



CHAIRMAN'S MESSAGE Kearney Gomez, MBE, JP



DIRECTOR'S MESSAGE Gelia Frederick-van Genderen, PhD 2



GENERAL INFORMATION
Suppliers of the world's most popular drink for 35 years.



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A year of celebration and innovation.
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OUR PEOPLE



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Unqualified audits of the Authority's accounts.

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On behalf of the Board of the Water Authority.

This Annual Report outlines the performance of the Water Authority during the 2018 fiscal year and compares it to the planned performance documented in the Ownership Agreement for the Authority, or as amended through the supplementary appropriation process, and also against prior year performance. The requirement for an Annual Report is prescribed under section 52 of the Public Management and Finance Law (2017 Revision) (PMFL).

The annual report highlights the **key** strategic goals of the organisation, the achievements throughout the year as well as plans for the upcoming financial period.

This year represents the Authority's 35th Anniversary since its official founding in 1983. Having been part of the initial formation of the Authority, I am honoured to be presiding over the Water Authority Board during this milestone year.

Over the past 35 years, the Water Authority has worked diligently to uphold its *mission* statement to provide piped water services, wastewater services, and

groundwater protection in the Cayman Islands.

As the Cayman Islands continues to enjoy a period of sustained socio-economic growth, it is incredible to think how different the development of these islands would have been without access to these essential services.

The Authority also continues to shine as an example of *good corporate citizenship* in the local community. In addition to raising money for a different local charity each year through the annual Project Angel Tree, the staff of the Authority also participated in numerous fundraising athletic events, dress down days, and even supported Meals On Wheels throughout the month of August by delivering meals to their housebound clients.

I would like to sincerely thank all Water Authority Board Members and, on behalf of the Board, to thank each and every staff member of the Water Authority for their continued hard work and organisational commitment. Thank you for helping to make 2018 another successful year!

Water Authority Board Chair Kearney Gomez, MBE, JP



Having served as Director of the Water Authority since 2000, I am pleased to present the 2018 Annual Report on behalf of the Authority's management team and staff.

This year marks **35 years** since the Authority was officially founded and, on a personal note, 30 years since I first joined the Authority as Operations Scientist in 1988.

As such, this year has been one of celebration and reflection. Even for someone who has been with the Authority for so many years, it can be hard to explain the pace of development that the organisation has experienced. What started out as a small government department working out of a converted house is now a multimillion-dollar business with five reverse osmosis plants serving over 18,300 customer accounts.

The Authority has seen many successes over the past 35 years but it has not been without its challenges either - this year also marked 14 years since Hurricane Ivan devastated our islands. Nevertheless, the Authority has continued to keep pace with development, provide

reliable, affordable water and wastewater services to our customers and protect local groundwater resources, all while delivering steady returns on investment.

35th ANNIVERSARY CELEBRATIONS

In recognition of this important milestone in the Authority's history, the Authority launched a year-long schedule of internal and external events focused on the key themes of: 1) tap water, 2) education, and 3) employee engagement.

Focusing the Authority's celebrations around these three core values ensures that this important celebration would have a sustained, meaningful impact within the local community.

For its efforts, the Authority was selected as a finalist for "Business of the Year" by the Cayman Islands Chamber of Commerce as part of its annual Business Excellence Awards.

WATER & WASTEWATER OPERATIONS

Over the past year, the Authority's water and wastewater operations have continued to expand in both Grand Cayman and Cayman Brac. The Piped Water Expansion Project continues to

break ground in Cayman Brac and at the end of 2018 we have 329 active customers in the Brac.

The Authority also saw the completion of a new reservoir at its Red Gate Water Works site, bringing the total to 11 with a combined storage capacity of approximately 17.4 million US gallons.

COMMUNITY SPIRIT

The Authority continues to demonstrate *corporate responsibility* in the local community. This year, the Authority's staff came together to form a *social committee* with the aim of spearheading social, athletic, and community-focused events each quarter.

Events spear-headed by the social committee included: an Earth Day Clean-Up and PR campaign, a World Water Dress Down Day, Meals On Wheels deliveries throughout the month of August, and the expansion of the Authority's annual Project Angel Tree initiative to include a service element.

The Authority also used its 35th



Anniversary as an occasion to make a \$50,000 donation to the Cayman Islands National Museum to facilitate the purchase of a new animatronic robot in the likeness of the Hon. Annie Huldah Bodden OBE.

AN EYE ON THE FUTURE

Although this year has been marked by a great deal of reflection as to how far the Authority has come, the Authority continues to operate with an eye on the future.

The Authority's ongoing Piped Water Expansion Project in Cayman Brac is expected to take another 12 years to complete and, during that time, the Authority will work to introduce trucked water service to the residents of Little Cayman.

However, with the continued **hard work** of the Authority's staff, the **dedication** of the Authority's Board and management team, and the support of the Ministry of Education, Youth, Sports, Agriculture and Lands, I have no doubt the next 35 years will be just as successful for our organisation.

We look forward to another 35 years of supplying the Cayman Islands with the world's most popular drink!

Water Authority Director Gelia Frederick-van Genderen, PhD



OUR MISSION - BY THE NUMBERS



903,290,000

Gallons of wastewater treated in 2018.



42,000

Tests conducted on drinking water during 2018.



Total water service connections as of 31 December 2018



12,499,565

Gallons of trucked water delivered in 2018

MISSION STATEMENT

The Authority's mission is:

- ➤ To ensure that the entire population of the Cayman Islands has access to a pure, wholesome and affordable supply of potable water.
- ➤ To protect and develop groundwater resources for the benefit of present and future populations of these islands.
- ➤ To provide for the collection, treatment and disposal of sewerage in a manner that is safe, efficient and affordable.
- ➤ To operate in such a manner as to be financially self-sufficient while contributing to the economy of these islands and achieving a reasonable and acceptable return on capital investments.

GOVERNANCE

- ➤ The Authority is a statutory authority that falls under the portfolio of the Ministry of Education, Youth, Sports, Agriculture & Lands (EYSAL).
- As at 31 December 2018 the minister responsible for that portfolio is the Honourable Juliana O'Connor-Connolly, JP.
- The Authority's operations are governed by the Water Authority Law, the Water Authority Regulations, the Wastewater Collections and Treatment Law, and the Water (Production and Supply) Law.
- ➤ The Authority operates under the guidance of a Cabinet-appointed Board.



- As of 22 May, 2017, legislation came into force that made the Utility Regulation and Competition Office (OfReg) the economic regulator of the water and wastewater sector. Therefore, the Authority has relinquished its water sector regulatory functions to OfReg. OfReg is also responsible for creating and implementing a regulatory framework to regulate the Authority.
- ➤ The Public Authorities Law, 2017 came into force in May 2017 and has affected how the Authority's recruitment process to ensure compliance
- > The Procurement Law, 2016

SCOPE OF ACTIVITIES

The Water Authority of the Cayman Islands (the Authority) is a statutory body, wholly owned by the Government of the Cayman Islands (the "Government"), established on 01 January 1990, under the Water Authority Law (Law 18 of 1982), as amended.

The Authority is principally engaged in the management of water supply and sanitation affairs of the Caymans Islands including the provision of public water supplies, sewerage systems and the management, development and protection of water resources.

The Authority has a dynamic 10 Year Development Plan to predict and plan for expected growth and development. This plan is designed to allow for modifications to suit the changing needs of the islands.

MANAGEMENT DISCUSSION & ANALYSIS

INTRODUCTION

This year marked another successful fiscal term for the Authority. The Authority continues to stand out as an example of a well-managed utility that delivers impressive results both in terms of revenue and service deliverables to our customers. Currently, the Authority provides water services to over 18,300 customers and wastewater services to over 620 customers.

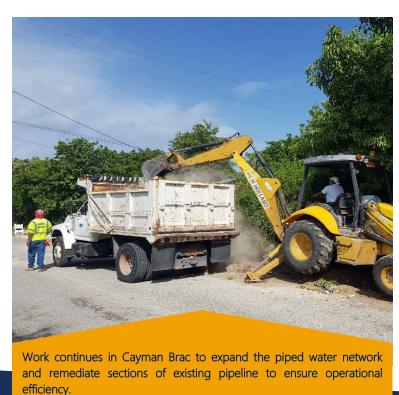
AUDIT POSITION

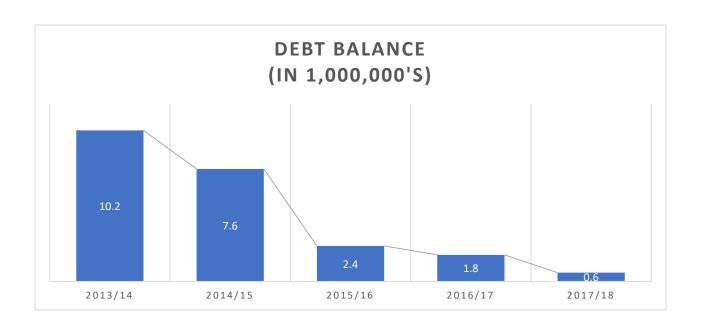
The Authority annual audit was put out to bid in May, 2018. The process was overseen by the Office of the Auditor General (OAG) and resulted in KPMG securing the tender.

KPMG has been the main auditors for the last 7 audits, working together with the Office of the Auditor General (OAG) to jointly issue the financial statements for the Authority.

FINANCIAL POSITION

Due to the moratorium on external borrowing, as introduced by the Cayman Islands Government in 2010, the Authority relies on its strong cash position to be able to continue with scheduled capital projects without outside financial assistance. The Authority will draw on its financial strength in the years ahead to continue with various critical capital investments (most notably the Cayman Brac Piped Water Expansion Project, which includes the construction of the Bluff Water Works) and essential remediation projects to maintain the Authority's existing assets.





The Authority has not taken on any new debt obligations during the 2018 fiscal period. The Authority's existing debt is consistently being paid down, resulting in decreased interest expenses. The only remaining loan at 31 December 2018 (\$613,000) will be re-paid in its entirety in June 2019.

Although the Water Authority Board has consistently foregone rate adjustments since 2013 due to the anticipation of the implementation of the RCAM, this year the Water Authority Board decided it would be prudent to adjust consumer rates. Effective 1 July, 2018, the Authority's base rates increased by 2.56%. In spite of this increase, a gallon of tap water still costs less than \$0.03, almost 98% cheaper than the price of bottled water.

The Authority, via the Public Service Pension Board, requests annual actuary confirmations on the estimated balance of the Defined Benefit Healthcare plan.

The Board of the Authority remains committed to its employees in their retirement by engaging annual actuary reports and recognising the full health care liability at the end of each financial period.

The estimated liability fluctuates from year-to-year as the reports are dependent on the group of eligible employees and on actuary assumptions. The overall liability is expected to grow, taking into consideration rising health care costs, aging and expanding workforce.

Annual remeasurements reflect the changes in financial assumptions, which has caused the projections to increase in the 2016/17 year, but decrease in 2018.

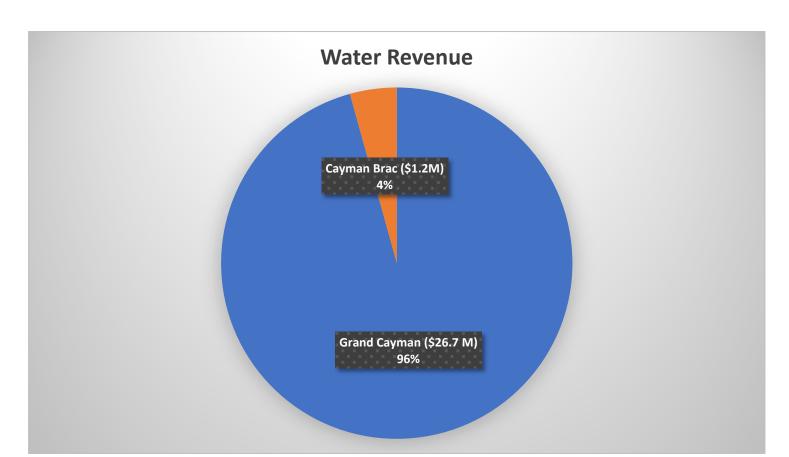
During the 2018 fiscal year, the Board provided dividend payments totalling \$250,000 (2016/17: \$250,000) to the Cayman Islands Government.

To take advantage of reserved cash balances the Board directed the Authority to place \$15 million on deposit with the Cayman Islands Government Treasury Department. Staggered rollover dates of the funds ensures funds are available for necessary capital projects and day to day operations.

RESULTS FROM OPERATIONS

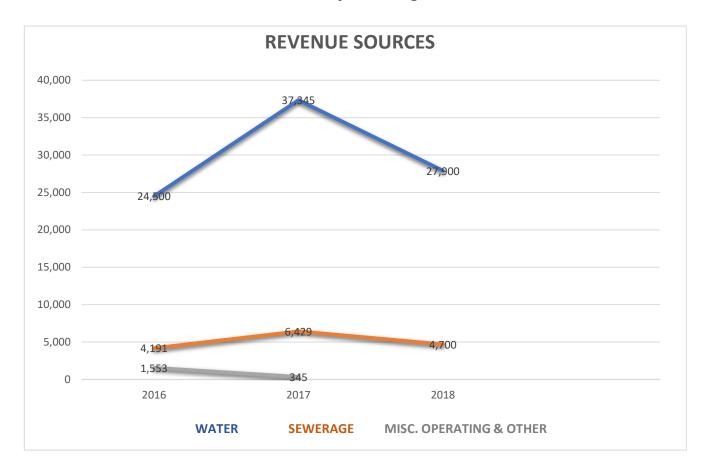
Total revenues of \$32.7 in fiscal 2018 (12-months) (2016/17 – 18-months: 44.1 million) was derived from 3 main sources: Sale of potable water, treatment of wastewater and miscellaneous, inclusive of royalties.

Water Revenue: \$27.9 million in water revenue was collected in the 12-month period ending 31 December 2018.



Wastewater Treatment: \$4.7 million in sewerage fees and septage disposal was collected in the 12-month period ending 31 December 2018. The growth is attributable primarily to the continued expansion of the Camana Bay corporate and residential developments.

The structure of the revenue within the Authority remains relatively unchanged over the last decade, with the majority of the income continuing to come from the Water sales, followed by Sewerage fees.



Expenses and Net Income: With careful and prudent financial management, expenses stayed in line with prior years (normalized). The Authority is subject to rate variations by external vendors, for example fuel expense fluctuations directly impact the cost of production/distribution of water and treatment of wastewater.

2018/2019 Budget: The Ownership agreement for the Water Authority for the 2-year (01 January 2018 – 31 December 2019) budget period was presented to the BMU (Budget Management Unit) on 08 September 2017. Consistent with the Authority's internal reporting four key strategic goals were identified and major projects were categorised accordingly. The highlights of the budget process are summarised in the "Looking Ahead "section on page 24.

As part of the overall government budget reporting the Authority presented financial forecasts in the 2018 budget document that showed a projected net income of \$2.2 million in 2018. As shown on page 46 in the 2018 audited Financial Statements the Authority showed a net income for the period of \$4.9 million and a comprehensive income of \$8.4 million after pension and health adjustments. Prudent financial management, lower than expected fuel costs and detailed expense monitoring allowed the Authority to present a higher year-end financial position that presented in the 2018 Ownership Agreement.



The wastewater team conducts daily readings of wastewater pump houses, to monitor the function of the system.



PRIORITIES & ACHIEVEMENTS

The achievement of the four goals below is essential to the Authority's ability to continue to serve its water and sewerage customers to a high standard of service. Over the past fiscal year, the Authority has continued to make great strides towards the accomplishment of these four strategic priority areas:

GOAL: MAINTAIN ADEQUATE INFRASTRUCTURE TO OPERATE EFFICIENTLY.

Area: Grand Cayman

Includes: - Miscellaneous water projects

- Construction of a purpose built file storage building
- Advanced Metering Infrastructure (AMI) pilot study



GOAL: MAINTAIN WATER PRODUCTION, CAPACITY, DISTRIBUTION AND STORAGE.

Area: Grand Cayman

Includes: - Construction of a new water storage tank at the Red Gate Water Works facility

- Re-negotiated the operating agreements with OCL



GOAL: WATER DISTRIBUTION EXTENSION AND BLUFF WATER WORKS FACILITY.

Area: Cayman Brac

Includes: - Providing access to piped water to 80% of Brac residents by 2030

- Developing the Bluff Water Works facility



GOAL: IMPROVE INTEGRITY OF THE EXISTING COLLECTION SYSTEM AND FUTURE EXTENSIONS.

Area: Wastewater

Includes: - Ongoing remediation project and CCTV survey

- Manhole remediation project



GOAL 1: MAINTAIN ADEQUATE INFRASTRUCTURE TO OPERATE EFFICIENTLY

This year, the Authority completed several pipeline upgrades and extensions in order to maintain operational efficiency and accommodate future development.

The Authority's plan to construct a purpose-built file storage facility has been delayed as the Authority evaluates its additional building needs and reconsiders how to more effectively manage for future infrastructure growth.

The internal AMI project team travelled to Turks and Caicos Islands in early March 2018 to view the AMI installation and discuss their project and any issues that arose. The visit was facilitated by a vendor, Smart Earth Technologies.

On the basis of the visit and other investigations it was recommended that the Authority carry out a pilot project to test the Smart Earth Technologies remote shut-off valve, a new type of water meter and software integration to the Customer Service software as well as providing a web-portal for customers.

It was agreed to proceed on the basis of installing a 100-meter pilot project to test this AMI within the Authority's distribution system. A proposal from the vendor was received in August 2018, a decision is pending.



The Authority successfully completed the construction of a new water storage tank at the Red Gate Water Works Facility. This new reservoir brings the Authority's total number of water reservoirs to 11 (9 in Grand Cayman, 2 in Cayman Brac). The Authority's 11 reservoirs have a combined storage capacity of 17.3 million US gallons. This amount equates to approximately 4.5 days' worth of water for the country at current daily usage levels.

Florida Aquastore commenced erection of the 2.0 MG glass-fused-to-steel bolted tank in July 2018 and completed it on 24 August 2018 at a total cost of \$1.0 million.

Operating agreements with Ocean Converstaion (Cayman) Ltd. (OCL) for the North Sound Reverse Osmosis Plant and the Red Gate Reverse Osmosis Plant expired on 01 April 2018 and 01 July 2018 respectively. Approval was sought and granted from the Central Tenders Committee to extend the current operating contract with OCL for the North Sound RO Plant to 01 July 2018 and subsequently extended to 01 February 2019 to allow adequate time for the formal bid process to proceed.





Throughout 2018 the Authority continued its mandate to extend the public water supply, monumentally connecting the Faith Hospital on 12 February 2018 and then moving to connect customers on the side roads, alternating resources between the pipeline installation and the connection of new water services. Work commenced on the second phase of 2018 towards Ashton Reid Drive along Dennis Foster Drive and 5,050 feet of pipeline was installed.

As a continued incentive for Cayman Brac residents the Board agreed at the 289th meeting to continue to waive the installation fees. The total number of piped water customers increased from 277 in January 2018 to 329 at the end of December 2018, an

increase of 18%.

Exploratory Drilling contract documents were drafted in August 2018 and sent to the four local well drilling companies in September 2018. The work covered under the contract comprises of two boreholes and the collection of continuous rock core samples therefrom up to approximately 500 feet in depth. The objective is to obtain site specific geological information for the design of the abstraction and disposal wells on the Bluff Water Works site in Cayman Brac for the future Reverse Osmosis plant. An additional borehole will be drilled in Little Cayman in order to provide geological information for when the containerised reverse osmosis plant will be relocated from Cayman Brac to Little Cayman. The deadline to submit proposals was in November 2018, however the bids came in 90-315% higher than originally estimated and the Authority will need to consider its options as this work is critical for the design of the abstraction and disposal wells in the sister islands.

GOAL 4: IMPROVE INTEGRITY OF THE EXISTING COLLECTION SYSTEM AND FUTURE EXTENSIONS

The Authority embarked on a project to replace the lining of the wet well on Pump Station 1, which prevents sewer gas from attacking and destroying the concrete of the pump station. The existing liner was removed and replaced with PVC liner. This liner will also be utilised to line manholes that are currently unlined. The first two manholes remediated using this method were completed in November 2018.

Upgrades were also conducted on Pump Station 12: the valve vault was upgraded and its ductile iron force main was replaced with approximately 800 feet HDPE (high density polyethylene) force main.

Additionally, the New Works team also installed a new sewer force main along North Church Street from the site of the proposed Tree House Hotel to an existing sewer manhole along West Bay Road.





LOOKING AHEAD: FUTURE PROJECTS

The Authority maintains a 10-year Capital Development & Maintenance plan (CD&MP) which identifies and prioritises the capital assets and financial resources required over the next ten years for the Water Authority of the Cayman Islands to successfully carry out its statutory mission to provide water and wastewater infrastructure and management of groundwater resources at a reasonable cost; to improve quality of life; to promote growth and development; and to do this all at no cost to the Cayman Islands Government.

Looking forward the Authority added two additional strategic goals for future projects, Goal # 5, Little Cayman – Provide Potable Water and Goal # 6 to renew vehicles and equipment to ensure efficient and relational equipment to support the Authority's operations and capital projects.



GOAL: MAINTAIN WATER PRODUCTION, CAPACITY, DISTRIBUTION & STORAGE.

Area: Grand Cayman

Includes: - Expansion of treatment, pumping and storage facilities

- Additional water tanks
- Expand capacity of Red Bay booster & pumping station

GOAL: MAINTAIN ADEQUATE INFRASTRUCTURE TO OPERATE EFFICIENTLY.

Area: Grand Cayman

Includes: - Maintain and improve the level of service of existing water supply

- District Meter Vaults and Advanced Meter Infrastructure



Area: Cayman Brac

Includes: - Expand distribution, treatment, pumping and storage facilities to maintain current and meet future water supply requirements in

Cayman Brac



Area: Wastewater

Includes: - Maintain current and meet future wastewater infrastructure

requirements.

GOAL: PROVIDE POTABLE WATER TO LITTE CAYMAN

Area: Little Cayman

Includes: - Building infrastructure to provide potable water to residents of Little

Cayman.

GOAL: RENEW VEHICLES AND EQUIPMENT

Area:: Grand Cayman

Includes: - Ongoing maintenance and replacement program designed to

Authority's capital and operational projects.















REGULATORY & STATUTORY

The Water Authority relinquished its water sector regulatory functions to the Utility Regulation and Competition Office (OfReg) in May, 2017, following the passage of the Utility Regulation and Competition Law 2016. The Authority continues to perform its legally mandated statutory functions as the protector of groundwater resources in the Cayman Islands.



The Authority and OfReg continue to strengthen their working relationship in the joint commitment to the regulation of the water sector in the Cayman Islands.

The Authority continues to operate its Onsite Wastewater Management Programme (OWMP), which is a partnership between the Authority as regulator, home and business owners as owners of wastewater treatment systems, and service providers as the business community who provide and service onsite systems. The Authority's Onsite Wastewater Treatment System Operation & Maintenance certification programme. Launched in 2017, the program continues to successfully train local service providers.

In addition, the Authority continues to actively maintain its working relationship with the Department of Environment (DOE) and the Department of Environmental Health (DEH) to address ad hoc environmental concerns. This year, the Authority stepped in to assist with a case of improper stormwater well waste disposal after local news media reported that the National Roads Authority (NRA) was discharging stormwater well debris into a wetland area off the Linford Pierson Highway.

The Authority hosted several multi-agency meetings as it worked alongside the NRA, DOE and DEH to resolve the issue of how to deal with stormwater well waste disposal in a safe, effective manner.



The Quality Control team worked to collect stormwater well waste for testing both at the Authority's Laboratory and at an overseas facility.

The Authority agreed to conduct scientific tests to characterise the waste and determine the levels of any contaminants present in the waste.

The Authority's Laboratory tested the samples for wastewater related parameters such as biochemical oxygen demand, total coliforms, including E. coli, nitrogen, and phosphorous, while samples were also sent overseas to be tested for the presence of metals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs).





OUR PEOPLE

At the end of the fiscal period, the Authority had a staff complement of 129 persons across a total of 6 departments under the umbrella of the Executive Office: Engineering services, Human Resources, Customer Service, Finance, Information Systems and Water Resources & Quality Control. There are 120 employees based in Grand Cayman and nine in Cayman Brac.

The Authority initiated a Compensation Review by McConnell HR Consulting (MHRC) in 2017 and at the 283rd Board meeting held on 16 August 2017 the Board approved MHRC's recommendations and instructed that the proposed salary structure be implemented effective 01 January 2018.



Water Authority Management Team (*I-r):* Joanna Welcome-Martinez, Tom van Zanten, Dr Gelia Frederick-van Genderen, Pat Bell, John Bodden, Lori Bergman, Hendrik-Jan van Genderen.

SOCIAL COMMITTEE



The Authority's Social Committee organised many charitable initiatives throughout the course of 2018, including a partnership with the Humane Society.

In January 2018 the Authority officially launched its internal Social Committee aimed at increasing the Authority's participation in local community/wellness and athletic events. The Social Committee's members are divided into three subcommittees: Athletics, Social. and & Health. The Social Community Committee is expected to continue to grow and encourage staff involvement the local community through volunteering and team participation.

In addition to numerous charitable initiatives, the Social Committee organised a Summer Bash for

employees and their families at West Bay Public Beach.

The Social Committee was responsible for organising a number of charitable and community events this year, including:

- The Authority's participation for the first time in the Cayman Islands Government Step Challenge.
- A month-long partnership between the Authority and Meals On Wheels during the month of August, during which volunteers from the Authority delivered meals to the charity's clients.
- A month-long partnership with the Cayman Islands Humane Society during the month of November, during which volunteers from the Authority walked shelter dogs.

COMMUNITY OUTREACH

The Authority also used the occasion of its 35th Anniversary to go above and beyond its normal charitable commitments to annual charitable initiatives such as the Cayman Islands Chamber of Commerce's Island-Wide Earth Day Clean Up.

In addition to cleaning dozens of bags of beach debris from a beach in the Spotter Way area of East End, the Authority also designed and implemented a week-long social media campaign dedicated to raising awareness about the 2018 Earth Day theme of #EndPlasticPollution.

The Authority also used the occasion of its 2018 celebration of World Water Day to host a staff Dress Down Day in support of Cayman's Acts of Random Kindness (ARK), a local non-profit. The donations made by staff were converted into Water Authority gift certificates that can be used towards water and sewerage bills to assist persons going through financial difficulties.

In addition, the Authority hosted booths at the Grand Cayman and Cayman Brac Agriculture Shows. The Authority answered questions from the community, encouraged customers to sign-up for e-billing, and served three delicious infused water options made using local fruits and herbs for visitors to try! The Authority also participated in a live radio interview with Radio Cayman during the 2018 Agriculture Show in Grand Cayman.

This year also marked the 60th Anniversary of the Cayman Islands Coat of Arms and the Authority participated in the Celebrate Cayman Summer Festival to mark this milestone occasion. The Authority hosted a booth featuring giveaways, an Instagram frame for attendees to take selfies with, and infused water tastings featuring local fruits and herbs.





EDUCATIONAL OUTREACH

The Authority continued to demonstrate its commitment to local education throughout the 2018 fiscal year through a series of initiatives, including: Its participation in the 2018 Cayman Islands Chamber of Commerce's Careers, Education & Training Expo, its Annual \$30,000 Scholarship, its Summer Work Experience Programme, its Educational Tour Programme, and the addition of a new \$25,000 Scholarship designed to support Caymanians attending local higher-learning institutions.

Although the Authority's booth is a regular feature at the Cayman Islands Chamber of Commerce Careers, Education & Training Expo, this year the Authority's booth was bigger and better than ever to promote WASH (Water, Sanitation & Hygiene) and STEM (Science, Technology, Engineering & Mathematics) careers to local students.

In November, 2018, the Authority announced Lisaida Swaby-Olivia as the recipient of its Annual \$30,000 Scholarship. Ms Swaby-Olivia graduated from John Gray High School and UCCI under the dual enrolment programme in 2013 and her Associate of Arts in Business Administration in 2017. Ms Swaby-Olivia will begin pursuing her bachelor's degree in Global Business (Management) at the University of South Florida in 2019.

The Authority also welcomed 17 interns into its annual Summer Work Experience Programme this year. Representing a variety of educational backgrounds and career aspirations, the interns worked across the Authority's various departments, including: Water Resources & Quality Control, Engineering Services, Operations, Information Systems, Finance, Customer Service and Human Resources. Two of this year's interns were Scholarship Recipients whose studies are still ongoing: Kristina Powell (2016/17) and Pierre Ordonez (2017).

The Authority's Educational Tour Programme continues to be a success with local schools and educators. This year, the Authority welcomed a total of 15 school groups to its facilities, including the University College of the Cayman Islands Nursing School students who also developed a project on the importance of water to public health as a result of the visit. The Authority's Education Tour Programme continues to grow each year in popularity.

The Authority also hosted its 6th Annual Geology Education Week in October, 2018. The week-long series of seminars and fieldtrips for local students and educators also included a week-long social media campaign and giveaways.

WAC REPRESENTED AROUND THE WORLD

During the 2018 period, the Water Authority was represented at various conferences and leadership programmes around the world by several staff members.

In October, 2018, Dr Frederick-van Genderen, Laboratory Manager Marcela Resources Martinez-Ebanks and Water Technologist Yasmin James attended presented papers at the 27th Annual Caribbean Water and Wastewater Association Conference & Exhibition in Montego Bay, Jamaica. The the conference "Climate theme of was Resilience. Innovation & Partnership Sustainable Water and Waste Development".



Dr. Frederick-van Genderen, Ms. James and Ms. Martinez-Ebanks take a selfie at the CWWA Conference in Jamaica.

During this conference, Dr Frederick-van Genderen also participated in the 14th High Level Forum of Caribbean Ministers Responsible for Water.

The Director also took part in the American Water Summit, as a member of the Global Water Leadership Group. The summit, which took place in Philadelphia, Pennsylvania in October 2018, focused on the theme "Inspiring Innovation.

In addition, Laboratory Technologist Jerry Banks participated in a weeklong Sample Master Intermediate and Advanced Boot Camp hosted by Accelerated Technology Laboratories, Inc., and Corporate Communications Officer Hannah Reid was one of two international applications chosen to take part in the Water Environment Federation's 2018 Water Leadership Institute.

NEW GOVERNOR VISITS CAYMAN BRAC FACILITIES

From 2 to 3 November, 2018, the Cayman Islands' new governor, His Excellency Mr. Martyn Roper, OBE, and his wife, Elizabeth, toured Little Cayman and Cayman Brac. On their visit to the Brac, Mr. and Mrs. Roper toured the Authority's West End Water Works facility, accompanied by a host of local dignitaries including the Hon. Premier Alden McLaughlin, MBE, JP, MLA.

The tour was led by Senior Engineering Manager Martin Tedd and RO Plant Operator Omar Harley.

Mr Tedd and Mr Harley explained the basic operation of the Authority's Brac facilities and outlined some of the Authority's plans to upgrade older pipelines, the next phase of the Cayman Brac Piped Water Expansion Project, and the progress made to date on the development of the new Bluff Water Works facility.





CELEBRATING 35 YEARS

To celebrate its 35th Anniversary, the Authority decided to engage its employees, customers and the general public through a year-long programme of events focused on the key themes of: 1) tap water, 2) education, and 3) employee engagement. Focusing the Authority's celebrations around these three core values ensures that this important celebration would have a sustained, meaningful impact within the local community.

The year kicked off with the installation of a photo display inside the Authority's lobby to provide visitors to the Authority's headquarters with a fresh look at the work that goes on behind the scenes.

To further celebrate its 35th Anniversary, the Authority held a successful Business After Hours event which drew almost 100 people — including dignitaries such as the Hon. Minister Juliana O'Connor-Connolly, JP, MLA, industry leaders, and members of the community — to its headquarters.



SUPPORT.
PROMOTE.
PROTECT.

In addition to the tours offered throughout the year to schools, the Authority also welcomed members of the public on special 35th Anniversary tours of its water production and treatment facilities during August and September.

To celebrate World Water Week in August and promote the value of tap water as an environmentally friendly alternative to bottled water, the Authority launched its #TakeBackTheTap campaign, which included giveaways through social media and the cinema launch of a new commercial filmed locally and starring its employees!

For the benefit of its staff the Authority hosted a series of internal presentations to help connect diverse departments. These monthly Lunch & Learn events provided a platform for departments to share their successes and challenges with their colleagues.

The Authority's 35th Anniversary came to a close with the Anniversary Awards Ceremony which was held on 8 December at the historic Pedro St. James Castle. The Awards Ceremony saw more than 200 people gather to celebrate this important milestone in the Authority's history and commemorate the men and women who have been instrumental to the Authority's success over the past 35 years.



The Hon. Minister O'Connor-Connolly addressed the attendees and later bestowing Special Recognition Awards on past Chairman and Board Member Brainard Watler, past Board Member Otto Watler, and current Board Chairman

The National Museum is presented with a donation of \$50,000.

Water Authority - Cayman

DATE PROPERTY AND SELANDS NEWSONS DIGITAL TRANSPORT OF THE PROPERTY OF

Kearney Gomez for their long service to the Authority as Board Members.

The Authority presented its 35th Anniversary Legacy Award to the National Museum, to assist with improving the museum's acquisition of an animatronic representation of Ms Anne Huldah, which is part of its court house display. Ms Anne Huldah was a strong supporter of the establishment of the Authority in its early years.

Mr Gomez then gave his address as current Water Authority Board Chairman, and presented the Employee Service Awards to members

of staff who have reached significant milestones in their careers. Mr Gomez also presented the prestigious Chairman's Award, which was awarded this year to Jovan Whittaker. Jovan was chosen as the receipient of this award for his exemplary character, the versitility of his skills and his willingness to go the extra mile to complete assignments.



THE WATER AUTHORITY OF THE CAYMAN ISLANDS

FINANCIAL STATEMENTS 31 December 2018

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Water Authority of the Cayman Islands STATEMENT OF RESPONSIBILITY FOR FINANCIAL STATEMENTS 31 December 2018

These financial statements have been prepared by the Water Authority of the Cayman Islands in accordance with the provisions of the *Public Management and Finance Law (2018 Revision)* and reference to *Section 17(1)* of the Water Authority Law (2018 Revision). The financial statements comply with International Financial Reporting Standards.

We accept responsibility for the accuracy and integrity of the financial information in these financial statements and their compliance with the *Public Management and Finance Law (2018 Revision)*.

As Chairman, Director and Financial Controller, we are responsible for establishing, and have established and maintained, a system of internal controls designed to provide reasonable assurance that the transactions recorded in the financial statements are authorised by law, and properly record the financial transactions of the Water Authority of the Cayman Islands.

As Chairman, Director and Financial Controller, we are responsible for the preparation of the Water Authority of the Cayman Islands' financial statements and for the judgements made in them.

The financial statements present fairly the statement of financial position, statement of comprehensive income/(loss), statement of changes in shareholder's equity, and statement of cash flows as at and for the year ended 31 December 2018.

To the best of our knowledge we represent that these financial statements are:

- (a) complete and reliably reflect the financial transactions of the Water Authority of the Cayman Islands as at and for the year ended 31 December 2018;
- (b) fairly reflect the financial position as at 31 December 2018 and comprehensive income/(loss) as at and for the year ended 31 December 2018; and
- (c) comply with International Financial Reporting Standards adopted by International Accounting Standards Board.

The Office of the Auditor General conducts an independent audit and jointly expresses an opinion on the accompanying financial statements. The Office of the Auditor General and its agent have been provided access to all the information necessary to conduct an audit in accordance with International Standards on Auditing.

Mr. Kearney Gomez

Chairman

Water Authority of the Cayman Islands

Director

Water Authority of the Cayman Islands

Dr. Gelia Frederick-van Genderen

Ms. Lori Bergman

Financial Controller

Water Authority of the Cayman Islands

Independent Auditors' Report to the Shareholder and Members

Opinion

We have audited the financial statements of The Water Authority of the Cayman Islands (the "Water Authority"), which comprise the statement of financial position as at 31 December 2018, the statements of comprehensive income/(loss), changes in shareholder's equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Water Authority as at 31 December 2018 and its financial performance and its 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 Water Authority in accordance with 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 Cayman Islands and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Restrictions on Distribution or Use

This report is prepared for and only for the Shareholder and Members of the Water Authority in accordance with the terms of an engagement letter dated 31 October 2018, and for no other purpose. We do not accept or assume any liability or duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come.

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 misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Water 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 Water Authority or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Water 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 the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Independent Auditors' Report to the Shareholder and Members (continued)

Auditors' Responsibilities for the Audit of the Financial Statements (continued)

As part of an audit in accordance with ISAs, we exercise professional judgment 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 purpose of expressing
 an opinion on the effectiveness of the Water 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 Water Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, 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 Water 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 have undertaken the audit in accordance with the provisions of Section 60(1)(a) of the Public Management and Finance Law (2018 Revision). 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.

KPMG

27 November 2019

KPMG

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27 November 2019



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E-mail: auditorgeneral@oag.gov.ky Internet: www.auditorgeneral.gov.ky

Water Authority of the Cayman Islands Statement of Financial Position

As at 31 December 2018 (Stated in Cayman Islands dollars)

	Note	31 December 2018	31 December 2017
Assets			
Non-current assets			
Property, plant and equipment	5	65,306,190	65,471,822
Total non-current assets		65,306,190	65,471,822
Current assets			
Cash and cash equivalents		10,364,744	19,048,777
Fixed deposits		14,191,034	
Accounts receivable, net	3	3,508,723	2,323,924
Unbilled revenue	10	986,877	871,860
Inventory, net	4	1,335,340	1,279,718
Prepaid expenses		204,416	131,713
Total current assets		30,591,134	23,655,992
Total assets		95,897,324	89,127,814
Non-current liabilities	6		613 34
Loans payable	6	_	613,344
Employee pension benefits, net	9(a)	2,182,000	2,515,000
Pension employee healthcare benefits, net	9(c)	5,119,000	5,560,000
Non-pension employee healthcare benefits, net	9(d)	11,645,000	12,505,00
Total non-current liabilities		18,946,000	21,193,34
Current liabilities			
Accounts payable		1,792,819	1,280,95
Contract retention payable		84,563	64,67
Customer deposits		1,443,054	1,382,97
Loans payable	6	613,344	1,168,67
Total current liabilities		3,933,780	3,897,28
Total liabilities	-	22,879,780	25,090,62
Shareholder's equity			
Contributed capital	7	236,000	236,00
Retained earnings		72,781,544	63,801,18
Total shareholder's equity		73,017,544	64,037,18
Total liabilities and shareholder's equity		95,897,324	89,127,81

On behalf of the Board on 27 NOV

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Director

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

Financial Controller

Water Authority of the Cayman Islands Statement of Comprehensive Income/(Loss) For the Year Ended 31 December 2018

(Stated in Cayman Islands dollars)

		31 December 2018	31 December 2017
	Note	(12 months)	(18 months)
Operating revenue			
Water sales		27,859,523	37,345,047
Sewerage fees		4,573,720	6,429,482
Septage disposal		158,235	210,715
Agency work		76,182	102,984
Connection and miscellaneous fees		20,900	30,850
Total operating revenue		32,688,560	44,119,078
Operating expenses			
Water purchases and production		7,110,937	9,699,592
Depreciation expense	5	3,710,357	5,628,452
Salaries		3,190,995	4,538,133
Repairs and maintenance		2,419,060	2,426,529
Wages		1,223,323	1,829,132
Electricity		1,183,426	1,433,954
Supplies		875,681	1,134,894
Miscellaneous		346,856	376,752
Land lease expense		12,335	18,502
Impairment of property, plant and equipment	5	407,950	
Total operating expenses		20,480,920	27,085,940
Finance costs			
Loan interest		81,347	276,740
Gross operating profit		12,126,293	16,756,398
Other income			
Royalties		1,409,401	1,926,518
Other		103,929	177,655
Statutory licencing fees		40,634	45,209
Interest income		68,087	3,313
Total other income		1,622,051	2,152,695
Operating profit		13,748,344	18,909,093

(continued)

Water Authority of the Cayman Islands Statement of Comprehensive Income/(Loss) (continued) For the Year Ended 31 December 2018 (Stated in Cayman Islands dollars)

		31 December 2018	31 December 2017
	Note	(12 months)	(18 months)
Administration expenses			
Non-pension employee healthcare benefits cost	9(d)	1,438,000	10,145,000
Salaries	8	2,216,392	3,156,144
Staff training and benefits		1,753,023	2,358,412
Insurance		833,791	991,924
Telephone and utilities		403,089	581,964
Legal and professional fees		356,223	538,809
Miscellaneous		443,377	485,911
Information systems		440,820	456,662
Pension employee healthcare benefits cost	9(c)	336,000	440,000
Defined benefit pension cost	9(a)	28,000	248,000
Repairs and maintenance	. ,	116,378	219,590
Depreciation expense	5	134,598	202,266
Licenses and dues		99,765	140,085
Office and lab supplies		22,813	68,787
Office rental		4,320	6,120
Bad debt expense		187,484	-
Total administration expenses		8,814,073	20,039,674
Net profit/(loss) for the year/period		4,934,271	(1,130,581)
Other comprehensive income/(loss)			
Remeasurements of defined benefit pension plan	9(a)	361,000	1,132,000
Remeasurements of pension employee healthcare plan	9(c)	777,000	546,000
Remeasurements of non-pension employee healthcare	. ,		,
plan	9(d)	2,298,000	(2,360,000)
		3,436,000	(682,000)
Comprehensive income/(loss) for the year/period		8,370,271	(1,812,581

Water Authority of the Cayman Islands Statement of Changes in Shareholder's Equity

For the Year Ended 31 December 2018 (Stated in Cayman Islands dollars)

	Note	31 December 2018 (12 months)	31 December 2017 (18 months)
Contributed capital			
Balance at beginning of year/period	7	236,000	236,000
Retained Earnings			
Balance at beginning of year/period		63,801,187	65,863,768
IFRS 9 opening balance adjustment	11	860,086	-
Adjusted balance at the beginning of the		1000,000 - 000,000	
year/period		64,661,273	65,863,768
Net income/(loss) for the year/period		4,934,271	(1,130,581)
Other comprehensive income/(loss) for the year/period		3,436,000	(682,000)
Contribution to Government	8	(250,000)	(250,000)
Balance at end of year/period		72,781,544	63,801,187
			1.374
Fotal shareholder's equity		73,017,544	64,037,187

Water Authority of the Cayman Islands Statement of Cash Flows

For the Year Ended 31 December 2018 (Stated in Cayman Islands dollars)

	N.T.	31 December 2018	31 December 2017
	Note	(12 months)	(18 months)
Cash flows from operating activities			
Net income/(loss) for the year/period		4,934,271	(1,130,581)
Adjustments to reconcile net loss for the year/period		1,50 1,27 1	(1,100,001)
to net cash generated by operating activities:			
IFRS 9 opening adjustment		860,086	_
Depreciation expense	5	3,844,955	5,830,718
Impairment of property, plant and equipment	5	407,950	-,,
Add/(deduct) net changes in non-cash operating		707,700	
balances:			
Accounts receivable, net		(1,184,799)	246,049
Unbilled revenue		(115,017)	74,283
Inventory, net		(55,622)	43,612
Prepaid expenses		(72,703)	57,208
Accounts payable		511,860	(310,169)
Contract retention payable		19,889	(107,829)
Customer deposits		60,083	60,181
Employee pension benefits, net		28,000	248,000
Pension employee healthcare benefits, net		336,000	440,000
Non-pension employee healthcare benefits, net		1,438,000	10,145,000
Net cash generated by operating activities		11,012,953	15,596,472
Cash flows from investing activities			
Property, plant and equipment purchased	5	(4,087,273)	(4,285,036)
Purchase of fixed deposits		(14,191,034)	(.,_0:,0:0)
Net cash used in investing activities		(18,278,307)	(4,285,036)
Cash flows from financing activities			
Repayment of loans payable		(1,168,679)	(2,144,251)
Contribution to Government	8	(250,000)	(250,000)
Net cash used in financing activities		(1,418,679)	(2,394,251)
rect cash used in imaneing activities		(1,410,079)	(2,3,74,231)
Net (decrease)/increase in cash and cash equivalents		(8,684,033)	8,917,185
during year/period			
Cash and cash equivalents at beginning of year/period		19,048,777	10,131,592
Cash and cash equivalents at end of year/period		10,364,744	19,048,777
Supplemental disclosure for cash flow information: Cash paid during the year/period for interest		_	(276,740)

1. Establishment and Principal Activities

The Water Authority of the Cayman Islands (the "Water Authority") is a statutory body, wholly owned by the Government of the Cayman Islands (the "Government"), established on 1 January 1990, under the *Water Authority Law (Law 18 of 1982)*, as amended.

The Water Authority is principally engaged in the management of water supply and sanitation affairs of the Cayman Islands including the provision of public water supplies, sewerage systems and the management, development and protection of water resources.

During the prior period the Regulatory responsibility previously held by the Water Authority was transitioned to the Ultility Regulation and Competion Office ("OfReg"). The Water Authority still maintains control of certain statutory functions.

The Public Authorities Law, 2017 came into force on 1 June 2017. The purpose of the Law is to provide uniform regulation of the management and governance of public authorities.

As at 31 December 2018, the Water Authority had 129 employees (31 December 2017: 133 employees). The Water Authority is located at 13G Red Gate Road, P.O. Box 1104, KY1-1102, George Town, Grand Cayman, Cayman Islands.

2. Significant Accounting Policies

(a) Statement of compliance

These financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") and interpretations adopted by the International Accounting Standards Board ("IASB").

(b) Basis of preparation and reporting period

The financial statements of the Water Authority are prepared on the accrual basis under the historical cost basis.

The Public Management and Finance Law (Amendment) Law, 2015 section 2(c) was passed on 15 October 2015 to reflect a change in the annual reporting date from 30 June to 31 December. The previous reporting period is for the 18 months commencing 1 July 2016 and ending 31 December 2017.

(c) New or revised standards adopted

(i) IFRS 15

IFRS 15 'Revenue from Contracts with Customers' and the related 'Clarifications to IFRS 15 Revenue from Contracts with Customers' (hereinafter referred to as 'IFRS 15') replace IAS 18 'Revenue', IAS 11 'Construction Contracts', and several revenue-related Interpretations. This standard was adopted using a modified retrospective ('cumulative catch-up') approach and had no impact on the total amount or timing of revenue recognised under each contract and, therefore, no adjustment to the opening balance of retained earnings as a result of the initial application of IFRS 15.

(ii) IFRS 9

IFRS 9 'Financial Instruments' (herein after referred to as 'IFRS 9') replaces IAS 39 that relates to the classification and measurement of financial instruments. The Water Authority has adopted this new standard for accounting for financial instruments (see Note 11 below) using a modified retrospective approach ('cumulative catch-up').

2. Significant Accounting Policies (continued)

(d) New standards or interpretations not yet adopted

A number of new standards, amendments to standards and interpretations are not yet effective for the year ended 31 December 2018, and have not been applied in preparing these financial statements. None of these will have an effect on the financial statements of the Water Authority, with the exception of:

(i) IFRS 16, Leases supersedes IAS 17, Leases, brings leases onto the statement of financial position, changes how to define leases and determines how lease liabilities are measured. The Water Authority has yet to perform a full assessment of the impact on net results and net assets. The standard is effective for annual periods beginning on or after 1 January 2019. The extent of the impact of adoption of amendments to IFRS 16 has not yet been determined.

(e) Functional and presentation currency

These financials are presented in Cayman Islands dollars (CI\$), which is the Water Authority's functional currency. All information has been rounded to the nearest dollar.

(f) Property, plant and equipment

(i) Recognition and measurement:

Items of property, plant and equipment are stated at cost less accumulated depreciation and any net accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the assets. The cost of self-constructed assets includes the cost of materials, direct labour and related costs to put the assets into service and capitalised borrowing costs. Certain costs capitalised within self-constructed assets are based on management's estimate of the actual amounts directly attributable to the self-constructed asset.

The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of the property, plant and equipment, and is recognised net within other income/other expenses in the statement of comprehensive income/(loss).

(ii) Subsequent costs:

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of an item if it is probable that the future economic benefits embodied within the part will flow to the Water Authority and its cost can be measured reliably. The costs of day-to-day servicing of property, plant and equipment such as maintaining underground piping are recognised in the statement of comprehensive income/(loss) as incurred.

2. Significant Accounting Policies (continued)

(f) Property, plant and equipment (continued)

(iii) Depreciation:

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed. If a component has a useful life that is different from the remainder of the asset, that component is depreciated separately.

Depreciation is charged to the statement of comprehensive income/(loss) on a straight-line basis over the useful lives of each part of an item of property, plant and equipment. Land is not depreciated.

The estimated useful lives are as follows:

Buildings50 yearsWater and sewerage systems8 to 50 yearsOther assets3 to 10 years

(iv) Construction in progress:

Construction in progress represents property, plant and equipment projects which are not yet completed at the period end date. Upon completion, the construction in progress is transferred to the relevant category of property, plant and equipment and depreciation commences when the asset is available for use.

(g) Foreign currency translation

Assets and liabilities denominated in currencies other than Cayman Islands dollars are translated at exchange rates in effect at the fiscal period end date. Revenue and expense transactions denominated in currencies other than Cayman Islands dollars are translated at exchange rates at the date of those transactions. Gains and losses arising on translation are included in the statement of comprehensive income/(loss).

(h) Use of estimates and judgement

The preparation of the financial statements in accordance with IFRS requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, income and expenses. Actual amounts may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period of the revision and future years, where applicable.

Judgments made by management in the application of IFRS that have significant effect on the financial statements and estimates with a significant risk of material adjustment in the next financial year are discussed below:

2. Significant Accounting Policies (continued)

- (h) Use of estimates and judgement (continued)
 - (i) Allowance for impairment losses on receivables

Under IFRS 9, there is now a new expected credit losses model that replaces the incurred loss impairment model used in IAS 39. The Water Authority has determined that the application of IFRS 9 effective 1 January 2018 would not result in any material variance in the normal calculation of allowance for doubtful accounts at 31 December 2017. However, the calculation of expected credit losses under IFRS 9 is used as the provision for loss against Accounts Receivable at 31 December 2018. For trade receivables the simplified approach is followed by the Water Authority measuring the loss allowance at an amount equal to lifetime expected credit losses.

(ii) Valuation of long lived assets

The Water Authority performs impairment testing when circumstances indicate that there may be impairment for long-lived assets. Management judgment is involved in determining if there are circumstances indicating that testing for impairment is required and in determining the grouping of assets to identify their Cash Generating Units ("CGU") for purposes of impairment testing.

The Water Authority assesses impairment by comparing the recoverable amount of a long-lived asset, CGU or CGU group to its carrying value. The recoverable amount is defined as the higher of: (i) value in use; or (ii) fair value less cost to sell. The determination of the recoverable amount involves Management judgment and estimation.

(iii) Valuation of employee benefit plans

The cost of pensions and other retirement and healthcare benefits earned by employees is actuarially determined using the projected unit credit method prorated on service and Management's best estimate of expected plan investment performance, salary escalation, rates of inflation, retirement ages of employees and mortality rates. Discount rates used in actuarial calculations are based on market yields on high quality bonds (consistent with the term of the benefit obligation) and can have a material effect on the amount of plan liabilities and service costs. Management employs external experts to advise the Water Authority when deciding upon the appropriate estimates to use to value employee benefit plan obligations and expenses. To the extent that these estimates differ from those realised, employee benefit plan assets and liabilities and comprehensive income/(loss) will be affected.

(iv) Depreciation and amortization

The Water Authority's property and equipment is depreciated and amortised on a straight-line basis, taking into account the expected useful lives of the assets and residual values. Changes to these estimates may affect the carrying value of these assets, net income/(loss) and comprehensive income/(loss).

2. Significant Accounting Policies (continued)

(h) Use of estimates and judgement (continued)

(v) Self-constructed assets

Included within plant, property and equipment are self-constructed assets for which costs are based on directly attributable inputs and allocations of costs incurred to bring the assets to the location and condition necessary for its intended use. Allocations of costs include estimates for fuel and costs for equipment usage.

(i) Interest expense

All interest and other costs incurred in connection with borrowings are expensed as incurred as part of loan interest, except where interest incurred on a qualifying asset is capitalised. The interest expense of loan payments is recognised in the statement of comprehensive income/(loss) using the effective interest rate and or straight line method as appropriate.

(j) Revenue recognition

In 2018 the Water Authority has adopted new guidance for the recognition of revenue from contracts with customers (see Note 2(c)). The Water Authority offers a variety of services and invoicing is dependent on the type of service rendered. Bills for water are based on consumption and billed monthly, sewerage fees are fixed in nature and billed monthly and other services including septage disposal and lab fees for water testing are billed on performance of the service. Revenue derived from such sources is accounted for when the respective performance obligations have been met. See Note 10 for additional disclosures.

(k) Operating lease

Operating lease payments are recognised as an expense in the statement of comprehensive income/(loss) on a straight-line basis over the lease term.

(1) Financial instruments

IFRS 9 sets out requirements for recognising and measuring financial assets and financial liabilities. It replaces the guidance in IAS 39 that relates to the classification and measurement of financial instruments. IFRS 9 retains but simplifies the mixed measurement model and establishes three primary measurement categories for financial assets: amortised cost, fair value through OCI and fair value through P&L. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset.

(i) Financial assets

Under IFRS 9, the Water Authority classifies its financial assets, cash and cash equivalents, fixed deposits and accounts receivable, as amortised cost. They are included in current assets, except for those with maturities greater than 12 months after the end of the reporting period which are classified as non-current assets.

The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

Financial assets are derecognised when the rights to receive cash flows have expired or have been transferred and the Water Authority has transferred substantially all risks and rewards of ownership. The Water Authority's financial assets are carried at amortised cost using the effective interest method.

2. Significant Accounting Policies (continued)

(l) Financial instruments (continued)

(ii) Financial liabilities

The Water Authority classifies its financial liabilities as other financial liabilities. Such financial liabilities are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers or obligations to Ocean Conversion (Cayman) Limited for loans payable. Accounts payable and loans payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

(iii) Offsetting financial assets and liabilities

Financial assets and liabilities are offset and the net amount presented in the Water Authority's statement of financial position when, and only when, the Water Authority has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

The following table and the accompanying notes explain the original categories under IFRS 9 for each class of the Authority's financial assets and liabilities as at 1 January 2018:

	Original classification under IAS 39	New classification under IFRS 9	Original carrying amount under IAS 39	New carrying amount under IFRS 9
Financial assets				
Cash and cash equivalents	Loans and receivables	Amortised cost	19,048,777	19,048,777
Accounts receivable and unbilled revenue	Loans and receivables	Amortised cost	3,195,784	4,055,870
Financial liabilities				
Accounts payable	Other financial liabilities	Other financial liabilities	1,280,959	1,280,959
Loans payable	Other financial liabilities	Other financial liabilities	1,782,023	1,782,023

2. Significant Accounting Policies (continued)

(m) Cash and cash equivalents:

Cash and cash equivalents comprise cash, bank balances and short term deposits with original maturities of three months or less.

(n) Fixed Term Deposits:

The Water Authority has funds held on fixed deposits with the Treasury of the Cayman Islands Government with varying maturity dates ranging from 6-14-months.

(o) Inventory

Inventory consists of consumable spares and water. Consumable spares are accounted for on the first-in, first-out basis. Water inventory is calculated at the cost of water plus chemicals multiplied by the volume of water. Inventories are valued at the lower of cost and net realisable value.

(p) Employee Benefit Plans

The Water Authority provides post-employment benefits through a defined benefit pension plan, a defined contribution pension plan, and defined benefit healthcare plans. In addition, during the period ended 31 December 2017 the Authority established a non-pension employee healthcare benefits plan.

 (i) Defined benefit plans (defined benefit pension plan; pension employee healthcare plan; and nonpension employee healthcare plan)

The Water Authority's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior period, discounting that amount and deducting any fair value of any plan assets.

The cost of the defined benefit plans earned by employees are actuarially determined using the projected unit credit method prorated on service and Management's best estimate of expected plan investment performance, salary escalation, retirement ages of employees, and mortality rates. When the calculation results in a net benefit asset, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liabilities, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in other comprehensive loss. The net interest expense on the net defined benefit liabilities for the period is determined by applying the discount rates used to measure the defined benefit obligations at the beginning of the annual period to the net defined benefit liabilities, taking into account any changes in the net defined benefit liabilities during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in the statement of comprehensive income/(loss).

2. Significant Accounting Policies (continued)

- (p) Employee Benefit Plans (continued)
 - (i) Defined benefit plans (defined benefit pension plan; pension employee healthcare plan; and nonpension employee healthcare plan)(continued)

The Water Authority's net obligation in respect of the defined benefit pension plan is calculated by estimating the amount of future benefit that employees have earned in the current and prior periods. To calculate the estimated amount for the pension obligation, the years of service and estimated salary upon retirement have been used.

The Water Authority's net obligation in respect of the healthcare plans is calculated by estimating the amount of future benefit that employees have earned in the current and prior periods. To calculate the estimated amount for the healthcare obligation, the years of service limit of 10 years and estimated health insurance premiums have been used.

The discount rates used to value the defined benefit obligations is based on a yield of high quality corporate bonds, in the same currency in which the benefits are expected to be paid and with terms to maturity that, on average, match the terms of the defined benefit obligations.

(ii) Defined contribution plans

The Water Authority's obligations for contributions to defined contribution pension plans are recognised in the statement of comprehensive income/(loss) in the periods during which services are rendered by employees.

(q) Comparative figures

Certain comparative figures have been reclassified to conform to the presentation in these financial statements.

3. Accounts Receivable, net

Trade and other receivables that were classified as loans and receivables under IAS39 are now classified at amortised cost under IFRS 9. Lifetime expected credit losses have been calculated using sales invoices billed between 1 January 2018 and 31 December 2018 and the actual cash collection dates of these invoices to determine a historical collection profile by aging category.

	31 De	cember 2018	<u>31 December 2017</u>
Trade Receivables		3,898,883	3,755,501
Other Receivables		856,905	488,090
Allowance for Doubtful Accounts		(1,247,065)	
Allowance for Doubtful Accounts		() , , ,	(1,919,667)
	_CI\$	3,508,723	2,323,924

All of the Water Authority's trade and other receivables in the comparative periods have been reviewed for indicators of impairment. Note 13 includes disclosures relating to the credit risk exposures and analysis relating to the allowance for expected credit losses. The above comparative for impairment provisions refers to the IAS 39 measurement basis which applied an incurred loss model, whereas the current year applies IFRS 9 which is an expected loss model.

4. Inventory, net

	<u>31</u>	December 2018	31 December 2017
Water Supply and Sewerage Materials		1,266,721	1,222,279
Water Inventory		84,480	73,300
Provision for Obsolete Inventory		(15,861)	(15,861)
	CI\$	1,335,340	1,279,718

5. Property, plant and equipment

The following projects classified as construction in progress are included in property, plant and equipment:

		31 December 2018	31 December 2017
1.	Grand Cayman – WBSS – Pipeline Install	809,94	809,947
2.	Cayman Brac - Site Preparation	546,28	546,287
3.	Cayman Brac - Distribution Extension	139,999	105,801
4.	Grand Cayman - Linford Pierson		243,376
5.	Cayman Brac – Upgrade to Water Distribution Pumps	13,32	13,327
6.	Grand Cayman – Esterley Tibbetts		- 243,189
7.	Grand Cayman - Upgrade on Prospect Point Road		- 26,315
8.	Grand Cayman - District Metering Vaults	6,46	6,465
		CI\$ 1,516,02:	1,994,707

The Water Authority's desalination plants operate under a number of finance lease agreements. At 31 December 2018, the carrying amount of leased plant, included in Water Supply assets, was CI\$6,910,696 (31 December 2017: CI\$7,984,675). The finance lease agreement between the Water Authority and Ocean Conversion (Cayman) Limited relating to the North Sound Plant expired in 2014. The finance lease agreement between the Water Authority and Ocean Conversion (Cayman) Limited relating to the Red Gate Plant expired in July 2017. Since the expiration of these finance lease agreements, both plants were operated by Ocean Conversion (Cayman) Limited under operating agreements. On 11 April 2017 approval was obtained from the Central Tenders Committee (CTC) for the extension of the operating agreement to the North Sound production plant and the Red Gate production plant to 1 April 2018 and 1 July 2018 respectively. On 8 February 2018 the Central Tenders Committee (CTC) approved a further extension of the operating agreement to the North Sound production plant to 1 July 2018. On 28 May 2018 approval was obtained from the Central Tenders Committee (CTC) for the extension of the operating agreement to the North Sound production plant and the Red Gate production plant to 1 February 2019. On 20 August 2018, after a competitive tendering process the new operating agreement for the North Sound and Red Gate production plants was awarded to OCL for a period of 5 years.

5. Property, plant and equipment (continued)

31 December 2018 (12 months)

	Freehold Land	Buildings	Water Supply	Sewage	Other Assets	Construction in Progress	Total
Cost Balance at beginning of							
year	3,555,599	5,650,711	72,234,100	29,719,217	8,228,307	1,994,707	121,382,641
Additions	-	-		449,531	668,585	2,969,157	4,087,273
Disposals - Impairment	-	-	(653,130)	(69,373)	-	-	(722,503)
Disposals Transfers between fixed	-	-	-	(5,908)	-		(5,908)
assets		-	3,297,824	150,015		(3,447,839)	
Balance at end of year CI\$	3,555,599	5,650,711	74,878,794	30,243,482	8,896,892	1,516,025	124,741,503
Accumulated Depreciation Balance at beginning of							
year		1,491,113	32,254,183	15,482,839	6,682,684	-	55,910,819
Depreciation expense	-	113,017	2,467,110	852,150	412,678		3,844,955
Disposals - Impairment Disposals	-		(272,935)	(41,618) (5,908)	-	-	(314,553) (5,908)
Balance at end of year			-	(5,500)			(5,555)
CI\$		1,604,130	34,448,358	16,287,463	7,095,362	-	59,435,313
Net Book Value at 31 December 2018							
CIS	3,555,599	4,046,581	40,430,436	13,956,019	1,801,530	1,516,025	65,306,190

During the year ended 31 December 2018, the Water Authority identified projects to be upgraded which resulted in a net impairment loss of the original assets of CI\$407,950 (18 month period ended 31 December 2017: CI\$NiI) that was recorded against the plant and equipment assets. The total cost of the refurbishments and replacement was CI\$1,164,002 (18 month period ended 31 December 2017: CI\$NiI).

5. Property, plant and equipment (continued)

31 December 2017 (18 months)

	Freehold Land	Buildings	Water Supply	Sewage	Other Assets	Construction in Progress	Total
Cost Balance at beginning of							
period	3,555,599	5,650,711	69,780,751	29,750,987	7,319,878	1,189,257	117,247,183
Additions	-	-	30,935	-	1,026,237	3,227,864	4,285,036
Disposals	-	-	-	(31,770)	(117,808)	-	(149,578)
Transfers between fixed assets			2,422,414			(2,422,414)	
Balance at end of period CI\$	3,555,599	5,650,711	72,234,100	29,719,217	8,228,307	1,994,707	121,382,641
Accumulated Depreciation Balance at beginning of							
period	-	1,321,283	28,392,861	14,249,135	6,266,400	-	50,229,679
Depreciation expense	-	169,830	3,861,322	1,265,474	534,092		5,830,718
Disposals		-	-	(31,770)	(117,808)	-	(149,578)
Balance at end of period CI\$		1,491,113	32,254,183	15,482,839	6,682,684	-	55,910,819
Net Book Value at 31 December 2017							
CIS	3,555,599	4,159,598	39,979,917	14,236,378	1,545,623	1,994,707	65,471,822

6. Loans payable

				Interest Rate			TOTAL	
	Date of Loan	Loan Amount	Original Loan Term** (Years)	Rate	At period end	Current	31 December 2018 (12 months)	31 December 2017 (18 months)
Ocean Conversion (Cayman) Ltd.* (OCL) North Side - Original	Jul 2009	9,176,442	10	6.50%	6.50%	613,344	613,344	1,782,023
Totals						613,344	613,344	1,782,023
Less current loans payable							(613,344)	(1,168,679)
Non-current loans payable							CI\$ -	CI\$ 613,344

^{(*) =} refer to note 5
(**) = Commitments per period are based on loan repayment schedules with respective entities and institutions.

6. Loans payable (continued)

The Water Authority has an overdraft facility at 4.25% interest per annum with First Caribbean International Bank in the amount of CI\$416,000 (31 December 2017: CI\$416,000). At 31 December 2018, CI\$Nil (31 December 2017: CI\$Nil) of the overdraft facility was being utilised.

7. Contributed capital

The Government provided 12.58 acres of land on Cayman Brac to the Water Authority of the Cayman Islands during the 2009/10 fiscal period at no cost. The fair market value at the time of transfer was CI\$236,000, which has been recorded as contributed capital in the statement of financial position.

8. Related Party Transactions

The Government of the Cayman Islands appoints the Chairman and Members to the Water Authority's Governing Board who collectively received CI\$19,700 (18 months period ended 31 December 2017: CI\$21,100) relating to their services rendered during the year ended 31 December 2018. The following transactions occurred during the year between the Water Authority and the Government of the Cayman Islands.

- The Water Authority paid a contribution to the Government in the amount of CI\$250,000 (18 month period ended 31 December 2017: CI\$250,000).
- 2. The remuneration of directors and other members of key management personnel for the year ended 31 December 2018 was CI\$942,472 (18 month period ended 31 December 2017: CI\$1,390,551). This amount entirely pertains to short-term employee benefits, namely salary, medical insurance and pension contributions. No loans were issued to key management personnel during the year (18 months period ended 31 December 2017: CI\$Nil). There were 7 personnel categorised in 2018 broken down as 6 key management personnel and 1 Director (31 December 2017: 6 key management personnel and 1 Director).

During the period, the Water Authority provided, at no charge to the Government of the Cayman Islands, the availability and use of water for fire fighting, free sewerage service to a number of indigent persons in the Watler's Road area, supervision of water resources, administration of Plumbers Examination Board, consultative services for development control, and water at a reduced Public Authority rate. The Water Authority does not estimate the value of these services provided to the Government of the Cayman Islands.

9. Employee Benefits

a) Defined Benefit Pension Plan

The Public Services Pension Plan is managed by the Government of the Cayman Islands through the Public Services Pension Board. The Board is responsible for among other things, administering the Public Service Pensions Fund (the "Fund"), communicating with plan participants and employers, prescribing contribution rates in accordance with the latest actuarial valuation and recommending amendments to the Public Service Pensions plans as needed. The current number of active employees enrolled under the defined benefit plan is 4 (31 December 2017: 4).

9. Employee Benefits (continued)

a) Defined Benefit Pension Plan (continued)

The Water Authority recognises the defined benefit pension plan as a net liability in its statement of financial position once the actuarial valuations are completed. For the defined net pension liability the Water Authority has recognised the actuarial liability since its date of establishment in 1990.

The most recent actuarial valuation for IAS 19 reporting was conducted on 8 May 2019 using data as at 31 December 2018. Management use this as best estimate to record the defined benefit pension plan and the profit and loss charges associated with the plan's participation as at and for the year ended 31 December 2018.

The actuarial position is as follows:

	31 December 2018	31 December 2017
	CI\$000's	CI\$000's
Defined benefit obligation	(3,083)	(3,329)
Fair value of plan assets	901	814
Net liability at end of year/period	(2,182)	(2,515)

The present value of the funded obligation changes as follows:

	31 December 2018	31 December 2017
	CI\$000's	CI\$000's
Defined benefit obligation at beginning of year/period	3,329	5,217
Current service cost	52	121
Interest cost	117	215
Transfer between other Participating employers	-	(1,206)
Plan participant contributions	13	26
Benefit payments from plan	-	-
Remeasurements	(428)	(1,044)
Defined benefit obligation at end of year/period	3,083	3,329

The fair value of the plan assets during the year/period changed as follows:

31 December 2018	31 December 2017
CI\$000's	CI\$000's
814	1,818
31	61
110	27
13	26
-	(1,206)
-	-
(67)	88
901	814
	CI\$000's 814 31 110 13 - (67)

9. Employee Benefits (continued)

a) Defined Benefit Pension Plan (continued)

The defined benefit cost included in net income/(loss) is comprised as follows:

3	1 December 2018	31 December 2017
	CI\$000's	CI\$000's
Current service cost, net of employee contributions	52	121
Net interest cost	86	154
Total defined benefit cost	138	275
Employer contributions recognised in administrative expenses	(110)	(27)
Net defined benefit cost	28	248

The remeasurements included in other comprehensive income/(loss) are comprised as follows:

	31 December 2018 CI\$000's	31 December 2017 CI\$000's
Effect of changes in demographic assumptions	(29)	(284)
Effect of changes in financial assumptions	(447)	(236)
Effect of experience adjustments	48	(524)
Return on plan assets (excluding interest income)	67	(88)
Remeasurements	(361)	(1,132)

The distribution of the plan assets based on the share of the total fund allocated to the Water Authority was as follows:

	31 December	31 December
	2018	2017
Equity securities	79%	80%
Debt securities	20%	19%
Cash	1%	1%

The principal actuarial assumptions at the date of valuation:

- A. Cost method Projected Unit Credit
- B. Economic assumptions used to determine the net benefit obligations as at:

	31 December	31 December
	2018	2017
Discount rate	4.50%	3.80%
Salary increase	2.50%	2.50%
Future pension increases	2.00%	2.00%

- C. Other assumptions -
 - 1. Mortality standard U.S. mortality rates
 - 2. Retirement age completion of age 57 and 10 years of service
- D. Asset valuation fair market value

9. Employee Benefits (continued)

a) Defined Benefit Pension Plan (continued)

The defined benefit pension obligation is calculated using a discount rate set with reference to corporate bond yields; if plan assets underperform this yield, this will increase the defined benefit pension obligation. The pension plan holds a significant proportion of equities, which are expected to outperform corporate bonds in the long-term while providing volatility and risk in the short-term. A decrease in corporate bond yields will increase the defined benefit pension obligations. This will be partially offset by an increase in the fair value of the pension plans' bond holdings.

The Water Authority's defined benefit pension obligations are linked to inflation, and higher inflation will lead to higher liabilities. The defined benefit pension obligation will be affected by the rate of pension increase as well as increase in pensionable earnings.

The majority of the defined benefit pension plan's obligation is to provide benefits for the life of the members, so increases in life expectancy will result in an increase in the defined benefit pension obligations.

b) Defined Contribution Pension Plan

In accordance with the *National Pensions Law of June 1998*, all new employees who are not participants in the Public Service Pensions Fund are enrolled in an approved local defined contribution pension plan with British Caymanian Pension. During the period, the Water Authority and its employees paid 5% and 5% (31 December 2017: 5% and 5%), respectively of salary contributions to the defined pension contribution plan. The total employees enrolled in the defined pension contribution plan is 129 (31 December 2017: 129).

The total amount recognised as employer contributions for the year ended 31 December 2018 was CI\$455,241 (18 months ended 31 December 2017: CI\$462,633) to the defined pension contribution plan. This amount is included in administrative expenses (staff training and benefits).

c) Pension Employee Defined benefit Healthcare Plan

The current number of active employees entitled to the pension employee healthcare plan is 11 (31 December 2017: 11), 6 of the 11 employees qualified for early retirement which exercised their right and will therefore not be part of the defined benefit pension plan. The total amount recognised as employer contributions for the year ended 31 December 2018 was CI\$112,538 (18 month period ended 31 December 2017: CI\$45,000). This amount is included in administrative expenses (staff training and benefits).

The most recent actuarial valuation for IAS 19 reporting was conducted 7 May 2019 using data as at 31 December 2018. Management use this as best estimate to record the pension employee healthcare benefits liability and the profit and loss charges associated with the plan's participation as at and for the year ended 31 December 2018.

The actuarial position is as follows:

	31 December 2018	31 December 201/
	CI\$000's	CI\$000's
Pension employee healthcare benefits obligation	(5,119)	(5,560)
Fair value of plan assets		-
Net liability at end of year/period	(5,119)	(5,560)

21 December 2010

21 December 2017

9. Employee Benefits (continued)

c) Pension Employee Defined Benefit Healthcare Plan (continued)

The present value of the funded obligation changes as follows:

	31 December 2018	31 December 2018
	CI\$000's	CI\$000's
Pension employee healthcare benefits at beginning of year/period	5,560	5,666
Current service cost	135	173
Employer direct benefit payments	-	(45)
Interest cost	201	312
Remeasurements	(777)	(546)
Pension employee healthcare benefits at end of year/period	5,119	5,560

The pension employee defined benefit healthcare cost included in net income/(loss) is comprised as follows:

	31 December 2018 CI\$000's	31 December 2017 CI\$000's
Current service cost, net of employee contributions	135	173
Net interest cost	201	312
Total pension employee healthcare benefits	336	485
Employer contributions recognised in administrative expenses	-	(45)
Net pension employee healthcare benefits cost	336	440

The remeasurements included in other comprehensive loss are as follows:

	31 December 2018 CI\$000's	31 December 2017 CI\$000's
Effect of changes in demographic assumptions	(51)	(478)
Effect of changes in financial assumptions	(648)	199
Effect of experience adjustments	(78)	(267)
Remeasurements	(777)	(546)

9. Employee Benefits (continued)

c) Pension Employee Defined Benefit Healthcare Plan (continued)

The principal actuarial assumptions at the date of valuation:

- A. Cost method Projected Unit Credit
- B. Economic assumptions used to determine the net benefit obligations as at:

	31 December 2018	31 December 2017
Discount rate for obligation	4.55%	3.85%
Discount rate for costs	4.60%	3.90%
Medical inflation rate	5.00%	5.00%

C. Other assumptions -

- Mortality standard U.S. mortality rates
- Retirement age completion of age 57 and 10 years of service

D. Asset valuation - fair market value

The Water Authority's pension employee obligations are linked to inflation, and higher inflation will lead to higher liabilities. The defined benefit healthcare obligation will be affected by the medical inflation rate at 5% in the current period and is based on historical claims information and long-term medical inflation expectation.

The majority of the pension employee defined benefit healthcare obligations are to provide post-retirement healthcare for the life of the member, so increases in life expectancy will result in an increase in the pension employee defined benefit healthcare obligations.

d) Non-pension Employee Defined Benefit Healthcare Plan

The current number of active employees entitled to the non-pension employee healthcare benefits plan is 115.

The most recent actuarial valuation for IAS 19 reporting was conducted on 8 May 2019 using data as at 31 December 2018. Management use this as best estimate to record the non-pension employee defined benefit healthcare liability and the profit and loss charges associated with the plan's participation as at and for the year ended 31 December 2018.

The actuarial position is as follows:

	31 December 2018	31 December 2017
	CI\$000's	CI\$000's
Non-pension employee healthcare benefits obligation	(11,645)	(12,505)
Fair value of plan assets		**
Net liability in financial position at end of year/period	(11,645)	(12,505)

9. Employee Benefits (continued)

d) Non-pension Employee Defined Benefit Healthcare plan (continued)

The present value of the funded obligation changes as follows:

	31 December 2018	31 December 2017
	CI\$000's	CI\$000's
Non-pension employee healthcare benefits obligation at	12,505	-
beginning of year/period		
Past service cost	m)	9,010
Current service cost, net of employee contributions	994	733
Employer direct benefit payments	(12)	(14)
Interest cost	456	416
Remeasurements	(2,298)	2,360
Non-pension employee healthcare benefits at end of year/period	11,645	12,505

The non-pension employee healthcare benefits cost included in net loss is comprised as follows:

	31 December 2018	31 December 2017
	CI\$000's	CI\$000's
Past service cost	-	9,010
Current service cost, net of employee contributions	994	733
Net interest cost	456	416
Total non-pension employee healthcare benefits cost	1,450	10,159
Employer direct benefit payments	(12)	(14)
Net non-pension employee healthcare benefits cost	1,438	10,145

The remeasurements included in other comprehensive loss are comprised as follows:

	31 December 2018 CI\$000's	31 December 2017 CI\$000's
Effect of changes in demographic assumptions	(116)	(567)
Effect of changes in financial assumptions	(2,211)	2,894
Effect of experience adjustments	29	33
Remeasurements	(2,298)	2,360

9. Employee Benefits (continued)

d) Non-pension Employee Defined Benefit Healthcare plan (continued)

The principal actuarial assumptions at the date of valuation:

- A. Cost method Projected Unit Credit
- B. Economic assumptions used to determine the net benefit obligations as at:

	31 December 2018	31 December 2017
Discount rate for obligation	4.55%	3.85%
Discount rate for costs	4.60%	3.90%
Medical inflation rate	5.00%	5.00%

C. Other assumptions -

- 1. Mortality standard U.S. mortality rates
- 2. Retirement age The probability of an employee staying with the Water Authority until age 60 or age 65 is summarized below.

	Age at re	Age at retirement		
Current age	Age 60	Age 65		
29 or younger	60%	40%		
30-39	80%	60%		
40-49	100%	80%		
50+	100%	100%		

D. Asset valuation - fair market value

The Water Authority's non-pension employee defined benefit healthcare obligations are linked to inflation, and higher inflation will lead to higher liabilities. The non-pension defined benefit healthcare benefits obligation will be affected by the medical inflation rate at 5% in the current period and is based on historical claims information and long-term medical inflation expectation.

The majority of the non-pension employee defined benefit healthcare obligations are to provide postretirement healthcare for the life of the member, so increases in life expectancy will result in an increase in the non-pension employee healthcare benefits obligations.

10. Revenue

The Water Authority has five major revenue streams. In the following table, revenue is disaggregated by revenue stream and timing of revenue recognition:

		31 December 2018	31 December 2017	Type of	Timing of
Revenue Stream		(12 months)	(18 months)	contract	transfer
Water Sales	CI\$	27,859,523	44,119,078	Fixed fee	Over time
Sewerage fees		4,573,720	6,429,482	Fixed fee	Over time
Septage disposal		158,235	210,715	Fixed fee	Point in time
Agency work		76,182	102,984	Fixed fee	Point in time
Connection and miscellaneous fees		20,900	30,850	Fixed fee	Point in time
Total	CI\$	32,688,561	44,119,078		

(i) Contract balances

There is no change in the amounts disclosed on the face of the statement of financial position as at 31 December 2017 due to the transition to IFRS 15, therefore restatement is not necessary. The following table provides information about accounts receivables and contract assets from contracts with customers.

		31 December 2018	31 December 2017
Accounts receivable	CI\$	3,508,723	2,323,924
Contract assets:			
Unbilled revenue	CI\$	986,877	871,860

Unbilled revenue is related to the above revenue streams whereby the water or service was provided but remained unbilled at the year-end. Significant changes in the contract asset balances during the year is as follows:

		31 December 2018	31 December 2017
Unbilled revenue at the beginning of the year /period	CI\$	871,860	946,143
Transfers from unbilled revenue recognised at the beginning of the year/period to receivables		(871,860)	(946,143)
Increases as a result of services performed but not yet billed		986,877	871,860
Unbilled revenue at the end of the year/period	CI\$	986,877	871,860

11. Financial Instruments

(i) Impairment of financial assets

Instruments within the scope of the new requirements include accounts receivable and fixed deposits which are assessed for impairment. Any impairment impact recognised during the year is recorded in the statement of comprehensive income/(loss). The Water Authority has assessed the expected credit losses on the fixed deposits held at the end of the year and determined that the expected loss is not material. In assessing impairment relating to accounts receivable, the Water Authority employs a simplified approach and records the loss allowance as lifetime expected credit losses. These are the expected shortfalls in contractual cash flows, considering the potential for default at any point during the life of the financial instrument. In calculating the lifetime expected credit losses, the Water Authority uses its historical experience, external indicators and forward-looking information to calculate the expected credit losses using a provision matrix.

On the date of initial application, the impairment impact to the Water Authority has been captured in retained earnings as at 1 January 2018.

		Loss Impairment		Carrying amount		
		Original	New	Closing balance	Adoption	Opening balance
	0.0	IAS 39	IFRS 9	31 Dec 2017	of IFRS 9	1 Jan 2018
Accounts receivable	and					
unbilled revenue	CI\$	(1,919,667)	(1,059,579)	3,195,784	860,086	4,055,870

12. Leases

The Water Authority leases a parcel of land in Cayman Brac under an operating lease. Lease payments are currently CI\$1,028 per month and are subject to periodic review to reflect open market rental values. The lease was signed in January 2000, and is for a period of thirty years.

Future minimum lease rentals payable follow:

	31 December 2018	31 December 2017
Within one year	12,335	12,335
After one year but not more than five period/years	49,340	49,340
After more than five years	74,008	86,343
	CI\$ 135,683	148,018

13. Financial risk management objectives and policies

The Water Authority's activities expose it to various types of risk that are associated with the financial instruments and markets in which it operates. The Water Authority's Board has overall responsibility for the establishment and oversight of its risk management framework. The most important types of financial risk to which the Water Authority is exposed to are credit risk, liquidity risk and market risk. This note presents information about the Water Authority's exposure to each of these risks and the Water Authority's objectives, policies and processes for measuring and managing risk and the Water Authority's management of capital.

Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Water Authority. Financial assets which potentially subject the Water Authority to credit risk consist principally of trade receivables and fixed deposits. Concentrations of credit risks with respect to trade receivables are small as the customer base is large and unrelated and the fixed deposits are held with the Treasury of the Cayman Islands Government.

Customer credit risk is jointly managed within the finance and customer service departments of the Water Authority. Outstanding customer receivables are regularly monitored, and the Water Authority will disconnect water supply to any customers who do not pay their invoices within 60 days. Payment agreements are available to customers who seek assistance and are monitored closely to ensure compliance. Failure to pay within the outlined time will result in disconnection. The Water Authority holds customer deposits on each account as collateral against non-payment amounting to CI\$1,443,054 (31 December 2017: CI\$1,382,971).

The maximum exposure to credit risk for financial assets at the reporting date, without taking account of any collateral held or other credit related enhancements and based on the carrying amounts as reported in the statements of financial position, is:

	<u>3</u> :	1 December 2018	31 December 2017
Trade Receivables		3,898,883	3,755,501
Unbilled revenue		986,877	871,860
Other Receivables		856,905	488,090
Fixed deposits		14,191,034	-
	CI\$	19,933,699	5,115,451

The expected loss rates are based on the payment profile for revenue generated over the past 24 months before 31 December 2018 and 1 January 2018 respectively as well as the corresponding historical credit losses during that period. The historical rates are adjusted to reflect current and forward-looking macroeconomic factors affecting the customer's ability to settle the amount outstanding.

13. Financial risk management objectives and policies (continued)

Credit risk (continued)

As at 31 December 2018, an allowance for doubtful receivables of CI\$1,247,065 has been made against accounts receivable (31 December 2017: CI\$1,919,677). The aging of trade and other receivables and unbilled revenue at 31 December 2018 is as follows:

	31 December	er 2018	31 December 2017
Current	1,65	2,925	2,628,083
Between 30 days and 60 days	86	3,429	645,590
Between 60 days and 90 days	58	4,339	173,067
Greater than 90 days	2,64	1,972	1,668,711
	CI\$ 5,74	2,665	5,115,451

Liquidity risk

Liquidity risk is the risk that the Water Authority will not be able to meet its financial obligations as they fall due.

Prudent liquidity risk management implies maintaining sufficient cash, the availability of funding through an adequate amount of committed credit facilities and the ability to predict and manage the Water Authority's expected cash outflows. Management monitors rolling forecasts of the cash and cash equivalents on the basis of expected cash outflows.

As at 31 December 2018, accounts payable are all due within 3 months of the statement of financial position date. The repayment dates on the loans are as described in note 6.

Market risk

Market risk is the risk that changes in interest rates, foreign exchange rates or commodity prices will affect the financial performance of the Water Authority. The Water Authority's activities expose it to interest rate risk and currency risk.

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates.

Loans are subject to interest rate risk. As outlined in note 6, the loans attract fixed interest rates based on market interest rates. Management does not consider there to be a significant interest rate risk due to the low interest environment. As at 31 December 2018, the interest rate profile of the Water Authority's interest-bearing financial instruments were:

	31 December 2018		31 December 2017	
Financial Liabilities				
Fixed rate instruments	CI\$	613,344	1,782,023	

The nature of the Water Authority's exposures to interest rate risk and its objectives, policies and processes for managing interest rate risk have not changed significantly from the prior year.

Currency risk

As substantially all transactions are denominated in Cayman Island dollars, the Water Authority is not significantly exposed to currency risk due to the Cayman Islands dollar being fixed to the United States dollar. The nature of the Water Authority's exposure to currency risk has not changed significantly from the prior year.

14. Subsequent events

In preparing these financial statements, management has evaluated subsequent events up to ______, 2019 which is the date that the financial statements were approved and available to be issued. No subsequent events were identified that require additional disclosures in these financial statements.

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