eight (58).

The major challenge faced by the department in 2018 was the ongoing maintenance needs of the Liebherr track loader deployed on the Grenadine Island of Canouan to push, compact and cover the waste delivered to the landfill. This equipment is seventeen (17) years old and experiences regular failures consistent with the age and the harsh operating environment. Additionally, maintaining heavy equipment at a remote location poses some challenges in resource mobilisation and job execution which increases the cost of maintenance.

5.0 COST RECOVERY STATUS

The legislatively supported arrangement between the CWSA and VINLEC to link the non-payment of Grenadines' environmental levies to the disconnection of electricity services came into effect on January 1st 2018. The management of the CWSA decided then that all Grenadines environmental bills will carry forward a zero balance as of December 31st 2017 in response to a unanimous request from customers there.

At the end of December 2018, the total Grenadines environmental fee receivables were \$262,000 with \$274,000 paid from a total billing of \$541,000 reflecting an overall compliance of 51 %. However, there were still a significant number of customers who had not paid any environmental levy since the balances were zeroed. Most importantly, this very low payment compliance limits the pace at which the SWMU can move forward in implementing a more sustainable solution for waste management in the Grenadines by incorporating activities such as the closure of traditional landfills and the establishment of a modern recycling facility.



IN LOVING MEMORY

In 2018, the Central Water & Sewerage Authority bade farewell to
colleagues, coworkers and fellow brothers;

Noel O'Neil

R. Andrew Cummings QC

Grantley Williams

Christian "Cims" Martin

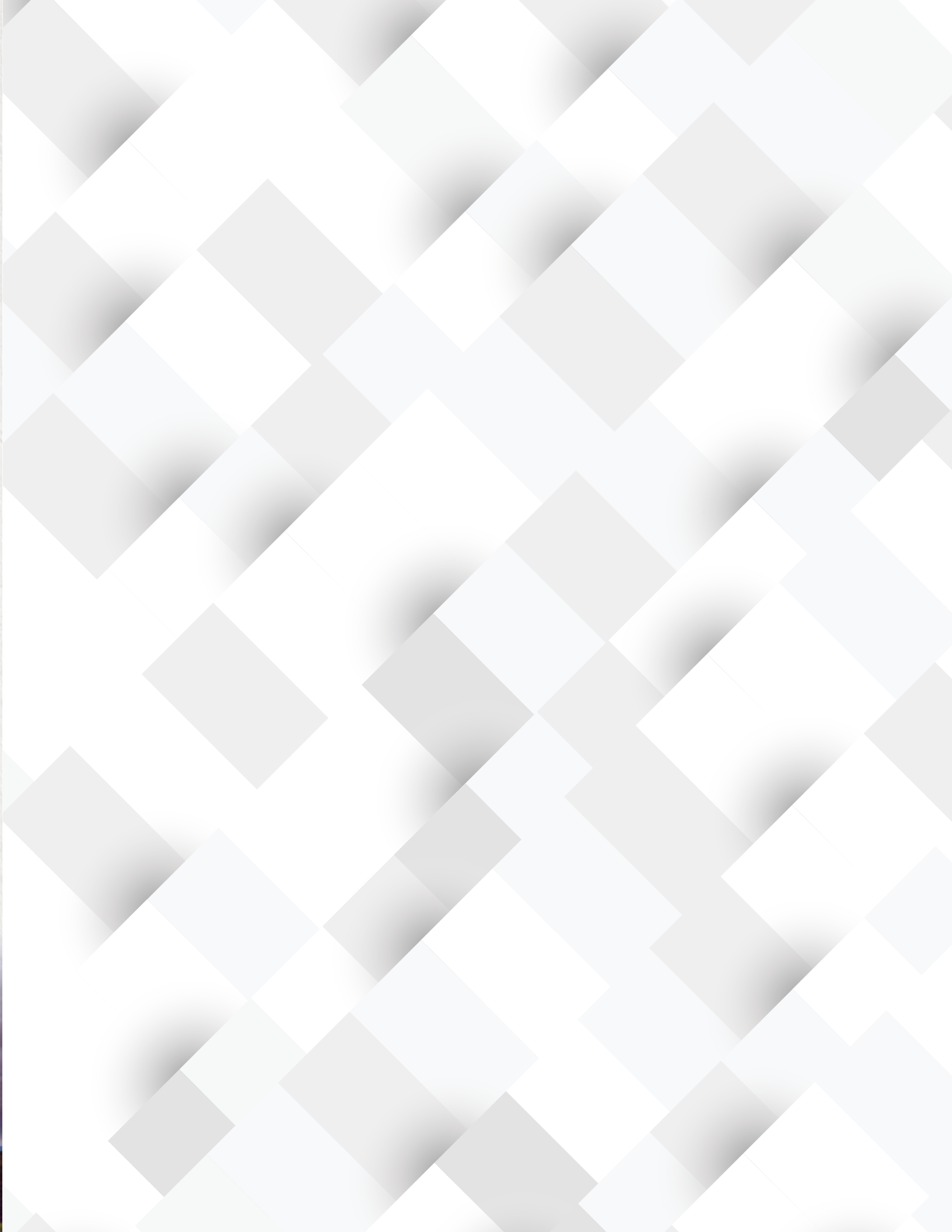
To their families, friends and loved ones, we offer our deepest condolences.

"MAY THE LORD WATCH BETWEEN ME
AND THEE, WHEN WE ARE ABSENT
FROM ONE ANOTHER.

PARTINGS COME TO LET US KNOW,
WE LOVE MORE DEEPLY THAN WE
SHOW,

BUT LOVE IN DEATH SHOULD LET US SEE,
WHAT LOVE IN LIFE SHOULD REALLY BE."





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Ms. Rae-Anne Mc Dowall

Mr. Garth Saunders



Our Mission Statement

To consistently provide all consumers with the highest quality water supply, sewerage and solid waste management services in an efficient and affordable manner.