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- Solution resilient to extreme climate events: both natural disasters and climate change
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Fast implementation to access fresh water in post disaster relief efforts





- Minimal environmental impact for both green-house gas emissions and concentrate rejection
- Proven solution in island contexts: Mauritius and Pacific (shown here)
- Production from 10 to 10 000 m³/day or 2 thousand to 2 million gallons per day







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PRESIDENT'S WELCOME

Sara-Jade Govia



DEAR MEMBERS, PARTNERS, AND SPONSORS

T IS MY HONOUR AND GREAT PLEASURE to present to you this, the Caribbean Water and Wastewater Association's 30th Anniversary Commemorative Magazine. In 1991 when our founding fathers conceptualised the CWWA, it was birthed out of their conviction that water, wastewater and solid waste were fundamental to Caribbean development, and the professionals that work in the sector must have a platform where they could advocate for, advise on, and contribute positively to the advancement of these sectors. They recognised that the Caribbean is our home and we have a responsibility to take care of one of its most important resources – water, and to effectively manage wastewater and solid waste to protect Caribbean land and marine environments. The gravity of the role CWWA would play in Caribbean development was evident in the passing of Act No.8 of 1991 by the Parliament of the Republic of Trinidad and Tobago. CWWA's founders were clear that the prominence of CWWA's constitution in the Parliament of a Caribbean state would root the organisation as a key development partner in the sustainable growth of Caribbean people, its places and profits.

Thirty years on, the CWWA has made tremendous strides. The CWWA has evolved into a platform for all

individuals and organisations that practice in the water, wastewater and solid waste sectors of the Caribbean. It has successfully leveraged this platform by hosting, for the last 30 years, a conference of professionals and companies that share this same interest. The CWWA has become a trusted partner for Governments, private companies, development agencies and other NGOs as a custodian for identifying and addressing water, wastewater and solid waste challenges. This is cemented in the two strategic documents that pivots CWWA's role in regional development – the Regional Strategic Action Plan for the Water Sector in the Caribbean to Develop Resilience to the Impacts of Climate Change (RSAP) and the Caribbean Waste Management Action Plan (CWMAP).

The CWWA is also proud of working with several partners to host the High Level Fora of Caribbean Ministers for Water and Solid Waste. These fora bring together Ministers throughout the region to deliberate on the collective issues they face and to chart a unified path forward. The most notable output of these discussions have been the Declaration of Basseterre signed in 2022 by the Ministers and Heads of Delegations responsible for water throughout the region. The Basseterre Declaration has strengthened



our resolve to manage our water and waste sectors for the development of the Caribbean.

Over the years the CWWA has partnered and collaborated with over 20 agencies across the region and internationally. Some of these include the Inter-American Development Bank, the Caribbean Development Bank, the United Nations Environment Programme, the Caribbean Community Climate Change Centre, the World Health Organisation, Caribbean Development Bank and the Global Water Partnership-Caribbean. These partnerships have made it possible for the Association to make great strides over the past 30 years and I expect they will continue as the Association continues to embark on digital growth and its training academy. I thank each partner and collaborator we have worked with over the years for their support and look forward to stronger collaboration in the coming years.

The Association has overcome many challenges in the past 30 years. Through the lens of opportunity, the most recent being the global pandemic which saw us hosting our first virtual conference in 2020. Venturing into unknown territory of the virtual world was no easy task, however, the Secretariat persevered in learning new technologies, garnering support of our membership for various activities and ensuring our collaborators and exhibitors were highly visible. From all across the Caribbean we were able to host yet another successful conference. We would repeat this with a notch on our belt to host our milestone 30th anniversary virtually. While we would have thoroughly enjoyed a celebration in person we did the best we could with the global situation. For this, I thank the Secretariat for being adaptable and harnessing the opportunity we were given in the midst of a global pandemic.

Although it is in the name, the CWWA has not been limited to the Caribbean, our membership and partners span the globe. This allows for diverse interaction, extensive networking, and knowledge sharing. The impact of this was observed with the hosting of the annual conference for the first time outside the Caribbean in 2015 when it was held in Florida, USA.

Hosting a CWWA conference is no easy task but we have managed to do so consistently throughout the past 30 years. I take this opportunity to thank our past host countries and utilities, members, partners, and volunteers for their time and dedication to ensuring a successful conference every year, and I welcome the partnership of new countries and utilities to hosting a CWWA conference in your territory.

To the Executive Council upon which I was elected President, I am grateful for your support during what was at the time an unprecedented Presidency. The dynamism and vitality of the Executive Council is a symbol of the zeal and commitment of CWWA's members to the Association and to the Caribbean. I am encouraging all sector professionals to join us and get involved, in particular to young professionals and women we need your creativity and fervour to pair with our more experienced members who are ready to share their legacy. I would like to thank all the members, individual, corporate, utilities, and associates, our many collaborators, sponsors, and exhibitors over the years for your continued support. I have seen the resilience and determination of the members of the CWWA and I am confident that the Association's growth path will be exponential in the near-future, for me it is imperative for a resilient Caribbean.

Happy 30th Anniversary CWWA!

EXECUTIVE DIRECTOR'S MESSAGE

Wayne O. Williams

REFLECT ON THE WISDOM of the early water engineers in the region to agree with a proposal set before them by my father, the late Engineer Ron Williams in what turned out to be the last Water Engineer Conference in Montserrat in 1989. I was privy to participate in that conference and get voted in as the inaugural Secretary. In fact, some of our current members were also in attendance at that pivotal gathering, a testament to their faithfulness to the ideals then presented.

The proposal was to launch a regional not-for-profit membership Association promoting the water and wastewater sectors in the Caribbean known as the Caribbean Water and Wastewater Association (CWWA). The fact that the original Mission and Vision have remained unchanged some 30+ years later is testament to the quality of the plans by the original architects of the Association.

Over thirty (30) years later, with hundreds of members registered, an online presence via a website and social media, the largest sectoral Conference and Exhibition (C&E) in the Caribbean with two (2) annual High-Level Fora for water and waste, the CWWA is still going strong.

The CWWA continues to have close and friendly relationships with funding banks doing business in the region, technical partners, CARICOM Agencies, private industry, regional education facilities and other sister agencies. It is understood by all these partners that with all the challenges the water and waste sectors have on an annual basis, from climate change threats, lack of adequate funding, aging infrastructure, low tariffs and frequent political turnover, etc. the best way to progress is to work together in a synergistic fashion.

And if those threats were not enough, a new type of challenge, the deadly COVID-19 pandemic entered the picture. Although this health threat somewhat resembled certain aspects of a natural disaster, it was dramatically different in many other ways, primarily hanging around for over 2 years...and counting. It required a paradigm shift in solution-finding to address and overcome the "in your face" challenges. Businesses, governments and eventually countries had to lock down to prevent the spread of the deadly disease while still trying to function albeit on a limited basis. Hospitals, utilities, groceries, pharmacies and transport, could not close for business no matter "how bad it got". The CWWA congratulates all who HAD to show up to work during even the darkest hours of the pandemic, especially our water, wastewater and waste management membership.

However, all was not only doom and gloom during this period. The capacity and ability to work remotely increased exponentially. Businesses, including utilities found ways to continue to provide their valuable services, to collect revenues, etc. all online. Webinars and other online meetings for international, regional and even local groups are now a norm, saving time and money with the spin-off benefit of reducing their carbon footprints as a result of less carbon-intense travel methods.

There is a "new normal" and CWWA has "jumped in with both feet". We held our first virtual C&E in 2020 and another in 2021 as the pandemic lingered on. We now have our first Specialist Group – The Water Loss Specialist Group that has been very active and their events well participated. Water Resources, wastewater and solid waste management specialist groups are in the works.

Full digitalization of membership and accounting records and the development of the website capability are happening at a "full steam ahead" pace. Our skills "reservoir" is steadily being populated to provide the membership with regional visibility in their sectors as well as for those looking for specific talents/capability in the region. On completion of the online upgrades the website will also be a data repository for technical data, Tenders and job opportunities.

We are also proud to have launched the capacity-building arm of the CWWA, the ReEF (Research and Education Foundation) to fill the gaps in regional sectoral training. This would include bi and multi-lateral partnerships to deliver the required/requested training.

Last but not least, the CWWA has been selected to Chair both the Implementation Monitoring Committee (IMC) of the "Regional Strategic Action Plan for the Water Sector in the Caribbean to Develop Resilience to the Impacts of Climate Change" (RSAP) and the "Caribbean Waste Management Action Plan" (CWMAP). This is testament to the confidence the regional partners have in the CWWA to ensure these regional action plans continue to chart and guide the way forward in the water and waste sectors.

The CWWA looks forward to the next thirty (30) years to a larger, even more engaged and effective membership to continue the work started with our partners and lead the development in the region to overcome both the periodic and perennial challenges of the water and waste sectors.



TRUSTEE'S MESSAGE

Sherry Dumas-Harewood

AM SHERRY DUMAS-HAREWOOD, one of the Trustees of the organization. I joined CWWA because I was very interested in continued professional development, particularly in the water sector. I attended the second annual conference in Barbados and was very impressed with the material I received and the interaction with other professionals from the region who became friends in a short space of time. CWWA offered me an opportunity, on an annual basis, to stay updated with developments and experiential learning in the water sector.

My official duties for CWWA started in 1994 when I was elected as Secretary of the organization. At that time, the CWWA did not have a Secretariat and I was responsible for setting it up at the Water and Sewerage Authority, Trinidad and Tobago, where is it still housed up to today. The establishment of the Secretariat in 1996 gave the organization a stable foundation since before we operated out of boxes with no staff. The appointed Administrative Secretary, Ms. Marian Stephens and I worked together over the years to build on membership relations and collaborations with Regional Institutions that were interested in the development of the water sector.

As an Executive Member over a number of years, it was quite rewarding to see how through collaboration with other Regional Institutions like CEHI, CBWMP, PAHO, AIDIS, CDB, GWP-C and the annual CWWA conference the organization was able to build capacity in the sector in the Caribbean. In this regard, two experiences standout, the first in early 2000 at the Disaster Management conference in Barbados where we discussed the framework for a regional approach to disaster preparedness and recovery. Although no memorandum was signed at the time, regional Utilities have embraced the approach to offered assistance both technical and material in times of disasters. The other experience is a collaboration with Global Water Partnership Caribbean (GWPC) on Women in Water programme, where Paul Hinds, GWP-C Regional Coordinator at the time and myself visited Haiti and shared information on protection of the watershed and water management with women in rural communities. These were truly exciting times when while volunteering with CWWA, I saw changes and positive impact on the society and communities.

I always say to people I owe CWWA for my professional development. Having served in the organization, I had

the opportunity to interact with the other practitioners in the regional utilities even though most of my time was in engineering training at the University of the West Indies. I was able to gain practical knowledge from these interactions, which I shared with engineering students, who themselves are today's utility managers.

For the future of CWWA, I would like to see recognition at the regional level. I know many regional organizations look to CWWA to collaborate, but I would like to see that CARICOM recognition. We started working on it in the 2000s and I think that fell off a bit but I would like to see that in the future.

When you think about an organization - in terms of mobilizing persons in the water, waste and solid waste sector – the first organization to come to mind should be CWWA. I think we are on the road to doing it. In terms of the membership, I would say to the general membership do not look at CWWA as just another organization that you join. The membership fee is small so you can pay it but look at CWWA as an organization that you can assist and that will assist you. Without a doubt, I would recommend to any professional to first volunteer your time, because with volunteering in a professional organization, you learn some things that you would not even believe. For example, the protocol as a professional to host dialogues with other professionals, politicians, lending agencies and NGOs, you master that from just volunteering your time and fully participating in CWWA.







MILESTONE

• Trinidad and Tobago Parliament passed Act for **CWWA**

Legal Supplement Part A to the "Trinided and Tobego Gazette", Vol. 30,
No. 201, 8th August, 1891 Fifth Session Third Parliament Republic of Trinidad



REPUBLIC OF TRINIDAD AND TOBAGO

Act No. 8 of 1991

[L.S.]

An Act to incorporate the Caribbean Water and Waste-water Association and for matters incidental thereto

[Assented to 5th August, 1991]

Whereas there has been established in Trinidad and Presents and Wastowater Association.

Association.

Fulfilling Our Mission



CWWA'S THIRTY YEARS OF GROWTH & PROGRESS

Andrew P. Hutchinson C. Eng, MICE, FBAPE, P. Eng.
CWWA Trustee | CWWA President 1994-96, | CWWA Gold Award 2000

AS WE PROUDLY CELEBRATE the hosting of the 30th CWWA Annual Conference and Exhibition, we must reflect on this milestone achievement of the CWWA.

Since registration in 1991 in Trinidad & Tobago, the CWWA has made steady progress, with limited resources, in the fulfilment of its mission statement.

"To advance the science and practice of water supply, wastewater disposal and solid waste management, and promote the efficient management of utilities for sustainable development of the Caribbean people."

I recall joining CWWA in 1993 to assist with the planning for the 2nd Annual Conference in Barbados at the then Dover Convention Centre. We welcomed the 20 participants and 5 exhibitors with a cocktail reception. In recent years the Annual Conference and Exhibition attracts 100 or more participants and 50 exhibitors, welcomed by a grand opening ceremony, and concluded with a "banquet" and award ceremony.

In the past 30 years CWWA has effectively used the Annual Conference & Exhibition, conference proceedings, training workshops, newsletters, and its web site to support the development of human resources, public education, and its members through the sharing of knowledge and experiences, for the benefit of the wider Caribbean. We have also strengthened our alliance with institutions such as PAHO, CARPHA, IADIS and others, as we draw on their experience.

However, in a world of constant change CWWA must continue to refocus its vision to meet the changing demands of the Caribbean Water and Waste sectors.

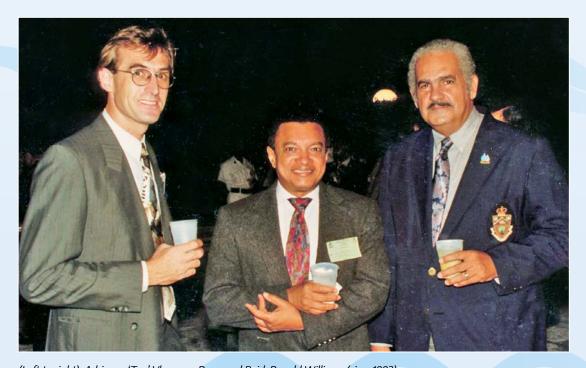
After 30 years, CWWA is well placed to facilitate the development of a CWWA Certification Program for operatives in the Water, Wastewater and Solid Waste sectors across the Caribbean. This can be pursued in partnerships with agencies offering technical and vocational training. As the Caribbean moves towards freedom of movement, certification is necessary for operatives to market their skills regionally.

The sharing of knowledge and skills can only improve the quality of operatives within the Caribbean's Water, Wastewater and Solid Waste sectors, and by extension enhance the quality of service within the Caribbean socio-economic environment. 1993 2nd CONFERENCE Theme:

STANDARDS IN THE WATER & WASTEWATER INDUSTRY

BARBADOS





(Left to right) Adrianus 'Ton' Vlugman, Raymond Reid, Ronald Williams (circa 1993)



Professional Partnerships

CWWA RETROSPECT

RUMINATING WITH ADRIAN 'TON' VLUGMAN, WASH Consultant

CWWA WHEN IT WAS ESTABLISHED IN 1991, of course, I joined it because firstly my predecessor Dr. or Engineer Ronald Williams set up CWWA. It is a professional association of people that worked in the same sector that I was working in water sanitation. So it was logical that I joined as part of a network as part of sharing experiences, as part of developing policies, and that it was logical for me to join the CWWA.

The first thing I actually tried to do in 1994 when Chris Griffith, who was then the head of the Sanitation Service Authority in Barbados, came to me because he wanted to set up the solid waste association of the Caribbean and I said "Chris why don't we join the CWWA" and we tried that in 1994 and we had meetings to try to change the Constitution of the CWWA and it didn't really go through, although CWWA was open to accept participation from the solid waste sector and my suggestion was to change the name from Caribbean Water and Wastewater Association to the Caribbean Water and Waste Association so the acronym stays the same, but it was a bit lukewarm received so the name change never happened. I don't think the constitution ever changed.

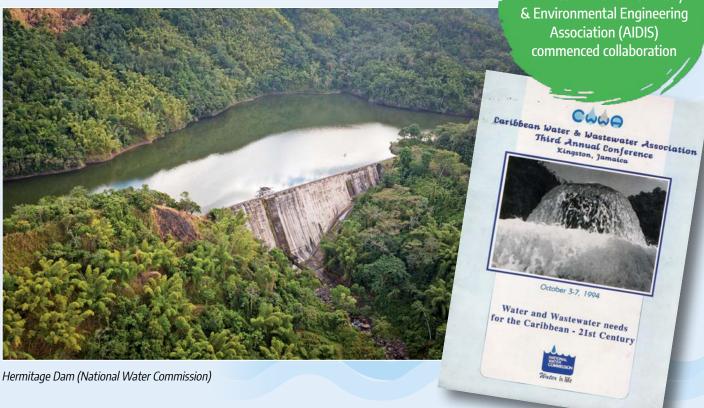
The CWWA was significant in my career development basically we had a strong overlap. I was a regional advisor for PAHO in the water and sanitation sector, water environmental health sector and CWWA provided a platform to meet stakeholders, counterparts and professionals from the region and outside the region and develop common strategies. I worked very closely, also through the CWWA conferences we developed a good relationship, with the IADB, CDB, CIHI, and so that network, that professional network and later also behind the performance was significantly important to execute my work and to make a more significant impact on the water sanitation sector.

This is a no-brainer, anybody in the area of water and sanitation, and waste management should join the CWWA. It is an excellent network of professionals, is a network where people meet on an annual basis but also you can meet outside of that through your network and discuss common interests, you can develop your career paths, you might understand that I was playing in the sector.

So for all young professionals and all the professionals, also I encourage women to become members of CWWA because of course this is a male dominated world. I think they should be involved in CWWA and in its future development. Now my best memories of CWWA were always the annual meetings and really meeting with my colleagues including ministers to be able to interact.







Longstanding Collaboration



GWP-C AND CWWA: A FOUNDATION BUILT ON PARTNERSHIP

Global Water Partnership-Caribbean

"ALONE WE CAN DO SO LITTLE; TOGETHER WE CAN DO SO MUCH." These popular words by Helen Keller ring true when one considers the long-standing partnership between the Global Water Partnership-Caribbean (GWP-C) and the Caribbean Water and Wastewater Association (CWWA).





When GWP-C was established in June 2004 with a mission "To support Caribbean countries in the sustainable development and management of their water resources at the community, national and regional levels" the CWWA became one of its first Partners, in that same year.

A partnership that has spanned 18 years to date. CWWA's own mission of "Bringing together the water and sanitation community in the Caribbean towards the protection of public health and the promotion of sustainable development" presented a solid synergy and shared purpose amongst both organisations.

GWP-C and CWWA's collaboration over the years is strongly reflected in both organisations agreeing to do something novel back in 2005, when they began jointly hosting the first-ever High Level Forum (HLF) of Caribbean Ministers with Responsibility for Water. They saw the HLF as a proactive approach to addressing the water resources management problems in the Caribbean and a means of bringing government ministers and policymakers in the water and wastewater sectors together to engage in discussions on critical issues on Integrated Water Resources Management (IWRM). They also saw

the Forum as a platform to provide the necessary technical information to support decision-making and the development and implementation of regional approaches/policies for water sector management.

GWP-C and CWWA went on to jointly convene the HLF for eleven (11) years from 2005 – 2015 throughout the region; examining critical themes such as:

HLF 1 (Barbados) – IWRM and Effective Water Governance

HLF 2 (Tobago) – Challenges and Opportunities in IWRM in the Caribbean

HLF 3 (St. Kitts) – IWRM Planning and Policies in the Caribbean

HLF 4 (Jamaica) – Water Financing

HLF 5 (St. Thomas, USVI) – Building a Water Secure Region: A Caribbean Response

HLF 6 (Grenada) – Water Crisis in the Caribbean: The IWRM Response

HLF 7 (Guadeloupe) – Water Management Financing in the Caribbean: Pricing, Efficiency, Equity and Sustainability

HLF 8 (The Bahamas) – The Water and Energy Nexus in Caribbean Development

HLF 9 (Barbados) – Water and Sanitation and the Post-2015 Development Agenda: Addressing Wastewater Policy and Financial Challenges in the Caribbean

HLF 10 (The Bahamas) – Caribbean Water Security: Risks and Opportunities

HLF 11 (Miami, Florida, USA) – Connecting Water to Climate, Economic Growth and Development within the Post-2015 Development Agenda

With some notable outcomes from HLF 1 – 11 being that various Caribbean Ministers of Water endorsed proposals to include water resources management as a key sector to be addressed at the highest political

level in the Caribbean region. Over the period, some Caribbean Ministers with responsibility for water resources management also committed themselves to addressing regional water security and building climate resilience in the Caribbean; as well as, working to develop Drought Management Plans to be incorporated into their overall Water Resources Management planning and; placing greater value on wastewater in the region and its role in the holistic management of water in Small Island Developing States (SIDS).

The GWP-C and CWWA working together on the HLF for 11 years, undoubtedly created a key tool and platform for providing an opportunity to develop and implement a regional approach to water sector management. To date, the HLF on Water now held by CWWA, remains a very important regional event in which GWP-C continues to participate.

The partnership between GWP-C and CWWA goes beyond the HLF. GWP-C remains committed to working and collaborating with its long-standing Partner the CWWA, in advancing water security in the Caribbean.

The CWWA celebrating its 30th year in operation, signifies a dedicated Association of professionals and practitioners for the water and the waste sectors in the Caribbean and GWP-C values this partnership. In the words of Henry Ford "Coming together is a beginning; keeping together is progress; working together is success."





WE'RE IN THIS TOGETHER

Core & Main is a leading distributor of water and wastewater products. We believe in fostering a world where communities thrive because our people and products provide safe, sustainable infrastructure for generations to come.





Successfully Engineered

CWWA: A PIPELINE

FOR WATER AND SANITATION COOPERATION IN THE CARIBBEAN

Ignatius Jean *Executive Director*Caribbean Water and Sewerage Association (CAWASA) Inc.



AFTER 30 YEARS OF ADVOCACY, 30 years of building alliances and partnerships, 30 years of promoting professional development, and 30 years of promoting good governance, it's time to pause and reflect. It is also a time to celebrate this milestone achievement.

We also take the opportunity to recognise the vital role that our water professionals play in ensuring good health and safety in our communities by providing reliable access to safe water and dependable wastewater services. We salute the services provided

by these essential workers, particularly during the past 20 months of the COVID-19 Pandemic, and recognise their passion, commitment and dedication.

Over the years the CWWA has collaborated with several regional and international development partners to amplify the voices of its membership in advocating for good governance, financing and investments in water, sewerage and solid waste infrastructure, water source protection, disaster risk response, resilience and climate change adaptation and NRW reduction.



CAWASA is proud to be associated with the strides that the CWWA has made in helping to improve the sector in the Caribbean.

CAWASA's association with the CWWA dates back to 1996 when the Caribbean Basin Water Management Programme (CBWMP) was established – this being the predecessor organization which was rebranded CAWASA in 2010. It was in this same year that the two organizations formalized their relationship through a Memorandum of Understanding (MOU). Strengthening the cooperation between the two organisations continues to be a key pillar in CAWASA's strategic plan.

One key area of cooperation was the formation of the Caribbean Water Operators Partnership (Cari-WOP). Cari-WOP is the Caribbean platform for WOPs and is part of the larger geographical WOP platform for Latin America and the Caribbean (WOP-LAC). The WOPs are affiliated to the UN-Habitat's Global Water Operators' Partnerships Alliance (GWOPA). CAWASA and the CWWA are the Co-hosts of the Cari-WOP Secretariat. Water Operators' Partnerships (WOPs) are peer-support partnerships between water and sanitation service providers. WOPs work by harnessing the skills, knowledge and goodwill within a strong utility to build the capacity and improve the performance of another utility that needs assistance or guidance.

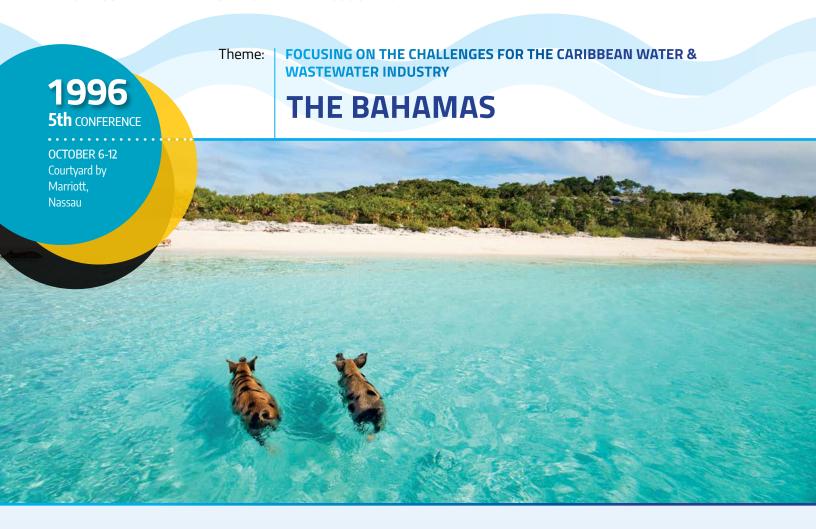
Among the WOPs coordinated by Cari-WOP include, Belize Water Services Limited (BWS) and Contra-Costa Water District (CCWD) of California on NRW reduction and Safety in the Workplace; Multi-partner WOP (Cari-WOP, GWOPA and DINEPA, Haiti); and MOU signed by Pacific Water and Waste Association (PWWA), Cari-WOP and GWOPA in 2015.

Other areas of cooperation between CAWASA and CWWA include preparation and coordination of the Caribbean Delegation to participate in the 8th World Water Forum in Brasilia, Brazil, 2018; development of the Regional Strategic Action Plan for Governance and Building Climate Resilience in the Water Sector in the Caribbean (RSAP); the RSAP Implementation and Monitoring Committee which includes coordinating the reporting on progress to the Ministers responsible for water and wastewater at the High Level Forum (HLF) of the CWWA's Annual Conference. A key outcome of the RSAP has been the development of the Caribbean Water Utilities Insurance Company (CWUIC) which is expected to be launched by early 2022.

Over the years the two associations have been integral to the disaster risk planning and response mechanism among water utilities particularly after events such as Tropical Storm Erika in Dominica, Hurricanes Irma in Antigua and the British Virgin Islands, and Hurricane Maria in Dominica. In 2021, CAWASA and the CWWA were co-opted by CDEMA as the WASH focal point that collaborated with the UNICEF WASH-LAC in managing the response to the La Soufriere Volcano eruption in St Vincent & The Grenadines, earthquake in Haiti and flooding in Guyana. The two associations have also represented the Caribbean Region on several virtual international conferences.

It is evident, that over the past 30 years the CWWA has successfully engineered itself as the pipeline for the flow of inter-regional and international cooperation for the water and sanitation sectors in the Caribbean. This is manifested by the annual trek by hundreds of water, wastewater and waste professionals, scores of exhibitors, ministers of government, and students to the Annual Conference and Exhibition of the CWWA – albeit virtually in 2020 and 2021. Much of this cooperation has been possible through the support and investments of technical and financial resources of institutions such as the Inter-American Development Bank (IDB), the Caribbean Development Bank (CDB), UN-Environment (Caribbean), PAHO, GWP-C, UN-Habitat GWOPA and sundry multilateral agencies.

In closing, we echo the words of CAWASA's President, Mr. Christopher Husbands: "On behalf of the Board of the Directors, Members of the Caribbean Water and Sewerage Association (CAWASA) and my own behalf, I join in the celebration of the 30th Anniversary of our friends and partners in the water sector - The Caribbean Water and Wastewater Association (CWWA). This is no ordinary celebration. It's a celebration of professionalism and excellence of the people in the water and wastewater sector of the Caribbean. CWWA has been an anchor for professional development, forged meaningful partnerships among diverse stakeholders, brought us the only High Level Forum (HLF) for Ministers responsible for water and sanitation, mobilization of resources for post disaster recovery and the Action Plan to build resilience in our water utilities. Three Cheers to the CWWA!!"







CWWA Past Presidents: (L - R) Daniel Cummings, Errol Grimes, Ron Williams, Emmanuel Romain, and Leo Lawson

Valuable Partuership

PLAYING THE LONG GAME

FLORIDA AQUASTORE'S 39 YEAR COMMITMENT TO THE CARIBBEAN'S MOST CRITICAL INFRASTRUCTURE



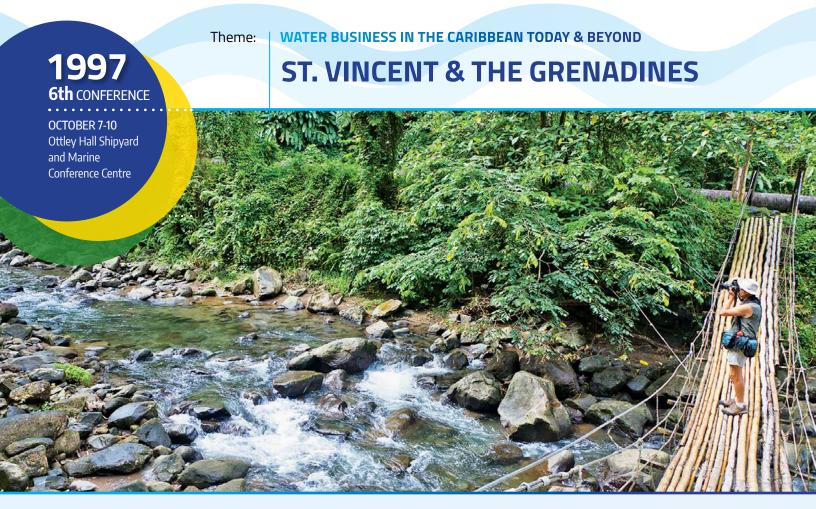
FLY INTO ANY CARIBBEAN AIRPORT and on the approach, you are sure to see the glisten of the Florida Aquastore's glass-fused-to-steel storage tank's aluminum dome and its signature cobalt blue. This is the glisten of the world's leading corrosion resistant vitrium coating for bolted storage tanks. This premium technology has set the standard for Caribbean water storage offering maximum corrosion resistance and the longest lifespan available.

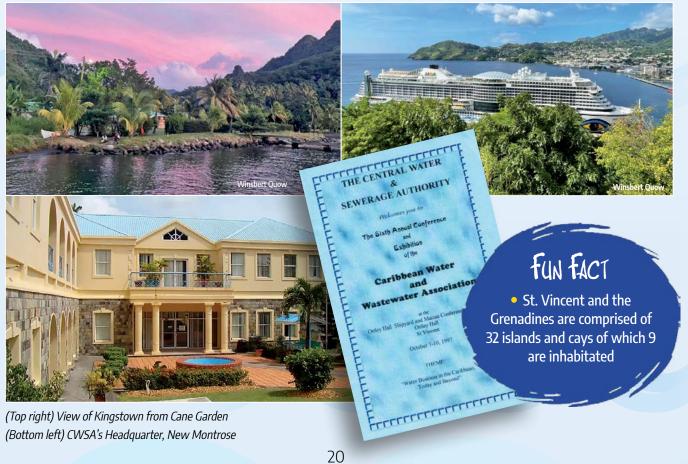
Founded in 1983, Florida Aquastore (FA) is the premier company for water storage across Florida, the Caribbean, and Central and South America providing over 1,500 installations in 32 countries. A Caribbean Water and Wastewater Association (CWWA) member since 1996, FA has been a mainstay at the CWWA conferences sponsoring events, sharing its engineering, design and construction expertise, and offering cost-effective, low maintenance, high quality solutions for the region's most critical infrastructure.

"We greatly value our partnership with CWWA and the relationships we have made at the conferences with industry professionals, vendors, utilities and agencies in the water and wastewater sector. Not to mention the laughs shared at the signature cultural events through the years," says Matt Whelchel, FA CEO.

"The question we constantly get asked is, what makes Florida Aquastore different?" Our answer is always the same says Nick Hartofilis, FA Caribbean Sales Manager, "we intently listen to our clients and understand the critical importance of water and wastewater infrastructure in the region. Water is life, water scarcity and loss are real problems in the area and responding to our client's needs in a moment's notice is what differentiates us from our competition. Our goal has always been so much more than supplying a tank or wastewater treatment system. We want to be a trusted partner for decades to come!"

As a trusted partner in the region, Florida Aquastore's advanced glass-fused-to-steel coating system has set the standard for both the private and public sector with liquid storage solutions for both Municipal and Industrial applications. FA offers its customers complete design-construct storage and wastewater treatment solutions with guaranteed dependable performance, long life, and minimal maintenance costs. These factors coupled with a dedication to quality, efficiency, and continued innovation keeps Florida Aquastore at the forefront of the industry. If we are not already, we look forward to the opportunity to become your water storage and wastewater treatment partner in 2022!





Soldiering Ou



SOLIDIFYING SOLID WASTE MANAGEMENT WITHIN THE CWWA

Winsbert Quow BSc. Civil Engineering, MBA

Manager, Solid Waste Management Unit, Central Water and Sewerage Authority, St. Vincent and the Grenadines

I AM A MEMBER OF THE CWWA since 2002, initially joining as an engineer working in the water department of the Central Water and Sewerage Authority (CWSA), St. Vincent and the Grenadines and then transitioning to solid waste management in 2004. Since 2005, I have been managing the Solid Waste Management Department within the CWSA with the responsibility for organizing and directing all the waste collection and disposal activities throughout the state assigned to the organization. Therefore, my engagement with the CWWA thus far has been predominantly from a solid waste management perspective.

Since 2018, I have served as the CWWA's National Section Chair for St. Vincent and the Grenadines. In this capacity, I was able to develop a country profile of St. Vincent and the Grenadines for the CWWA, highlighting national developments and approaches to the management of water, wastewater and solid waste. In April 2021, immediately following the explosive eruptions of the La Soufriere Volcano, an arrangement was established through the CWWA to have water samples from St. Vincent tested in Trinidad for heavy metals due to local capacity challenges. This service was vital to providing credible information to the public concerning the safety of drinking water during the emergency.

In August 2013, the CWWA initiated the process of developing a three-year strategic plan. As part of this process, the 2002 -2010 Action Plan of the organization was reviewed and one of the objectives of that plan was to 'solidify the solid waste section of the CWWA'. Their commitment to achieving this objective was to be reflected in the renaming of the organization to the Caribbean Water and Waste Association. If this simple but significant change is implemented, the Association will be better positioned to engage with solid waste management professionals and companies regionally and internationally.

Notwithstanding, the CWWA has soldiered on in its efforts to become a sector lead and focal point for solid waste-related matters in the region.

It has hosted a two-day High-Level Forum (HLF) for Caribbean Parliamentary Representatives with responsibility for solid waste management at its last five annual conferences. I have had the privilege of attending four of these forums including the first held in Guyana in 2017 and the last one in 2021 which was held virtually. A major achievement of these annual forums was the drafting of a Caribbean Waste Management Action Plan (CWMAP) which aims to be a road map to establishing sustainable waste management systems in the Island nations of the region. Although this proactive approach is welcomed by technocrats in the sector, solid waste management issues in the region are not usually given a high national priority until they become a sociopolitical problem. The CWWA, therefore, will have to develop an effective communications strategy that translates proposed solid waste management developments into socio-politically palatable terms and indices such as job creation, revenue generation and positive public opinion. This intentional and targeted communication is critical if the goals and timelines of the CWMAP are to be fully realized.

Overall, my experience as a member of the CWWA for nearly 20 years has been a rewarding one. It has contributed to my professional development, the expansion of my network and an enhanced sense of regionalism. Though there are current matters to be resolved and new challenges to navigate, I am confident that the organization will continue to advance with the support of its members and regional and international partners. Happy 30th Anniversary to the CWWA!

Established Framework

THIS IS WHY - MY CWWA JOURNEY

Lennox O'Reilly Lewis

CWWA Past President, 2012-2014

MY JOURNEY WITH THE CWWA began in 1996, a year after I joined the Central Water and Sewage Authority (CWSA) in St. Vincent and the Grenadines. A large team from the CWSA attended that year's conference in the Bahamas to work with and learned from the organizers of that conference. The CWSA had committed to hosting the 1997 conference and I had the privilege of being part of that hard-working team, led by Daniel Cummings, who successfully hosted that conference.

That experience provided me a first-hand view of the workings of the CWWA. The value of the organization and the commitment of its leaders and members were self-evident. It was the only organization that facilitated networking amongst water sector professionals at all levels. The conference was a one-stop-shop for all things water, where you could share experiences and meet suppliers of water technologies relevant to the Region. Since 1996, I have been fortunate to have attended all but one conference.

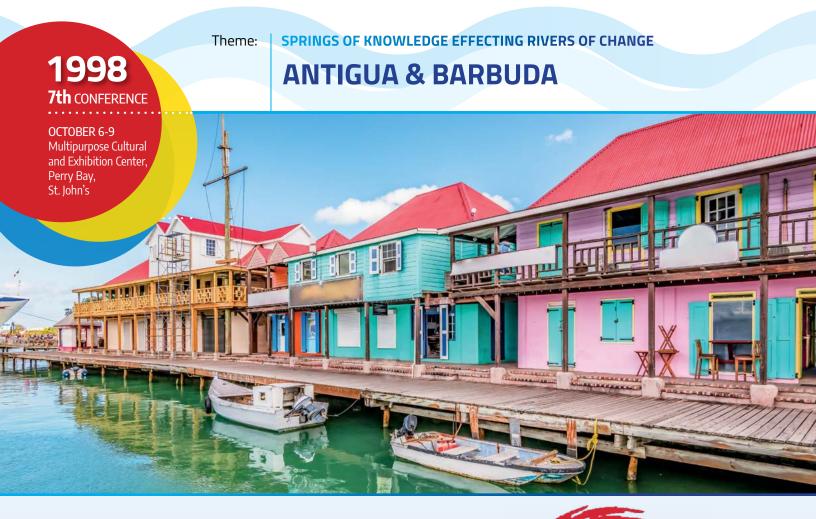
As with all things in life - the more you put in, the more you get back. Through preparing and presenting on our work at the CWSA at the 1998 conference, I gained direct exposure to potential employers. I am convinced that this contributed significantly to me being recruited by the Caribbean Environmental Health Institute. The opportunity to serve on the CWWA Executive Council not only allowed me to give back to the organization, but was also a period of rapid professional growth and development. It exposed me to a different type

of organizational management which required me to develop new skill-sets. The experience on the CWWA Executive Council also exposed me to the workings of key institutional partners such as PAHO, CIMH, CCCCC, CDB, IADB, and UNDP, increasing my understanding of the intricacies of the international development space. These experiences have made me into a more effective and knowledgeable professional.

I encourage the management of all water and solid waste management utilities, consultants, water resource management agencies, regional organizations, suppliers and vendors to advocate for, and provide support to the CWWA. This can best be done by facilitating (including financing) the participation professional staff in all CWWA events and activities. This benefits your organizations by building staff capacity, as well as enhancing your visibility and networking opportunities.

The CWWA provides an established framework to contribute to the larger objective of advancing the water and waste management sectors in our region - a noble and worthwhile endeavor which benefits all Caribbean people.







FUN FACT

 Antigua has a great nickname - 'the land of 365 beaches' - because of so many white sandy vistas. A beach for every day of the year!



(Top) Conference leaders (Bottom) Conference delegates

Unique Organization



MY TIME IN RETROSPECT

AND BEST WISHES TO CWWA FOR THE FUTURE

Marian Stephen

CWWA Past Executive Assistant and First Staff Member

I BECAME THE FIRST MEMBER OF STAFF for the Caribbean Water and Wastewater Association-CWWA back in October of 1997. At that time, CWWA had newly acquired office space, located at the headquarters of the Water and Sewerage Authority-Trinidad, to run its operation and Secretariat. This is where my journey with CWWA began. I was hired as an Administrative Assistant and later became the Executive Assistant. Full support was given to me by the members of the diverse regional Board, and I was guided and assisted especially by the board members located in Trinidad. They were quite accommodating, and we developed a long-term camaraderie. I am ever grateful for that bond we shared during my work life at CWWA. I eventually retired in October 2014.

As I reminisce, one of the biggest hurdles that CWWA encountered, was operating without a permanent home in its earlier years. The Board Secretary at that time managed the office operations between her private place of work and her home. Subsequently, the office space had been acquired and outfitted with staff and other resources and the full operations were in gear. This became CWWA's biggest accomplishment at that time. During my years with the CWWA, I witnessed the strengthening of the Association, by the growth of its functions and development in its membership.

One of my fondest memories, and although there were many, was assisting in the planning of the annual conferences, as well as participating and experiencing seventeen of those exciting and rewarding annual event. The real nugget within those fond memories would be the 2014 annual conference which was the year I retired, and the year the conference was hosted in the beautiful island of Bahamas. I was honored and awarded for exceptional contributions to CWWA and was really treated beautifully. It was quite a proud and humbling occasion for me and will always be etched in my memory.

CWWA is quite a unique organization. I call it the Caribbean's networking gem. There are many values to be gained by being a member of this distinctive Association, including what it advocates in the water and waste sector. The positive influences it has on the science, supporting the advancement of technology, education, and a host of benefits are there to achieve.

A famous quote states, "There are friends, there is family, and then there are friends that become family." So, for me, I started as an employee of CWWA, became a friend and now a part of the CWWA family. I would encourage anyone in the sector, be it technical, administrative or a patron to come on board, there are lots to attain. You are always welcome to become part of the CWWA family.

Happy 30th Anniversary to CWWA! Congratulations and best wishes to the Management and Staff for years of success. You have come a long way and still going strong, Cheers!



Marian Stephen





Influencing Behaviours



CWWA AND ME

Lise Walter CWWA Vice President

I CONSIDER CWWA FAMILY with an annual reunion. Some family members I speak to often, others I catch up with when I see them. The conference is a week highlighted on the calendar that I plan around and look forward to. A good excuse to travel to another territory, get cool stuff (technical brochures, a squawking chicken, caps) and learn how challenges are solved elsewhere. I know who to call when a project needs a pump or a containerised treatment plant. I can also give a colleague a heads up when I see an RFP advertised.

Now that we meet the family online and not at breakfast before a technical session, my reflection on the past 13 years of activities reminds me how information influences behaviours. In Guadeloupe I was speaking to a Haitian and I said how I had a bag in my car for all the water bottles I had to keep after a day on site or shopping because there were so few locations for disposal. He asked me why I would buy water when out and about when I could fill a metal flask! I had not carried an "Igloo" since Secondary School and a bell went off. Today when we are about to get in a car my daughter asks if she is to fix water bottles, she is so well trained.

The local colleagues who influenced me to join the CWWA are still the persons I call when I need to bounce ideas. I remind all my young colleagues that you never know when you can use information you learn so make time for the technical sessions. When I need a solution I go to my drawer of information from booths over the years to remind me who I can call.



CWWA/AIDIS "ON THE AIR"

joint CWWI/AIDIS Conference, and other Vicente Jonghod Falcon of AIDIS, Doniel nelated matters, hit the circurures on several. Cummings, Leo Lowson, Enol Grimes and Ana Jamaicon talk shows. These included pro-liveature of the CWWIA. The discussions were grammes cient on JS RAIDI, LOVE FM, QUAS geomet towards sensitizing the public about FM, POWER 106, HD1 102, and TVJ. Among worter, environmental, and sanitation issues.

Clockwise, Leo Lawson, Entitious Assistan, Michall Anthony Curry for show host, and Daniel Cummings discuss water, environmental, and sonitation issues on the air of KIAS FM.

3

REFLECTIONS

Vincent Sweeney CWWA Member, Jamaica

AS A LOYAL MEMBER OF THE CWWA I am pleased to reflect on my long-standing interest in the work and success of this Association, informed by my lengthy relationship with the CWWA (since its inception in 1992), and having served on the Executive Board – I was a two-time Vice-President and also the PRO. In 2015, I was deeply honoured to receive a CWWA Gold Award, presented by my peers, for my service to the sector. Having seen the calibre of individuals who were previously selected for this prestigious award, I was both thrilled, and humbled. It has been the single

greatest professional honour that I have ever received and I was moved to tears in accepting this honour. That is what the Association means to me!

In my acceptance speech I noted that "As a young engineer, it (the CWWA Conference) was early exposure to senior professionals in the sector, who eventually mentored me and shaped my own career. Some of the persons present were legends in the sector and I was extremely fortunate to have been able to meet with such persons as Ronald Williams (first CWWA President

& father of another President, Wayne); Herbert "Nicky" Sealy (from Barbados Water Authority & also father of a former President, Hugh Sealy); Leo Lawson (another former CWWA President, under whom I later served as Vice President); Emile Warner; Raymond Noel (from Grenada); Arthur Archer; and O.K. Yhap".

The CWWA is a relatively small association, and more like a family. As for most families, there may be periods of growth, shrinkage, changes, conflict, and celebration. There is also need to take stock, adjust, and even chart a new course. Over the past thirty years I have witnessed every one of these.

The fact that we have survived and thrived is due to the commitment to the welfare of the Association by the various Executive members and the Association's membership. I have known some members for many years and have supported candidacies of former (& current) Presidents for the positions which they held, so I'm aware of their collective motivation and interest in the association.

I recall the early conferences, held, among others, at the Trinidad Hilton, the Windjammer Landing in St. Lucia, Atlantis in the Bahamas and even Ottley Hall in St. Vincent, to name a few. I was even involved in directly organizing a few, in St. Lucia and in partnership with local organizing committees, like in Jamaica. Some utilities were shy to host, based on the high standards set every year. There was quiet competition to "upstage" the previous host, which made for great camaraderie and anticipation of what was to come. Each of these events has been unique and memorable, for different reasons. Some were very elegant; others were adapted to suit the local conditions, and some were a process of discovery. But they all are uniquely etched in my mind, and have essentially become an annual event on my calendar. COVID 19 disrupted our annual reunions, but the CWWA adapted, like the rest of the world to the new realities. I'm sure that most persons agree however that there is nothing like a face-to-face CWWA Conference, and I'm glad that we are back on track in 2022.

Throughout my time as a CWWA member, I have represented one or other of the CWWA's partner agencies, while keeping my personal perspective¹ as well. I remember the early discussions on the need for a strengthened Secretariat and full time Executive leadership, when I was a part of the Executive. In those days we perhaps did not have the confidence in ourselves that we could sustain such an investment. But

with time, we became more bold and it was pleasing to see the subsequent Executive members moving forward to strengthen the CWWA by recruiting an Executive Director in 2015, to manage the affairs of the CWWA. I believe that was a pivotal move in terms of the sustainability and growth of the Association, which raised the profile of the CWWA and encouraged partners to support the work of the Association, in very tangible ways. We know that many development partners now have greater confidence in the CWWA and entered into contracts and supported further the work of the Association as a result of the strengthened Secretariat. Indeed, the relationship between regional and international development partners and the CWWA has been cemented through the work carried out during the last few years in great part, I am convinced, because of the skills and expertise of the strengthened CWWA Secretariat and its Executive Directors, which has led to greater impact of our individual and collective work and added value to the region.

The CWWA Annual Conference and Exhibition has been complemented by the High-Level Forums of Ministers. The Association has led discussion on regional strategies in the water and waste sectors in the Caribbean, involving many partners, which demonstrates the very important role which the CWWA should play going forward.

Having reflected on all of this, I wish to suggest that in order for the Association to move forward successfully, there is need to fully implement its strategic plan, which the Executive Board developed earlier this year. But we cannot leave it to the Executive and Secretariat alone. As members, we need to become more engaged, and not only guide, but support the work of the Association. That is how the Association has survived, by persons getting involved and giving selflessly of their time. Local chapters have a lot of potential and can result in exponential growth of the membership. Events in between annual conferences, especially now that we can do them virtually, can expand on our Association's reach, even beyond National Chapters. I would also like to see the CWWA build on its position within the Caribbean Development Partner's Group on Disasters, and cement its place at the table when water, sanitation and waste issues are on the regional agenda. This is nothing new, but we need to seize the moment.

As we celebrate 30 years of existence, let us not rest on our laurels but strive to continue to make a difference in our profession, for the benefit of the people of this region.

¹ Although I have represented both the Caribbean Environmental Health Institute, as Sanitary Engineer and Executive Director, as well as the United Nations Environment Programme, these reflections are my personal opinion.



FROM BENEFITS TO SERVICE

Mark Barnett CWWA Past President, 2018-2020

IF MY MEMORY IS CORRECT, I would have joined the CWWA in 2010 during the Grenada conference, where I presented a paper on the impact of the recent droughts. My motivations to join CWWA were primarily to:

- Better understand the challenges within the Region in water and wastewater issues. How similar our challenges are and the approaches that are being pursued to make meaningful improvement in a sustained way;
- Be a part of a regional network of professionals in the water and wastewater sectors as well as the supporting entities;
- Be exposed to changes in technologies and know how. Here the interaction/networking with suppliers was a big attraction as an avenue to engage to development client and supplier relations;
- Develop networking with regional development partners, Non-Governmental Organizations, and other global and regional bodies whose work in some way impacts water and wastewater; and
- Enhance my own capacity building, to be more effective in my job at the National Water Commission.

Initially, I was not keen to participate in the CWWA Presidential election, at least not at that time, due to the demands of leading the NWC as all as other commitments. However, there was a counsel of Past Presidents, who engaged me and encouraged me to participate since there was a disruption in the usual transition of leadership with the passing of Ivan Rodrigues. In the end I offered myself and was successful and would characterize my time as president as relatively successful from the following perspective:

- I had a very hard working and dedicated Executive Council members;
- We were able to host a successful conference in St. Kitts;
- CWWA was going through a transition period both from the Executive Council level as well as within the Secretariat. We were able to navigate the challenges and stabilize the organization;
- The RSAP was completed in conjunction with the IADB to include several workshops; and
- At the 2019 CWWA Conference we achieved the Basseterre Declaration of Ministers responsible for water.



2000 9th CONFERENCE Theme:

SUSTAINABILITY IN WATER AND WASTE MANAGEMENT IN THE CARIBBEAN

TRINIDAD



FUN FACT

 Trinidad's first drinking water facility, Maraval Waterworks, was constructed in 1853.

It's first sewer system was built in 1861.



(Left) Ribbon cutting at the Opening Ceremony (Bottom) Handing over of CWWA Flag to The Cayman Islands at the Closing Ceremony



CWWA Amenine Nationarchy ANNIVERSARY

Humble Beginnings

MY PROUDEST MOMENT AS AN ENGINEER

Daniel Cummings CWWA Past President, 1998-2000

AS A NEWLY QUALIFIED CIVIL ENGINEER, I found myself in an institution of about fifty engineers and many related professionals in WASA Trinidad. My immediate supervisor gave me an assignment and placed the voluminous document in my hand!

I studied the document from cover to cover and armed myself to manage a fairly large project of 7 miles of 24 inch steel pipes. It was a balancing act and required taking decisions on the spot from time to time.

My greatest help came from the engineering technician who, though not technically up there, was vastly experienced and clever. We both learned a lot from each other.

The meetings of the engineers in WASA were more procedural and routine than technical. It dawned on me that there is need for a technical forum for me to learn and grow.

I attended a meeting of the Water Engineers Association in SVG in early 1980's. It was a seed well planted. Small meeting but very useful discussion on issues affecting the water sector. CWWA came out of that humble beginning. The conferences then were centered on technical matters and the format was very simple.

Over the years CWWA has become the authority on matters related to water, waste water and solid waste in the region. The grouping of water utilities, PAHO and CEHI have been co-conspirators along the way.

Looking up to Engineers Raymond Noel of Grenada, Leo Lawson out of Jamaica, Ron Williams and many others like them including many champions from WASA Trinidad, it gave me enormous pride when they were honoured. When having been in the struggle to build a world class water authority in SVG and then being recognized by my peers, it remains my proudest moment as an engineer.

May the CWWA continue to ever meet the growing needs of its members and the entire region.



CWWA Conference Participant Wendy Whittaker





Looking Back



CWWA AND THE CAYMAN ISLANDS 2001



THE WATER AUTHORITY-CAYMAN, and by extension The Cayman Islands, has been connected to the Caribbean Water and Wastewater Association since its inception 30 years ago. Within that time, the Water Authority has had the pleasure of hosting two of the CWWA's annual conferences.

The Annual Conference and Exhibition brings together a cross-section of stakeholders involved in the production, treatment and supply of drinking water, wastewater collection, treatment and disposal, and solid wastewater management.

The Cayman Islands first served as the host of a regional conference in 1991 for the 20th Caribbean Water Engineer's Conference and Exhibition, the precursor of the CWWA conferences. Ten years later, Water Authority Cayman was selected to host the CWWA's 10th Annual Conference and Exhibition.

The event took place 1-5 October 2001 at the Grand Cayman Marriott Beach Resort, under the theme "Innovative Technologies in the Water and Waste Industries for the 21st Century." A large portion of the Water Authority staff participated in the organisation and execution of the conference, working hard to ensure a successful event. The staff was visible throughout the conference, in their yellow polos, ready to guide any attendee.

The conference began with an opening ceremony that included remarks from the Governor, the Leader of Government Business, and the CWWA President and ended with the traditional ribbon cutting. The

conference format consisted of presentations of scientific and technical papers on water/wastewater related topics, discussion forums on current issues facing the sector, and exposition by overseas and local suppliers of products relevant to the sector. Other aspects of the conference included a reception at the Government House and a tour of the exhibition hall for local school children.

MILESTONES

- CWWA 10 year anniversary
- The Cayman Islands first served as the host of a regional conference in 1991 for the 20th Caribbean Water Engineer's Conference and Exhibition, the precursor of the CWWA conferences







The John Compton Dam formerly known as the Roseau Dam

MILESTONE

 High Level Forums driving solid waste management in the Caribbean

Valuable Contributions



HIGH LEVEL FORUMS DRIVING SOLID WASTE MANAGEMENT IN THE CARIBBEAN

Justin Sealy Strategic Program Coordinator for Solid Waste, National Recovery Program Bureau, St. Maarten

WHEN I JOINED THE CWWA, I think I was an engineer at St. Lucia Water and Sewerage Company (WASCO) but that seems like so long ago. From that time, I progressed from engineer, technical coordinator, Strategic Planning manager, and general manager of St. Lucia Solid Waste. During this time, I attended two High-Level Forums on solid waste. I am now the Strategic Program Coordinator for Solid Waste with the National Recovery Program Bureau (NRPB) in St. Maarten.

Valuable contributions were made at the High-Level Forums for waste management where it was stated that solid waste management required a boost needing more recognition and thereby attracting more resources, human and financial, to the sector. CWWA was very pivotal in putting that together. Actually, I was at the inaugural High-Level Forum and the second and like in all posts I have been blessed to occupy try and contribute as much as possible and likewise with the association. I have also tried to contribute by getting more members and persons involved in the association and coming together with like minds. All with the same objective and try to boost where we are right now.

At first, I barely knew CWWA. Then I got to know about it and from then, it just has gotten more prominent over time to the point now I know it well. The last major initiative was helping out persons in St. Vincent after the recent volcanic eruption and all the dust and with water production. I know that apart from the water and wastewater, they have expanded the portfolio to now include solid waste. Like I stated before, I was part of the initial High-Level Forum on solid waste management and all we were trying to do. Over the years that I first came to know CWWA, I have now seen they have grown and spread their horizons over water and sanitation and trying to do more lectures. I also know the conferences are not all serious business

with a little playing at their rum competitions and other events.

What I like about CWWA, as much as they are growing, they are staying within certain confines to not spread themselves too thin. However, still doing more within their boundaries they set for themselves. I pretty much owe my present position to CWWA. It's true that I did get into solid waste management from my academia and background. However, through attending the High-Level Forums, we, the service managers in the region, actually created a chat group through the meetings of CWWA. It's through the meetings and the comparing and associating that this job was advertised. I applied and was successful. So now I am sitting in St. Maarten as the Strategic Program Coordinator for Solid Waste Management. I do believe through one association and others; a person should associate build your network and why not do it more. I believe CWWA is a regional one and if you have the local chapters that is fine. It's beneficial to be part of the local chapter. I reached as far as being the President of the Association of Professional Engineers for St. Lucia. However, I still value being a member of the CWWA and trying to contribute as much as possible. It is important to be out there and get your face recognized as well as to meet persons who are in the field. You know to rub the shoulders and the elbows and as much as you talk serious it is good to stop, relax and enjoy it. It's a brotherhood and sisterhood.

The most memorable thing is being at the High-Level Forums and actually being there for that amount of time and understand that we all live for the for the same cause. We, the solid waste professionals, created this little chat group and it's still very active. It's a lot of information going through it and it's like a living reference. I would say one of the most active results from CWWA.









EXPANDING THE REACH OF THE CWWA2000-2005

Ana Solis Ortega Treasure CWWA President 2002-2003

THE YEAR 2000 marked the genesis of a new generational period geared towards expanding the reach of the CWWA. Thanks to the work of real Caribbean Water and Wastewater sector integrationists, Ronald Williams, Leo Lawson, Emmanuele Romain, Andrew Hutchinson and Daniel Cummings, the CWWA was strongly positioned within the Region. These stalwarts took time to mentor those who would take the baton to run the relay race sustaining the vision while also reinventing to grow.

The CWWA moved beyond conferences and exhibitions and positioned itself in a more international arena strengthening the relationship with AIDIS as well as embracing new partners like CWWA Canada, the International Desalination Association, as well as the private sector.

The technical scope of the organization was expanded by including the Solid Waste sector. The membership increased by allowing other professionals outside of engineers to be part of the Organization.

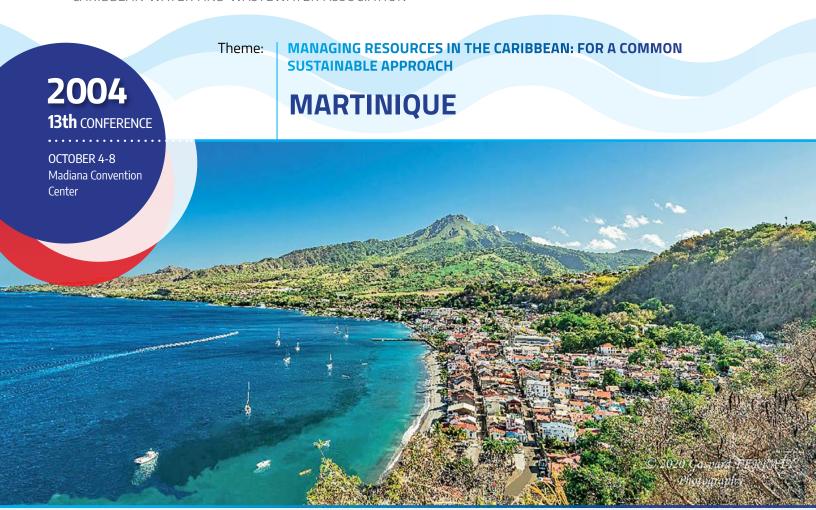
During these years, the CWWA also became the facilitator of exchange of experiences among members. The Distinguished Lecture Series held in all countries and territories developed into a tool to keep members informed of critical issues and to allow for strategic partnerships. The period also saw the largest utilities act as mentors and provide meaningful assistance to our smaller utilities. This was best exemplified during recovery work after hurricane Ivan in 2004.

CWWA became even more political. The first High Level Forum (HLF) for Water Minsters in the Caribbean in 2005 was attended by 6 Ministers and marked an important milestone for political advocacy and influence in the region.

Errol Grimes (CWWA President 2000-2001), Ana Solis Ortega Treasure (CWWA President 2002-

2003) and Hugh Sealy (CWWA President 2004-2205) lead the CWWA in the commencement of this transformational era, aided by the strong foundation of previous presidents and left an important legacy for the presidents to come.









Conference Poster

Opening Ceremony

Conference Milestone



CWWA IN MARTINIQUE:

A FIRST IN THE FRENCH CARIBBEAN

Regine Sainte-Croix Owner/ Manager Reliable Solutions Caribbean

THE ISLAND OF MARTINIQUE was honored to be granted the opportunity to host the 13th CWWA Conference & Exhibition in 2004. Located between its sister islands of Dominica (north) and St. Lucia (south), Martinique is a small island of 1,000 km2, with approximately 360.000 inhabitants,. It is a French and European Outermost Region and became an associate member of the Organisation of Eastern Caribbean States on February 4, 2015.

The 2004 Conference theme was "Managing resources in the Caribbean: for a common sustainable approach". This theme emphasized the importance of acknowledging the existing commonality between the Caribbean territories, and the need to further implementa joint strategy in this respect, for the benefit of the Caribbean people. This topic was also an advocacy for the adoption of the most holistic approach, fully in line with CWWA's core objectives.

The event was sponsored primarily by the Regional Council of Martinique (local assembly) and the European Union. Given the multiple public agencies involved in water sector in Martinique, the CCIM (Chamber of Commerce and Industry of Martinique), based on its experience, was entrusted with the mission to organize the event and cement the holistic approach sought.

The 2004 edition probably set a milestone in the history of CWWA Conferences in the balance between "water" and "solid waste/ wastewater" topics regarding technical presentations and site visits. Beyond that, in many ways, it remains emblematic of CWWA coming developments and achievements in many different fields.

That year, the prestigious Ronald Williams' Award for Technical Excellence was awarded to a conference:

- presented by two women: Gem Hutchinson (SLSWMA – St. Lucia Solid Waste Management Authority) and Regine Sainte-Croix from Martinique (your servant), enhancing the importance of gender equality.
- multilingual and multicultural (St. Lucia and Martinique, representing the diversity of our Caribbean)
- about waste management (introducing the pivoting shift to non-incineration technologies for the treatment of medical waste), hence preempting and pioneering the recent announcement of an "updated CWWA logo to reflect the waste sector as part of the ongoing name change process".

Dear CWWA colleagues and partners: "Happy 30th Anniversary from Martinique!"

Special thanks to Marie-Noëlle Catayee (CCIM) and Thierry Calabresse (SCEC), for sharing their memories and pictures.



Regine's Eng. Ron Williams' Award

2005 14th CONFERENCE Theme: | SECURING OUR FUTURE ONE ECONOMY, ONE ENVIRONMENT, ONE CARIBBEAN

BARBADOS







Relevant Developments

THE CWWA RESTROSPECT

RUMINATING WITH BERNARD ETTINOFFE

General Manager - Dominican Water and Sewerage Company Limited (DOWASCO)



MY NAME IS BERNARD, General Manager of the Dominica Water and Sewerage Company Limited (DOWASCO). I've joined the company in 2006 and actually met the company as a member of CWWA so I embraced the opportunity to continue to be a member of CWWA and to attend almost all of the Conferences from the time I joined to now. As manager for a utility company, I've made contributions to several of the meetings of the CWWA. I have attended several of the technical sessions, as well as quite a bit of the Ministerial High-Level sessions. With Dominica being a country that has had its challenges with climate change and natural disasters, I recall clearly doing several presentations at several big Ministerial High-Level sessions on how we were able to manage, to adapt and to survive through those disasters over the years.

From 2006 to now, I have seen quite a bit of development of CWWA. The sessions have become more and more very relevant, of particular importance is the Ministerial High-Level sessions. The CWWA with its partners have been able to bring all these ministers, together. I recall at one meeting there were 13 ministers in one of the countries, and that to me was significant. It really served a great deal in mainstreaming water and water related issues and it continues to help equip engineers and technical personnel as regards to water related issues and help solve the problems of the region.

CWWA has helped me tremendously, the first session I attended of CWWA was in 2007 in St Kitts, and

believe it or not, I was less than a year at DOWASCO and that was the first time I really learned a lot about designing storage tanks and what goes into the designs of storage tanks, the fire reserve capacity etc. The CWWA conference is something that not only I really recommend, but I am supporting staff to attend CWWA even when it's online such as last year (2020) and this year (2021). I like facilitating the attendance of the young people because you know the future of these organizations are really going to be young people. Even if a young engineer comes out of school as a brilliant engineer, I think when he/she goes to or attends sessions like the ones put together by the CWWA it is really honing their skills and enhancing their capacity and ability to contribute to the water sector.

There have been so many great experiences with just the coming together of professionals in the water sector and the hosting of conferences in various countries. There was something that CWWA introduced a few years ago with the water tasting that has been expanded to include even rum and other things. I felt it was so creative in building not just capacity now but building relationships across the countries. These are just some things I will take away from beyond the CWWA. I now have friends almost all over the region, Jamaica and Trinidad for example, just about everywhere and I think that's a plus for CWWA.





Wayne Joseph handing over conference banner to Cromwell Williams

15th ANNUAL GENERAL MEETING OF CARIBBEAN WATER AND WASTEWATER ASSOCIATION HELD AT THE TOBAGO HILTON - Wednesday OCTOBER 4th 2006

NAME	COUNTRY	Attendees
CYPRIAN GIBS	ON BAHAMAS	E-MAIL
TAP A S (S TEX S CO. C.)		Wccgibson@wsc.com.bs
EDDOS COMO		Jose9366@wasa.gov.tt
WAYNE O.		
WILLIAMS	TRINIDAD	Will603@wasa.gov.tt
AVRIL SIUNG-	TDD IID AV	
CHANG	TRINIDAD	changavr@trt.paho.org
VINCENT	ST. LUCIA	
SWEENEY	SI. LUCIA	Vincent.Sweeney@unep.org
IVAN	ANTHONY	
RODRIGUES	ANTIGUA	ivan@apua.ag
TREVOR FORD	U.S.A.	
IAN GAGE		iincsuppliesinc@aol.com
DANIEL	JAMAICA	Houtiel@vahoo.com
CUMMINGS	ST. VINCENT	tropicalwines@vincysurf.com
DALE A. MILLER	DADDAD	
HECTOR		hmarshall@caribsurf.com
MARSHALL	BARBADOS	Dale.miller@bwa.bb
WAYNE GARCIA	TRINGING	
ROSHAN PRAGG	TRINIDAD	
WALDO VASSEL	TRINIDAD	Rpragg1@yahoo.com
EMILE DUBERRY	TRINIDAD	Vass3211@wasa.gov.tt
ROMMEL	MONTSERRAT	mwa@candw.ms
HUGHES	ANGUILLA	Rommel.Hughes@gov.ai
STEPHEN LINDO	D. D	
HARRIET	BARBADOS	spolindo@hotmeil.com
WALDRON	BARBADOS	hawaldron@caribsurf.com
ASON JOHNSON	110.	
CARL AXEL	U.S.A.	Johnsonja@cdm.com
ODERBERG	PUERTO RICO -	Soderberg.carl@epa.gov
AY D. BECKOM	U.S.A.	The second secon
DRIANUS A.		j.beckom@insightbb.com
LUGMAN	ST. LUCIA	vlugmana@cpc.paho.org
TEPHEN	TDIMBOAR	
RENCH	TRINIDAD	Latenight56@yahoo.com
RWIN GILL	TRINGDAR	
AROL DOYLE	TRINIDAD	Irwin@tstt.net.tt
UGH SEALY	TRINIDAD	cdoyl9344@wasa.gov.tt
IERRY DUMAS	BARBADOS	hsealy@yahoo.com
AREWOOD	TRINIDAD	sdumash@eng.uwi.tt
THE PARTY NAMED IN COLUMN TWO IS NOT THE PARTY N	TDDUD	0
	TRINIDAD	
RADSHAW	ANTIGUA	john@apua.ag

A Closer Relationship



CaribDA CELEBRATED THE CWWA'S 30TH ANNIVERSARY!

Shawn Meyer-Steele *President* BOD CaribDA **Karlene Singh** *Vice President* BOD CaribDA

THE CARIBBEAN DESALINATION ASSOCIATION (CaribDA) would like to congratulate the CWWA membership and leadership on your 30th Anniversary! As our region faces multiple and new challenges, the vital role that the CWWA has played as a place for the exchange of ideas and information for the greater Caribbean Water Utilities is more important today than it has ever been.

The formation of the High Level Forum for Water Utility Ministers under the auspices of the CWWA, where ministries, utility heads, regional and international banks that fund infrastructure in the region as well as organizations responsible for preservation, resilience, development, disaster mitigation, operator training and other key development parameters related to water and wastewater is a shining example of the capabilities and respected status of the CWWA. There is simply no other format in the region where so many with the responsibility for water and wastewater can meet, exchange ideas and draft regional frameworks for sharing resources and tackling mutual issues.

The CaribDA Humanitarian Committee has on more than one occasion teamed up with CWWA leadership and our other regional partners (CAWASA, PAHO, CEDEMA, etc.) to bring emergency water treatment equipment to our family, friends and neighbors in the Caribbean when tragedy has struck and we look forward to strengthening and expanding those capabilities and that relationship in the future.

As the Caribbean continues to adapt to changing weather patterns, a recently introduced "Heat Season" (during COP26 in Glasgow), a raising sea and other threats to potable water supplies that increase the need of those in the region to rely on desalination, advanced water re-use and incorporation of renewable energy supplies CaribDA also looks forward to increased collaboration with CWWA and CAWASA in offering training and support in sustainably and reliably utilizing those resources.

In closing, on behalf of the CaribDA Board of Directors, please accept our heartfelt congratulations on this great anniversary milestone. We look forward to your further accomplishments over the next 30 years as well as a continued, closer relationship.



A Passionate Organisation

THE BLOODLINE OF THE CWWA IS ITS PEOPLE!

Marissa McMillan CWWA PRO 2017-2019

PROCESSION OF THE JANKUNU **DANCERS** accompanied by the rhythmic Caribbean music within the great halls of the Atlantis Hotel, workshops and technical presentations during the day and networking and culture exposé at night characterized my introduction to CWWA conference life. I had been a member of the CWWA since 2009 - two years shy of my introduction into the sector; however, that event exposed me to the bloodline of the organisation - its people! They are passionate people with pride in their craft, region and sectors. It was after this conference I became active in the organisation.

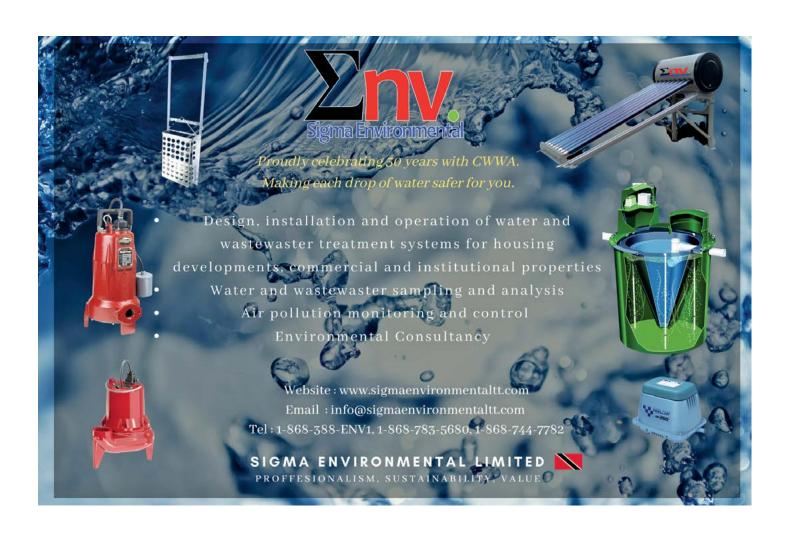
My participation began with the attendance of lecture series which were designed for both knowledge sharing and to revive the National Sections. I would later serve in the capacity of the Secretary and Chair of the Trinidad and Tobago National Section. Within this time, the team designed and executed a multiprone approach to re-engage existing members and attracted new members. In true CWWA style, these activities consisted of technical lectures and social mixers.

When Trinidad and Tobago hosted the 25th Annual Conference and exhibition in 2016, it afforded a number of persons within the section and the utility the opportunity to understand the intricacies of planning and executing a conference. This knowledge was further compounded when a core team was invited to assist the Local Organizing Committee with the 2017 conference in Guyana.

Within this conference, I was responsible for media and communications and at the Annual General Meeting was elected to the Position of Public Relations Officer (PRO). It is important to note that prior to this I was very contented to live without a social media presence and work quietly in the trenches. Functioning in the capacity of PRO demanded that I step outside of my comfort zone quickly and steadily ascend the learning curve. As CWWA's PRO for the 2017-2019 term, I would have developed a Communication Plan geared towards raising the profile of the association, increasing the membership and facilitate its establishment as a main actor in the progressive development and building resilience in the water and waste management sectors. One of the main activities was the redesign of the organisation's website to include:

- Secure member logging,
- Facilitate online payment,
- Job and training postings,
- Technical conference papers with full access to financial members
- Content on member states developed by national sections. For use by researchers, students and potential investors.

Being a member of the CWWA has and continues to be a very rewarding experience. It has allowed me to make friends throughout the Region, to actively contribute to the advancement of the profession within the region and refine my professional outlook.





Over the past thirty years Traeger Brothers has worked with members of the Caribbean Water and Wastewater Association (CWWA) to provide the highest quality water production and distribution products.

Our Waterworks Division at Traeger Brothers is proud to be a key supplier for the majority of CWWA members. We work directly with end users or through contractors to ensure that requirements are met and that the highest quality water is delivered to their customers. During its nearly 100 years of operation Traeger Brothers and its trusted partners have provided millions of dollars worth of pipe, valves, fittings, and accessories to water authorities throughout the region.

Congratulations to the CWWA on this 30-year milestone! We look forward to our continued partnership.

Contact Us Today! Call us at: 305- 371-5551 Or email: sales@traegerbrothers.com









Bringing People Together

BAPTISM BY FIRE

Halla Sahely, Ph.D. IWEco SKN National Project Coordinator

I WAS THE DEPUTY CHAIRPERSON of the LOC for the 2007 CWWA conference. Actually, this was one of my first assignments when I was hired to work at the local water utility in St. Kitts. I started work in June and the conference was in October. The committee was already active but needed a strong push to really get things going. It was a steep learning curve - a "baptism by fire" sort of experience for me - but we came together as a team to make the event guite successful. It required focused commitment from so many of the staff that went above and beyond the call of duty to make sure we hosted a successful conference. To be honest, it was quite exhausting but what kept us going was all of the positive feedback we were getting from the participants. This lifted our spirits and made us want to see it through until the very last activity.

For me, there were several memorable moments but one of the best was the night out at Brimestone Hill - our distinct cultural heritage on display, amazing local food and music - it all came together so beautifully and it was at that point that ...

I realized that the CWWA was all about bringing people together to share and learn but also to celebrate our friendships and close ties across the Caribbean region.



2007 Attendees

2008 17th CONFERENCE

Theme: INTEGRATED WATER RESOURCES MANAGEMENT – DEVELOPING WATER SYSTEMS AND MANAGING WASTE

JAMAICA





COUGH Continued ratio and ANNIVERSARY 199° 2001

Institutional Strengthening

JAMAICA'S NATIONAL SECTION

OUR EXPERIENCE

Rohan Dennis CWWA Jamaica Section

THE CWWA JAMAICA SECTION is proudly one of the more active and alive sections of the CWWA. It is a pleasure to be affiliated with this Section and to be able to highlight what we have achieved together.

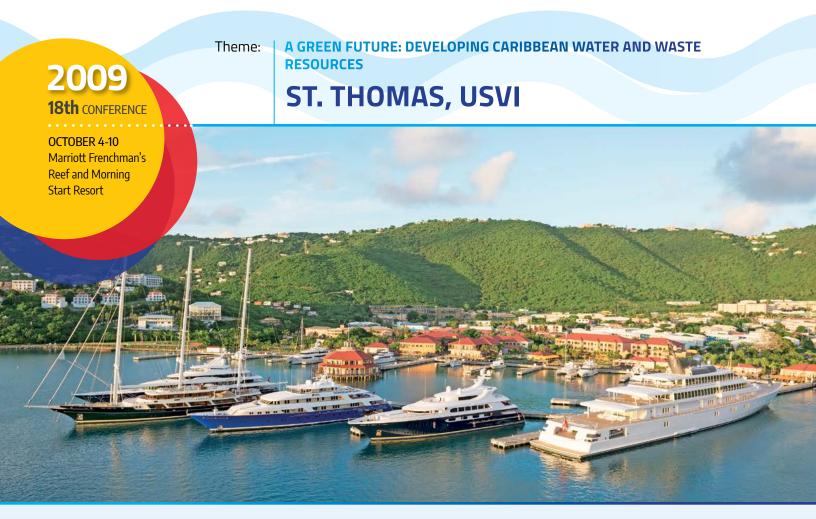
After lying dormant for some years this giant of a Section was resurrected through strong leadership. A strong team of water professionals from the fields of academia, commerce, water systems professionals, construction and engineering were assembled, dedicated to rising the now established local Section banner. This effort meant updating, amending and establishing the legal and constitutional framework for which a particular vision and mission was now our mandate. Each member of this team excelled in joining hands and hearts through regular formal meetings, long informal discussions and with sights set on a successful established outcome of among other things presenting our official website, increasing membership and ultimately presenting a bright black, green and gold team at the upcoming conference to be hosted by Jamaica.

Upon reflection, these successes would undoubtedly not have been possible without the support of a team with a determined sense of national pride that ran deep. The 'team' is much more than the active membership, always ready to fall in line and pick up the mantle, to pass the baton. We were determined to not only let the Section glow brighter but also to sell Jamaica, land we love. It's with this sense of national consciousness that invigorated the immense support from sponsors, donors, governmental agencies and other stakeholders.

Kudos to the National Water Commission (NWC) for its unwavering support to its employees some of whom are members of the CWWA. The input, cooperation and support of this cohort of CWWA members is instrumental in making conferences a success year after year. The experience gained, the lessons learnt is a significant NWC contribution to its employee's development. The CWWA too benefits from increased participation while the sponsors benefit from increased outreach year upon year. This symbiotic relationship could not have been possible without the NWC being the main driver of this Section. Although the members of the Jamaica Section consist predominantly of employees of the NWC it serves to represent Jamaicans from other governmental organizations, universities and private individuals and companies interested in the field of water, wastewater and solid waste. All are welcomed at the table and all enjoy inclusiveness. The vision of the Section is to add to the spectrum of members and truly diversify and broaden its umbrella.

This would translate into institutional strengthening for the CWWA through a deeper, more fresh pool of thought eager to participate and add value to the sector.

Currently, the Jamaica Section is bursting with potential to be the ideal, a model and a lesson-based experience for other Sections. Admittedly the pandemic has left us ravaged and drained for resources. The Jamaica Section had some major plans not limited to "adopting" a NWC treatment plant and implementing a beatification project that would showcase some sort of innovation in water technology. We were able to deliver a few care packages to the needy and a very small group of us did a clean-up at two springs located in western Jamaica. Notwithstanding, this Section is determined to find more innovative ways to be self-reliant, viable and attractive.





A Bright Future



CELEBRATING OUR BRILLIANT PAST

WITH BOTH EYES ON OUR BRIGHT FUTURE!

Kevin Carter 30th Anniversary Committee member and CWWA Water Loss Specialist Group member

Broward County, Florida

GREETINGS FROM Southeast Florida and Happy 30th Anniversary CWWA! I am a proud CWWA member, and I also am privileged to be a 30th Anniversary Committee member. It is very rewarding to learn so much about CWWA's amazing leadership, members, conferences, and memories from the past 30 years. For example, the photos and videos on the CWWA website are an outstanding record of the great legacy. Unfortunately, I did not attend the 2009 CWWA 18th Annual Conference and Exhibition in the USVI. However, it was one of the 2009 conference organizers and eventual 2015 CWWA President, Jason Johnson, who introduced me to the CWWA and personally introduced me to many of you at the 28th Annual Conference and Exhibition in St. Kitts and Nevis in 2019. I am forever grateful to Jason for his time and willingness to help me begin creating relationships within CWWA that have grown over the last 3 years.

While much of this magazine is celebrating the great past, parts of some articles are also looking towards our great future.

Through the vision and work of many people in this magazine, CWWA's future is looking exceptionally bright, and I am excited to be part of it.

For example, the CWWA Water Loss Specialist Group (WLSG) formed in 2021 and seeks to collaboratively find solutions to reduce water loss in our region. Our Chair, Stuart Hamilton, is also the International Water Association's WLSG Chair and brings global expertise to us and has an excellent article in this magazine. The CWWA WLSG other members include our Secretary, Kelvin Romain, Trinidad and Tobago

Water and Sewerage Authority; Advisor, Wayne Williams, CWWA Executive Director; Evan Cayetano, International Development Bank; Bernard Ettinoffe, Dominica Water and Sewerage Company Limited; Nkechi Jemmott and Sharon Wilson, Barbados Water Authority; Kevin Kerr, Jamaica National Water Commission; Roland Liemberger, Miya; and Dave Pascascio, Belize Water Services Limited (now retired). Our team looks forward to training workshops and information exchange such as with our newsletter in 2022 and beyond. Please contact me at kcarter@broward.org if you want to learn more about our exciting future.

I am also a proud Florida Section of the American Water Works Association (FSAWWA) member and as our Executive Director Peggy Guingona writes in her Miami 2015 article the FSAWWA and CWWA have great past collaborations. Looking forward, we have the opportunity for more interaction and information exchange such as two successful annual Caribbean and Florida H2O Link Ups that was attended virtually by over 160 CWWA and FSAWWA members over the last two years. I look forward to exploring other collaboration ideas such as joint memberships and utility exchange programs to benefit each group. Working together CWWA and FSAWWA members will benefit from each other while continually providing the world's most important resource water – over the next 30 years and beyond.

Goals and Staying Engaged

NATIONAL SECTION CHAIR

Sherry Bell-Parker Water Quality Manager and Safety Coordinator

MY NAME IS SHERRY BELL-PARKER. I am the Water Quality Manager and Safety Coordinator for the local utility company, located in the beautiful Turks and Caicos Islands. I have been attending CWWA Conference since 2014. In 2018 I was honoured to be nominated CWWA National Section Chair (NSC) for the Turks and Caicos Islands (TCI).

The NSC has a broad range of members. Some are engineers and consultants; some are researchers, teachers, operators, and utility managers. The one thing in common amongst all members is the shared

interest in collaborating, advocating, and building the capacity of professionals in the water, wastewater, and waste sectors.

Since becoming the NSC for TCI, I have tried to stay engaged with CWWA by assisting and bridging those in the region with connections and resources available in TCI. One of my goals as the NSC is to provide educational events for the public, including tours, presentations, and hosting of events.

With being the country's only accredited water

testing laboratory, we strive to provide educational opportunities that focus on drinking water. The highlight is our annual drinking water week celebration, the first week of May, marking our 10th annual celebration. We host a week of events focusing on the importance of having a safe, reliable drinking water supply. Additionally, we host events to celebrate World Water Day and World Environmental Day, two critical dates that all NSC aim to commemorate annually.

As the NSC, we must stay up-to-date with changes in the industry and educate the public along the way.



We provide the following services:

- Chemical, physical and microbial testing for over 35 parameters
- Regulatory and compliance monitoring
- Characterization of water and wastewater
- Designs of wastewater and water treatment plants
- Designs of rainwater harvesting systems
- Assessment of water and wastewater treatment systems
- Handling of the permits for water and wastewater treatment systems







- ★ Lease to Own and Financing Options
- **★ Design Construct Solutions**
- ★ WWTP From 5,000 GPD to 2M MGD
- ★ Installation, Commissioning and Training





Need Clean Water?

No Worries.

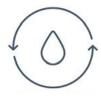
We will build and maintain the plant on our dime, so you can focus on what you do best.



Desalination for drinking quality



Wastewater treatment for reuse



Water 360 for the full package

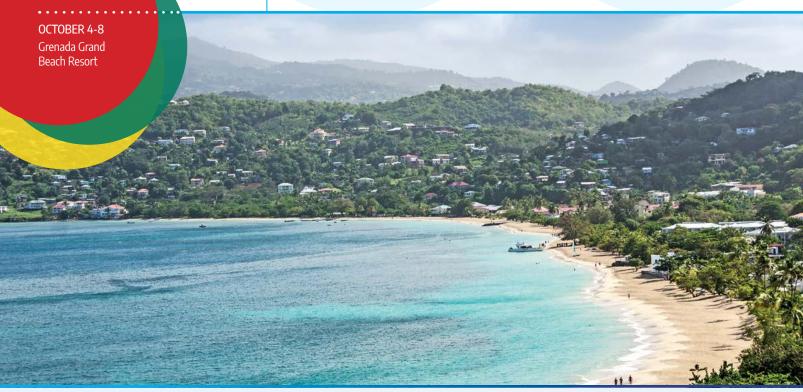


2010 19th CONFERENCE

Theme:

WATER. WASTE AND CLIMATE CHANGE: A NEW DECADE OF CHALLENGES AND OPPORTUNITIES

GRENADA





(Left) Past President Alphosus Daniel with his collection of Conference bags (Right) Dr Chris Cox, Dr Halla Sahaley, and Trevor Thompson (ED GWP-C) (Bottom right) Karlene Singh







30 YEARS OF CONSISTENCY OF SERVICE

TO THE WATER AND WASTE SECTORS IN THE REGION

Alphonsus Daniel CWWA Past President 2016-2018

AFTER GRADUATING from Engineering School in 1986, I joined the Central Water Commission (forerunner of NAWASA), Grenada.

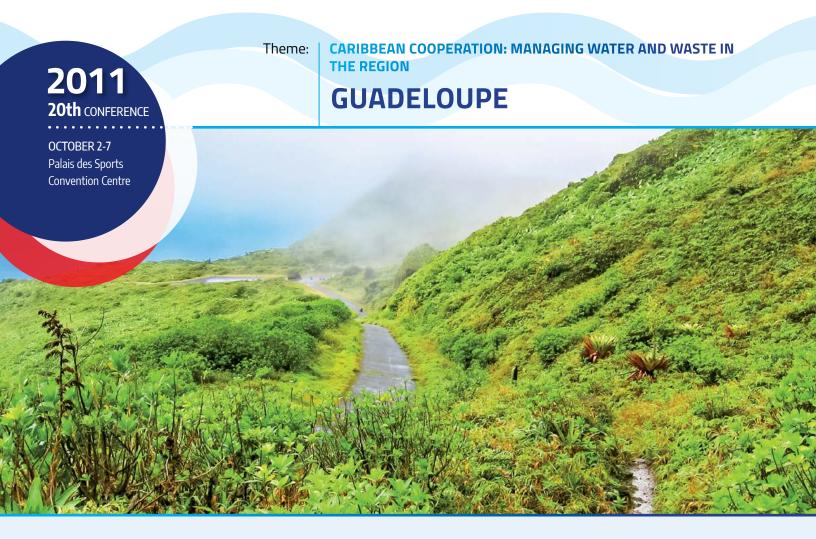
I was introduced to the 18th Caribbean Water Engineers Conference held in Grenada in 1987 (the fore-runner to CWWA). I then represented Grenada at the 19th Conference in St. Kitts and Nevis which was held at the Fort Thomas Hotel in 1988. It was then I met the old stalwarts Engineers Ronald (Ron) Williams, Emmanuel Romain, Leo Lawson, Andrew Hutchison, etc for the first time. I remembered Ron saying to me "Young fella! you look very energetic! We are starting an association of which I want you to be part of and give it full support". When the organization was chartered in 1991, I automatically became part of the prestigious grouping. When asked when did I joined the CWWA I usually answer "before it started".

When I brought the Conference to Grenada in 2010, I was elected 2nd Vice President at the Annual General Meeting and I remained on the CWWA's executive up until 2019. Of course, during those years, I became President for the period 2016-2018.

I have witnessed the CWWA grow up to be the premiere NGO rallying professionals and other allied players in the Water and Waste Sectors in the region and beyond.

I will never one day regret being part of this auspicious CWWA family. My many contacts, i.e., professional and otherwise in the international arena in general and the Caribbean in particular were through the CWWA. I will continue to be eternally grateful for this!







MILESTONE
• CWWA
20 Year Anniversary

Handing over of the banner to Bahamas at the Guadeloupe Conference Closing Ceremony

Water Professionals



THE GUADELOUPE EXPERIENCE

Wayne Williams CWWA Executive Director and CWWA Past President 2010-2012

AS A REGIONAL NGO, one of the goals of the CWWA is to have membership from each country of the wider Caribbean area. In 2011 the opportunity presented itself for the country of Guadeloupe to host CWWA's Annual Conference and Exhibition (C&E). The President of the main water utility, SIAEAG (Syndicat Intercommunal d'Alimentation en Eau et d'Assainissement de la Guadeloupe = Syndicate Intercommunal of Water Supply and Sanitation of Guadeloupe), Mr. Emelius Hernandez approached the Board of Directors with his request to host the C&E. His request was considered and approved as he had been a participating member in previous conferences and had knowledge of what was expected.

President Hernandez and the Local Organizing Committee (LOC) had a mission to make their C&E the best one CWWA ever hosted. The timing was right as their annual water week – "journée de l'eau" was synchronised with the CWWA conference week. As a result, the combined initiative was spectacular. The exhibition Hall was full, with over 50 exhibitors, a day for the local schools to attend, sessions in French and English, a huge banquet with 3 music bands and the Minister for water and other dignitaries who had flown in from France to participate.

To overcome any shortcomings due to the French/ English language differences the CWWA President attended 3 LOC meetings. This proved to be very successful as nothing was lost in translation as a result. The French culture with their 'joie de vivre' was very evident in Guadeloupe and resulted in a memorable time for all attendees.

What was also appreciated was the respect the French have for their water professionals. They truly believe that "water is life" and respect those that provide a safe, reliable supply of potable water and safe treatment and disposal of wastewater or "assainissement".

It was a truly a wonderful week in beautiful Guade-loupe!





(Above) Best Booth Award (Left) Opening Ceremony-Ribbon Cutting with President Hernandez (Right) Thierry Calabresse, Ian Gage, and Regine Sainte-Croix 2012 21st CONFERENCE Theme:

WATER AND WASTE MANAGEMENT IN THE CARIBBEAN: REAL STRATEGIES AND SOLUTIONS

THE BAHAMAS



Drinking H20 Contest

FUN FACTS

First Water Tasting Competition



CARIBBEAN WATER & WASTEWATE





LET'S TALK ABOUT LEAKS!

Stuart Hamilton International Business Development Director and Head of NRW Development within Miya Water, and Group Chair CWWA Water Loss Specialist Group email: stuart.hamilton@miya-water.com • website: https://www.miya-water.com/





IT IS A PLEASURE TO CONGRATULATE the Caribbean Water and Wastewater Association (CWWA) for achieving such a milestone of a 30th anniversary! This is a credit to all the hardworking staff that are present within the group both at the front facing and the hard-working backroom staff that don't always get seen. It is an honour to be part of this close nit and professional association.

I'm also a member of the International Water Association (IWA) who are present in over 140 countries with active members forming the largest international network of water professionals covering all aspects of water and the challenges facing the world today. Within the IWA, I chair the Water Loss Specialist Group (WLSG) where we have over 4000 active members all contributing towards reducing water loss across their water companies, projects and countries while sharing their knowledge freely of both problems and successes while encouraging a gender balance and the requirement of new young water professionals to join.

Being the chair of both the IWA and CWWA WLSGs brings immense satisfaction however this does not pay the bills! In fact, during my career in water, non-revenue water (NRW) has always been my focus having started in 1981 with Anglian Water (UK) before leaving in 1994. I have since worked in the private sector working on projects in over 30 countries with my experience more than 40 years in the NRW arena. I am available to go for a beer at our next CWWA event if you want to talk about leaks.

My normal day to day role is Director of International Business Development and Head of NRW Development within Miya Water www.Miya-water. com and I am forever grateful to Miya who allows me to get involved with both organizations. Miya has sponsored the previous 3 CWWA conferences and through this has allowed workshops and webinars to be delivered on the NRW projects completed both locally and worldwide. These workshops have also been supported by both previous CWWA Presidents - Mark Barnett and Sara-Jade Govia.

In the region, several NRW reduction projects have been completed with possibly the largest in the Bahamas and Jamaica where immense success has been had. We must follow these successes with a continued program of NRW reduction projects in the region. Water loss is as serious challenge in the Caribbean and with the 26th UN Climate Change Conference of the Parties (COP26) insisting the reduction of our carbon footprint then these issues must be taken serious along with the other issue of power and equipment costs dramatically increasing. All which means the supply cost of water is spiralling upward and NRW cannot be ignored going forward.

I hope you enjoy this brief introduction to myself and what is closest to my heart. I look forward to finding solutions together with the Caribbean Water Sector going forward as Chair of the CWWA's newly formed WLSG.

I hope to see you at the 2022 CWWA Conference and Exhibition in The Bahamas where Miya Water will be a Platinum Sponsor.





Dominica Water Infrastructure Post hurricane



THE BEGINNING OF OWB

Valerie Jenkinson info@operatorswithoutborders.org



THE IDEA FOR AN ORGANIZATION that would assist Caribbean water and wastewater utilities recover following disasters was sparked by a conversation between Bernard Ettinoffe, the General Manager for DOWASCO, and Valerie Jenkinson, CEO of World Water and Wastewater Solutions LTD. Bernard had just made a heartfelt presentation at the CWWA plenary session in Trinidad about his experience leading his utility post Hurricane Maria. Apart from the need for equipment, Bernard mused that it would be very advantageous to have qualified operators to help the rebuilding effort.



Valerie returned to Canada for the Canadian Water and Wastewater Conference. Their Executive Director, Robert Haller jumped on board and set aside time for Valerie to present, and also organised a silent auction to raise funds. This culminated in deploying our first three volunteers to Dominica! They were all senior operators certified at Level 3 or 4 in water and wastewater. In the two weeks they were there they worked with DOWASCO staff and managed to assist in restoring water to three villages just before Christmas and getting the wastewater treatment plant running. They were also able to provide some technical training to the DOWASCO operators.

Following this successful mission Operators Without Borders (OWB) was fully formed. It is now a registered Canadian NGO with charitable status. We have a Board of Directors and an Advisory Committee with members well known in the Caribbean water community such as: Tom Vlugman recently retired from PAH;, John Joseph (JJ) past General Manager of WASCO St Lucia, current Chair of the Board Lucelec; Kevin Carter, from Florida who works with both CWWA and CAWASA; and Patricia Aquing past Executive Director of CWWA.

Affordable, sustainable training has long been a challenge for Caribbean utilities. OWB has been very successful in recruiting certified operators and other water professionals with stellar credentials who volunteered to teach courses. These courses included training for numerous technical water and wastewater courses, e.g.: ABC certification exams; safety training & Incident Command Systems (ICS) disaster workshops. OWB's mandate was then broadened to include training and mentoring *delivered Free of Charge on an "as needed" basis* to utilities in the Region.

Our Objective

To assist water and wastewater utilities in developing countries recover from disaster situations and build capacity through training and mentoring water and wastewater operators. The heart of OWB: Operators helping Operators - water & wastewater utility driven

Services Offered

If it is related to water and wastewater utility operations we can help! We have been pleased to provide various types of assistance:

 Disaster Assistance. The Bahamas - working with Grand Bahamas Port Authority to do well testing for salinated water, safety repairs and general reconstruction and Dominica pipe and water reconstruction and restoring service to the wastewater treatment plant Incident Command
Systems (ICS)
Training &
Certification –
(Working with
CAWASA we have
certified about
200 operators. Our
expert can assist in
reviewing disaster
plans for a reduced



Laboratory Technicians

fee.)

Training – We are presently working on an IDB-C funded initiative, training participants from Barbados, the Bahamas and Jamaica Water Authority in ICS up to Level 300

- Operator Certification OWB is presently partnering with CAWASA to obtain CreW funding for an initiative to provide wastewater treatment and wastewater Level 1 Certification Exam preparation courses to St Lucia, Belize, Barbados and Grenada
- Safety training (Belize 120 personnel at Belize Water Services were given classroom and hands on training in all aspects of safety training including; Trenching and Excavating, Confined Space; Chemical Spills; Gas Leaks and Road Safety)
- Customised Technical Training With over 70 courses to choose from, OWB has provided instruction in all manner of operational subjects such as Leak Detection, District Metered Areas, and Operations and Maintenance

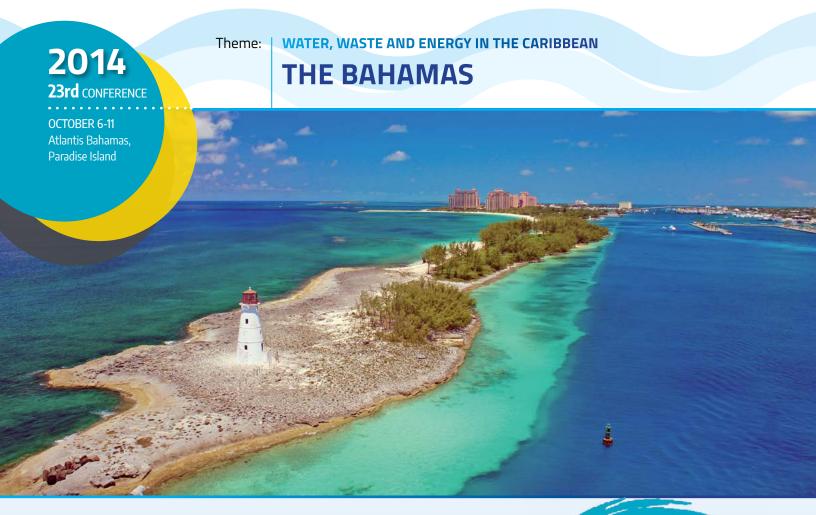
Standard Operating POrocedures (SOPs)

For the last year an OWB Committee has been hard at work developing SOPs for utilities in developing countries. We now have 225 SOPs that have been formatted and vetted by our team in collaboration with operators from Caribbean utilities that are now ready to share, free of charge.

Our Partner Agencies

Operators Without Borders is pleased to work in collaboration with the following Caribbean organizations:

- Caribbean Water and Wastewater Association (CWWA)
- Caribbean Desalination Association (CaribDA)
- Caribbean Disaster Management Agency (CEDEMA)
- Global Water Partnership-Caribbean (GWP-C)





FUN FACT

 90% of New Providence Island's (including Nassau) water supply is produced from desalination by the Bahamas Water & Sewerage Corporation.





THE PRIVILEGE OF SERVICE IN THE CWWA

Cyprian A. Gibson CWWA Past President 2008-2010 Assistant General Manager, Family Island Division, Water and Sewerage Corporation

THE CARIBBEAN WATER AND WASTEWATER ASSOCIATION (BAHAMAS CHAPTER) is alive and well. Due to the ongoing impacts of COVID-19, we have forgone meetings and events as usual; nonetheless the team remains committed to the mission and vision of the CWWA and stand ready to do what is necessary to meet those objectives.

Even though we are active, we can do more in the way of publicizing our efforts and events to local sector, the wider local community as well as the CWWA organization.

Over the years we have had various local training initiatives, hosted member socials, as well as hosting and attending a number of Annual conferences together. We especially now include administrative staff for inclusivity, and sustainability.

National sectors can be instrumental to the growth of the sector in the following key areas:

- Awareness. Having an active national sector can be a critical tool in increasing awareness to the general public, who may be in the sector, but outside of the public utility, about the CWWA.
- Membership Building and Retention. A robust national sector would contribute to membership growth and retention by actively recruiting new persons into the Association and keeping them engaged to ensure that they continue to contribute and remain active.
- Succession Planning. A national sector, particularly one that focuses on youth outreach can greatly assist the sector in succession planning by recruiting young talent early and giving them the proper exposure and training to be able to assume leadership roles in the future. Gender balancing is also important.

The Bahamas has had the privilege of hosting the CWWA Conference on four occasions: in 1996, 2003, 2012 and 2014. As a longstanding member of the Organization and a Past President, it is always a pleasure to watch the Annual Conference and Exhibition grow from year to year, and I am always looking forward to see what is new in the sector, and to meet new stakeholders.

I have had the privilege of serving as the Chairman of the Local Organizing Committee (LOC), and as an organizer, it was a wonderful opportunity to welcome our fellow members, partners, sponsors, exhibitors and other stakeholders to our country. My experience has showed that there is a tremendous amount of behind the scenes work that goes into planning a successful CWWA Conference, and I am grateful for the unwavering support of the Water and Sewerage Corporation, and the Government of the Bahamas. I am also grateful for the Core Committee that assisted me, as well as the various sub-committees that met the challenges of each segment of conference planning with great efficiency and effectiveness.

We are also slated to host in 2022, and are once again looking forward to this opportunity to showcase the best of what our region has to offer through technical presentations, exhibitions, high level forums, and of course networking and camaraderie among our Caribbean brothers and sisters.

I have 2 very memorable moments, which include the 2010 handover of my Presidency to Eng. Wayne Williams, whom was the son of my mentor Eng. Ron Williams, and hosting the Conferences in 2012 and 2014 where we were able to solidify our regional and global partnerships as the single most diverse entity that represents the water and waste sectors and peoples of the region.









(Top left) Ribbon cutting at the Opening Ceremony

(Top right) Miami Dade County's Utility Director Lester Sola speaking at the Opening Ceremony

(Bottom) Participants of the Conference

Positive Influence



INSIGHTS OF A PAST PRESIDENT AND CONFERENCE CHAIR

Jason Johnson CWWA Past President 2014-2016

IN 2004, I WAS FORTUNATE ENOUGH to attend my first CWWA conference in Martinique. During the AGM, we received an in-person update from Mr. Christopher Husbands regarding Hurricane Ivan and the valued assistance by the region, especially CWWA. This was my watershed moment with CWWA that convinced me this is the type of organization with which I want to be involved. In 2006, I was elected Public Relations Officer (PRO) tasked with following up with Puerto Rico's water utility, PRASA, who expressed interest in hosting the conference. A CWWA stalwart, Mr. Cyprian Gibson joined me in this venture where we coordinated with CWWA Gold Awardee Carl Soderberg in presenting our case to PRASA and the Government of Puerto Rico. Alas, Puerto Rico was not meant to be, but we were able to connect with the neighboring US Virgin Islands to host the 2009 conference. I was proud to support the introduction of the CWWA to another critical post within the region while exposing the USVI to the regional influence of the Association.

In 2014, I consider my election as President of the CWWA one of my most memorable professional moments. After ten years of professional service to the region, I was able to support the mission of the Association and build capacity and awareness of the water and sanitation challenges. Similarly, I was able to give back to the part of the world from whence I came. I was proud to work in collaboration with the American Water Works Association in bringing the 2015 conference to Miami, Florida after another hurricane devastated St. Lucia, the originally identified host for 2015. Now, in 2021, I stand proud as a Past President in support of the CWWA in awe of its evolution and still wishing to be of service in building awareness of the Caribbean region, addressing our unique water and sanitation obstacles and promoting our equally unique talents that lay within the water sector of all the respective islands.

I continue to stand in admiration of all Conference Hosts; past, present, and future. I thank you all for your representation of your home islands and commitment to building awareness and education surrounding water. It is not an easy endeavor and at times can be as exasperating as it is fulfilling. I honor my fellow Presidents of CWWA; past, present, and future.

We have all taken the mantel of this proud organization 30 years forward and given it wings to fly for many more. I hope the CWWA and the Annual Conference and Exhibition can have as positive an influence on our future generations as it has had on me.



Unique Connections

American Water Works Association Florida Section

Peggy Guingona Executive Director
Florida Section of the American Water Works Association

ON BEHALF OF THE Florida Section of the American Water Works Association (FSAWWA), many congratulations to the Caribbean Water and Wastewater Association (CWWA) for reaching a significant milestone – your 30th Anniversary! It's been thirty great years of following your mission to bring "together with the water and sanitation community in the Caribbean towards the protection of public health and the promotion of sustainable development." The CWWA and FSAWWA members share a priority to provide the world's number one resource – water – to our communities and our millions of visitors each year that enjoy our beautiful vistas. Our organizations also share a commitment to bring our memberships great value and experiences while providing education, networking, and information exchange opportunities.

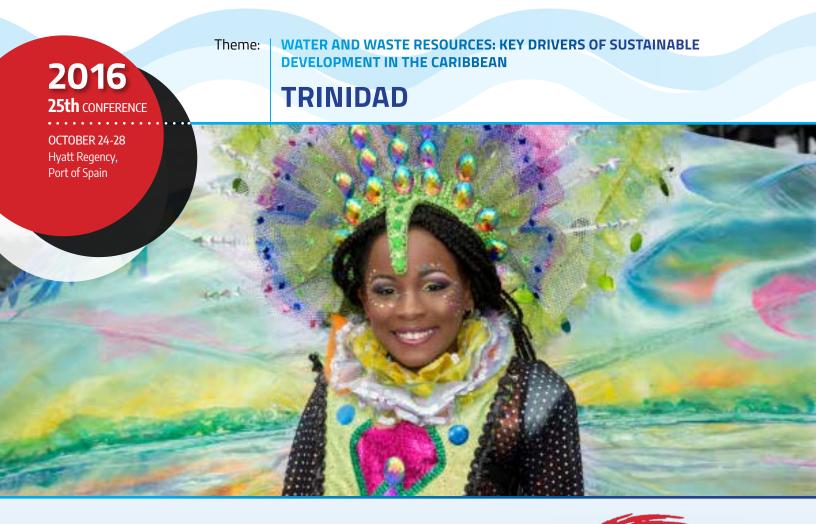
Florida and the Caribbean share unique cultural, economic, climate, and social connections due to close geographic proximity and immediate family and friendship ties.

Through this connectivity, our organizations will continue to collaborate like previous events. We enjoyed collaborating with the CWWA to host your 2015 conference in Miami, Florida. It was a hallmark event for our memberships to interact with and included the Miami-Dade County Mayor to kick off the conference. On May 6, 2021, we were excited to collaborate with CWWA, the Caribbean Water and Sewerage Association, and the Puerto Rico Water and Environment Association for our first virtual 'Caribbean and Florida H2O Link Up' webinar that over 120 people attended. This event helped all attendees to celebrate AWWA's Drinking Water Week, and we look forward to making year number 2 even better. Congratulations again for a great 30 years! FSAWWA looks forward to working with CWWA over the next 30 years and beyond.



Participants of the Technical Tour







HLF 2016 Participants

Dynamic Delivery



PLANNING A CWWA CONFERENCE

Candice Santana CWWA Vice President 2021-2023

PLANNING A CWWA CONFERENCE starts off slow and steady like the first innings of a cricket Test Match and ends like a 100m dash, with you struggling to hold on to Usain Bolt's shoulders. The 25th CWWA Conference and Exhibition was held in Trinidad and Tobago in 2016. This was a grand anniversary and the return to the birthplace of the Association and the Conference. Furthermore, the Conference would not be planned and executed from within a Utility but instead come from the bowels of a National Section.

Even before the first ball is bowled in cricket, the captain would meet with their team, strategize, and plan. Ms. Sara-Jade Govia delivered Conference manual, task list and the outline of a way forward to a team of about ten persons that ended up with a core of about five persons. Ms. Marissa Mc Millian served as Sara's right hand in planning, completely and continuously updating the budget, a guiding document that gave us direction and vision. And just like that Pre-Conference activities were upon us faster than a ball from fast bowler Fidel Edwards.

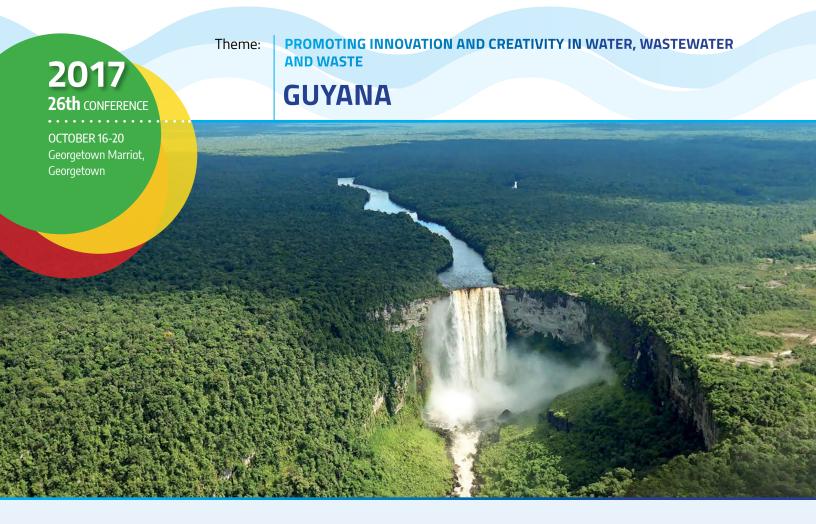
They say if you're not ready to face the first ball at the wicket, it affects the rest of the game. Your very 1st interaction with a physical CWWA Conference starts at Registration in the Conference Secretariat. Ms. Laurayne Lucky led this arm of the Conference effectively with Mr. Satesh Johnson and Ms. Tricia Gopie among others on her team. Ms. Lucky transitioned the Secretariat to be the heart of the Conference, linking the Exhibition to every participant, technical presenter and HLF attendee. This team delivered service with a smile, learning names, and building familiarity with one and all with the sole purpose of meeting their needs.

In the 1990's, when Curtly Ambrose delivered a fast ball, it would send the stumps flying and we experienced that many times in this journey. By the second over, SaraJade had to step up to face the next ball in the Technical Papers and Presentations arm of the Conference. When planning a Conference, having resource persons to call on is more essential than a wicket's keeper. Trustee

Mrs. Sherry Dumas Harewood, Mrs. Cassandra Le Fluer, Ms. Samantha Noel, Mrs. Nikki Mc Intosh, Mr. Timothy Augustine, and Mr. Dalven Harris are some of the persons that step-up to the wicket. In fact, Dalven was our middle order batsman in the Exhibition arm of the Conference, came in after a few overs but ended the innings strong.

CWWA, much like an all-rounder in cricket, brings balance to the Conferencing. After a long day of having your thinking caps on, bringing the best innovation and research to the field, you're allowed to step back and take a break. This was my arm of the Conference in Trinidad and Tobago, and I was determined to give everyone a slice of our culture. The Opening and Closing Ceremonies are our most formal events, and they included our National Instrument, Calypso Medley and Kiddies Carnival Costumes. Mrs. Elizabeth Howe, Mr. Sean Roberts, and Mrs. Nabilla Seepersad among others served as an exceptional Protocol Team. They say CPL is the biggest party in cricket, well I was determined to have our Cultural Night dubbed Canboulay Night imitate a Carnival event. We had a band playing all types of Caribbean music, a Tassa Druming Side, finger food from across the various aspects of culture, a "Doublesman" and masqueraders.

The minute the very last ball was bowled at Conference 2016, I felt like Brain Lara must have felt at St John's Ground in Antigua in 1994 when he broke the world record for the first time. This was my first experience at hosting a CWWA Conference and based on the explosion of positive feedback and excitement about going to the next Conference, we must have hit some 4s and 6s. The experience grounded us, taught us things about our ability to adapt and be resilient but most of all *I was able to witness the core team made up of some dynamic young people go into this as ordinary and come out of it the leaders we had been waiting on.*





Major Benefits



NETWORKING TO MAKE INFORMED DECISIONS

Amanda Ramgobind Water and Wastewater Engineer

MY FIRST EXPERIENCE WITH THE CWWA was in 2017 when the annual conference was held in Guyana. I took the opportunity to present at the Technical Paper session on an ongoing water supply project implemented by the Guyana Water Inc. in one of our hinterland communities. The advice and recommendation received was much needed for the completion of that project. I was amazed by the level of support and have been taking advantage of the benefits since.

Guyana is emerging significantly in wastewater treatment, reuse, and resource recovery. A number of small wastewater treatment plants are in the rehab and expansion stage while two major municipal treatment facilities are proposed to be constructed in the near future.

Being a member of CWWA has allowed me the opportunity to network with technical experts in the field of wastewater both regionally and internationally virtually and in person on a continuous basis. These experts share their experience and provide solutions to existing problems encountered in Guyana. CWWA also allows for networking with suppliers for a wide range of products such as chemicals, equipment, and monitoring tools.

A major benefit of CWWA for me is the short courses offered where new technologies, innovation, best practices, and case studies are presented. This helps to make a more informed decision on the most suitable solution based on the location and natural environment.

UNFORGETTABLE GUYANA CULTURE

Nigel Niles Corporate Secretary, GWI

FEAR, ANXIETY, EXCITEMENT just a few of the plethora of emotions experienced as the realization sank in that Guyana was preparing to host the annual CWWA conference in 2017.

The Guyana Water Inc. was tasked with the responsibility of making this conference a success and we delivered par excellence. From training staff on etiquette and protocol to dispatching welcome teams to our two international airports to greet Ministers of Government, dignitaries, conference exhibitors and participants, Guyana was on display and that famous reputation for hospitality was echoed by all who

came to our shores for this annual event. Being the host country, we ensured that the Culture Night was an unforgettable exhibition of Guyanese culture and there was confidence that this time Guyana will win the best rum, the best water and the best pepper. Alas only our pepper prevailed this time. The experience was certainly unforgettable and the opportunity to connect with colleagues around the world in the Water & Sanitation sectors was invaluable. Looking forward to this conference to continue leading the way as the Water & Sanitation sectors break new ground technologically and foster further camaraderie among the many who share a passion for its advancement.







Strong & Dedicated

THE JAMAICAN EXPERIENCE

MY EXPERIENCE AS A HOST COUNTRY

Rohan Dennis CWWA Jamaica Section

LET'S FLASHBACK TO GUYANA 2017 when the baton was officially passed to Jamaica to host the upcoming CWWA conference. Everyone jumped to their feet and applauded with excitement the idea of meeting in "paradise". As the applause raptured on, the NWC's president must have felt the weight of the heavy responsibility piled squarely on his broad shoulders. His smile gave nothing away as his team was marshalled into action. It's Day 365 and counting down to opening day!

Anyone who have ever been involved in hosting previous conferences can attest to the fact that there is never enough time to achieve the initial objectives of putting on a show. Yes! That's what it was to us. A showcase of all that's beautiful and wonderful about Jamaica. A showcase befitting satisfying the expectations of All. A showcase that was to linger in perpetuity in the minds of our sponsors, members and public. The public relation machinery, the inclusion of all stakeholders, the final product, the Caribbean spirit, the CWWA experience had to be packaged and priced to meet all expectations. Guyana had set the bar. But our job was to bolt across the finish line with the CWWA and the Jamaica flag in hand.

And so it was! The 27th CWWA Conference & Exhibition was hosted by Jamaica in Rose Hall, Montego Bay. For the benefit of those who missed out on the experience, the conference was true to form and generated wonderful discussions and presentations on sustainable climate resilient solutions aimed at mitigating the challenges that plague the water, wastewater and solid waste sectors within the Caribbean region. Over 400 regional and international participants inclusive of Caribbean ministers and other stakeholders attended. And all this we would agree, was achieved while showcasing the exotic beaches and landscape, the rich cultural heritage and the warm Caribbean smile. The baton was passed to St Kitts & Nevis!

Surely, the glamour and glitter, the bright colours of banners flapping in the cool breeze, the meeting and greeting, the food, the ambiance of resort life, the hustle and bustle of the Jamaican team on the ground keeping it together while others engage in purposeful activities and discussions pertinent to the theme of the conference, did not happen by waving a wand. It all came together through strong leadership, a dedicated and cohesive team aware of the objectives, sponsors and donors who understood the intrinsic value of making ourselves proud.

Hosting a conference of this magnitude and significance to the regional and international community is as much about cementing the memories as it about celebrating regional objectives of improving access to potable water and wastewater services, highlighting innovations and improvement in technologies for water development, recognizing the sector's contribution to sustainable economic and social development as well as focusing on safe-guarding our very existence through climate resilient solutions. The challenges of hosting this prestigious conference are minuscule when the host country has a team that is purpose-driven, successoriented and determined to not just "save face", but to put on a grand show.

A Forum for Innovators

YOUNG WATER PROFESSIONALS

AND THE NOT-SO-YOUNG

Angela L. Franklin CWWA PRO 2021-2023

WHEN OUR FUTURE PRESIDENT Sara-Jade Govia, rounded us up for the initiation of the CWWA's Young Professionals Connect, I jumped at the opportunity, well maybe not jumped as I was a full seven months pregnant. I saw this as an opportunity to contribute to the CWWA in keeping with my promise to Trustee Sherry Dumas-Harewood two years prior at the 25th conference, that I would give my best in service to the CWWA towards the growth and development of the Association. This would be that moment.

The discussions were lively and the excitement high in the room. It was evident that there was a need for a forum specifically for the younger members of the Association as more than 25 of us from across the Caribbean including, Jamaica, Trinidad and Tobago, Bahamas, Dominica, St Kitts and Nevis, Anguilla,

Turks and Caicos and of course Guyana, gathered in the assigned room in Montego Bay, Jamaica. As an initial meeting we were tasked with identifying who we were as young members of the Association and what it was that we wanted out of a Young Professionals group. We identified our vision and mission: we were passionate, we would be heard, we were committed, and we would be innovators as we represented a diverse group without gender bias and prepared to be role models, guardians of our resources, and educators.

During the session we were asked to finish the following: I love; I wonder; I will. I don't recall my exact responses then but my responses today surely wouldn't vary much. I love that the YP group gives younger members the opportunity for personal development so that they are better equipped to serve the Association and their respective sectors throughout the region. I

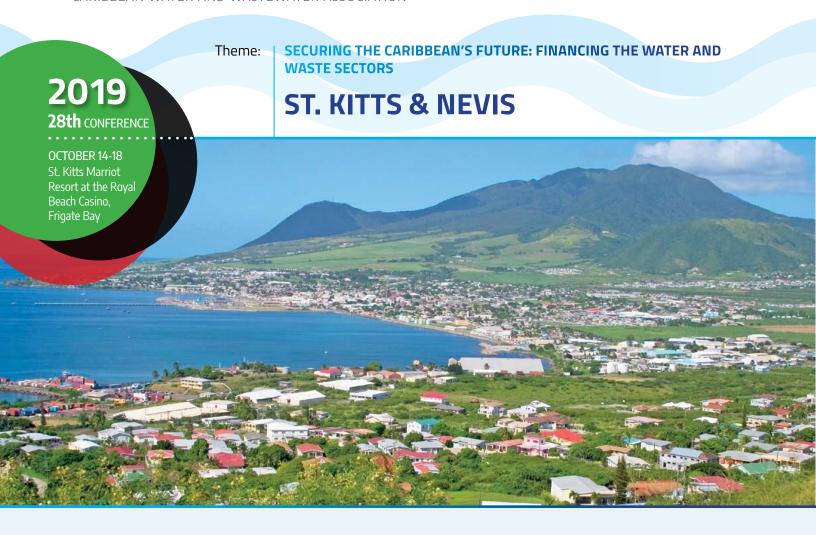
wonder if I will be able to continue to contribute to the youths of the Association even as I enter the not-so-young group. I will endeavour to do my best to serve in the Association.

I would later become the Chair of the CWWA National Section Guyana and subsequently CWWA PRO. To say that it has been my honour to serve is an understatement and I will continue to serve for as long as I can as I believe the CWWA is the ideal entity for ensuring the protection and management of our water resources in the region. More so I believe in the people who have contributed over the past 30 years to the continued growth of the Association, regardless of the challenges including a global pandemic. I will continue to serve.



First Young Water Professionals Meeting











(Top left) HLF 2019 Participants on the stairs of the Marriot

(Top right) Dr Halla Sahaley with collaborator IWEco

(Bottom left) Technical Tour Participants

MILESTONES

- Regional Strategic Action Plan for Governance and Building Climate Resilience in the Water Sector in the Caribbean was published
 - Young Caribbean Water Entrepreneurs Shark Tank Competitiom

COWO A COMMISSION WATER NO MATERIAL MANINE AND COOLS

Commit, Fund, Promote

NATIONAL SECTIONS, THE BACKBONE OF CWWA

Halla Sahely, Ph.D. IWEco SKN National Project Coordindator

I BELIEVE A NATIONAL SECTION can keep members motivated by allowing for fellowship and professional development and growth. As such, the Section would have to call on the rest of the CWWA to promote opportunities for professional development such as lectures, webinars, short courses etc. Unfortunately, we are not an active National Section. In fact, as far as I know, we do not have enough registered CWWA members in the Federation to constitute an official National Section. Of course, this could change if we made a strong attempt to recruit members from the Solid Waste Sector and convince lapsed members to

renew their memberships and commit to a National Section.

Overall, for a National Section to be successful, we would need a core group of members to commit to launching a Section as well as seed funding to promote the first few activities.

Tremendous Accomplishments

AHA MOMENTS:

WHAT I HAVE LEARNED FROM CWWA

Sara-Jade Govia CWWA President 2020-2022

IN 2011, I HAD JUST RETURNED TO TRINIDAD & TOBAGO from the UK and one of my colleagues thought it was a good idea for me to connect with Mr. Irwin Gill whom I met briefly in the past while working with a consultancy firm on a few wastewater projects in WASA. I was resettling after completing my Masters and I was enthusiastic to begin applying all the experiences I had gathered during my time in London. It was here, my CWWA-fate was sealed, upon that first meet up with the kinetic Mr. Gill. Apart from the eminence of the CWWA that he described, I wholeheartedly bought into the family spirit that he mirrored.

To be a part of a community of water and wastewater professionals, was exactly what I felt I needed to begin my mission of true impact in the water sector.

I experienced my 'aha' moment in the CWWA during my first Conference. As banal as that may be, when you are physically placed in a room filled with people who face very similar challenges and who share the same level of zeal for their country and solving development problems, that coalesces into a real force for change. Through my journey as a member of the CWWA, I have learnt from my colleagues who have travelled the road before me, I have conceptualised the future-proofing of the water sector in my country, and perhaps most importantly, I have eluded group-think. The CWWA is not a body of people who think the same way, nor people who practice in the same field – it is a body of people who examine the same problems in water, wastewater and solid waste and who are trying, have tried and have been successful in bringing about change. That specific dynamic is a very difficult network to find.

For me to achieve maximum benefit in the CWWA. I had to say yes to several assignments that lifted me out of my comfort zone. One of those was putting myself up for the role of President of the CWWA. Serving as President was one of my career goals but I was giving myself a few years to get "ready" for that step. This preparation was ongoing for some years and even elevated when I challenged myself to draft and champion, what is now known today as the Basseterre Declaration – a sustainable commitment from the High-Level Forum. However, I was measuring myself against an ideal of what I believed I should accomplish or have completed, before I was worthy of being President of the CWWA. One of the life-goals that I felt I needed to have checked-off is the common conflict that career women face of completing a family. It was only during my self-reflection in the few days leading up to the AGM, I realised that imposter syndrome had set in, and that I had less faith in my competence than those around me. Immediately, I knew that all the perceptions I had of where I was and where I should be were completely constructed by me and therefore I was the only one that could re-engineer the yardstick. Perhaps, on a personal level, that may have been the greatest gain that CWWA has given to me.

What the CWWA has been able to accomplish in the last 30 years, with the resources that it has been given is tremendous. For the most part, the CWWA has succeeded on volunteerism – on the dedicated, altruistic service of Caribbean professionals. Equally weighted is the confidence and commitment of CWWA's sponsors and donors in the value and quality of work it is able to deliver. The chemistry of the dedicated volunteers and sponsors, with a level of equitable viability will take CWWA forward for the next 30 years.

My dream for the CWWA is for it to be a model for professional associations. An association where the skills of its members are leveraged through a mutually beneficial partnership that harnesses opportunities to solve the Caribbean's water, wastewater and solid waste development challenges. In this near-

future, the CWWA's web platform would be the hub for all water, sanitation and waste data, projects and research in the Caribbean, untangling our data-poverty predicament, and facilitating national and regional policies and programmes that are evidence-based. Finally, the CWWA will be the host of a virtual learning environment for professionals who practice, want to practice or are just interested in water, sanitation and waste. These three goals, in my view, will empower and



APU training



position professionals and the public with the data and knowledge to add true value to advocate and be a part of solving the Caribbean's development challenges.

> (Top) NIHERST Open Day 2020 (Middle) Risk Training 2021 (Bottom) Student Day











Overcoming Hurdles



THE CWWA'S FLAGSHIP TRANSITION TO CONFERENCE VIRTUALITY!

Anuradha Maharaj-Jagdip Operations Officer, CWWA

THE YEAR 2020 PRESENTED ALL OF US with many challenges. The COVID-19 pandemic changed the face of business entirely and forced us all to adapt or get left behind. Fortunately for the CWWA, many of the strategies that were already in development, incorporated aspects of what were needed to successfully move into a virtual environment, including our conference and exhibition (C&E) planning.

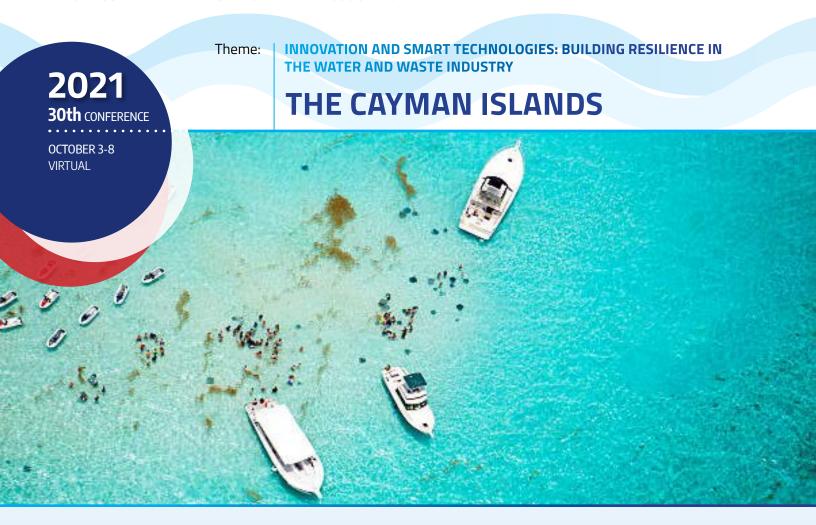
In 2018, at the 27th CWWA C & E held in Jamaica, the planning committee had decided to do just this, and move into a new domain in the Caribbean by employing the use of a conference application, or "App". This was the first time the Whova app was used. Thankfully, this first use of the Whova platform, albeit for an in-person conference, unknowingly thrusted us into a new era that was "soon come" as our Jamaican friends say.

Our 2020 Conference planning started in the same usual mode – prepping for another beautiful, inperson experience in fabulous St. Lucia. Then the pandemic lockdowns came. While most other regional conferences were cancelling their 2020 conferences, a decision was made by the then Executive Council (EC), on the advice of the Secretariat, to host the conference and Exhibition on a virtual platform. The EC then tasked the Secretariat with identifying a timely, costeffective practical solution and worked as a team in reviewing all the latest state-of-the-art platforms available. After several rounds of comparisons and deliberations, it came right back to Whova, who had recently upgraded their capability to completely host a conference and exhibition virtually.

As you would imagine, there were yet several other new hurdles that needed to be overcome. Deciding on virtuality brought new questions in the logistics of the conference. Central to our execution was ensuring the same Caribbean camaraderie and family feel while maintaining our technical value. In addition, we were determined to retain our Exhibition albeit virtually! From this first virtual conference and exhibition in the region came many firsts in the region: a fully virtual High-Level Fora – for Ministers and Partners, the use of customized introduction videos, regional music and entertainment pieces all controlled by a centralized "Command Control Centre".

Even though the CWWA 2020 Conference was our 'guinea-pig' experience at virtuality, we are thankful that the visionaries of the CWWA had previously, without knowing how soon we would have to; aligned the association for an immediate, successful transition. The current CWWA Secretariat worked tirelessly to ensure that all arms of the conference were well-executed. It was a grueling but all-in-all satisfying experience to be able to sift through the difficulties to continue the advocacy and promotion of the only water, wastewater and solid waste C & E in the Caribbean region. It should be noted in one of the Whova algorithmic statistics, that the CWWA C & E ranked in the top 10 of the hundreds of conferences hosted by Whova.

The CWWA would like to take this opportunity to thank our partners, sponsors and members who put their faith in us for the 2020 conference and supported us in any way possible. We continue to learn with each emerging conference and pledge to provide the highest value and support to our regional and international partners and members at all our future conferences – whether in-person, hybrid or fully virtual.







Technical Cooperation, Network Development

CWWA AND THE CAYMAN ISLANDS 2021

Water Authority The Cayman Islands



THE CAYMAN ISLANDS HOSTED the 30th Annual Conference and Exhibition from 3-8 October 2021. Unlike traditional conferences, the 2021 Conference and Exhibition was entirely virtual to accommodate ongoing COVID travel restrictions.

The organisation of the event took place over 11 months, with support from Cayman Water Company and the Department of Environmental Health of the Cayman Islands. Work on the conference began in late 2020 with the creation of the conference theme and logo. The logo was designed by the Water Authority's Laboratory Technologist, JD Banks. It featured a turtle – an important cultural symbol of the Cayman Islands. Its colour palette was pulled from colours associated with the various industries represented by CWWA (blue for water, grey for wastewater, and green for solid waste). The logo also highlighted the theme of the event; "Innovation and Smart Technologies: Building Resilience in the Water and Waste Industries."

In the following months, the Local Organising Committee did much work to organise and manage the production of the conference, including creating communication plans, managing conference registrations, developing engaging sessions, securing sponsors and exhibitors, and producing videos. A small group of four oversaw the technical run of the show the week of the conference.

The conference began with a pre-conference workshop, followed by a week of technical presentations, special

sessions, and special ceremonies, including the celebration of the CWWA's 30th Anniversary. This was followed by two High-Level Forums, with Caribbean Ministers responsible for water and solid waste the two weeks following the conference.

The CWWA was formed to meet the growing need for increased technical cooperation and network development for the water and waste industry in the Caribbean region.

The annual conference has been a critical tool in accomplishing this purpose. The Water Authority-Cayman is proud to have been a part of the successful legacy of the CWWA.



Theme:

RECOVERY AND EVOLUTION: REGIONAL ACTIONS FOR GLOBAL SUSTAINABILITY IN THE WATER AND WASTE SECTORS

THE BAHAMAS

OCTOBER 17-21
Atlantis Bahamas, Paradise Island

THE FOUR PILLARS

Marlon Daniels President Elect

DURING MY PRESIDENCY I wish to take a four pillar approach which will see the continuity of efforts now, during, and subsequent to my term. The first pillar, which I will continue to support until a collaborative effort produces a new one, is institutional strengthening. Here, I wish for us to focus on building membership through the National Sections but to also increase our presence via the National Sections in the non-English speaking Caribbean as envisaged in our new constitution.

The next pillar will focus on sector leadership and advocacy. I wish that the CWWA will strengthen its partnerships with more international and similarly styled organisations, such as AIDIS and IWA. This will help build the Association's position as a leader and advocate for the water and waste sectors in the Caribbean as well and to increase the mutual benefits of these partnerships.

The third pillar will focus on organisation sustainability, which speaks for itself. My focus will be increasing the institutional strength at the level of the Secretariat, which is a priority for us to transcend what we are currently. The Secretariat plays a vital role in the operation of the Association and as such it needs to be a well-oiled machinery for us to move from where we are to where we want to be as a regionally and internationally recognised Association. This feeds directly into our recognition as the regional leader and advocate for water and waste.

Only then can we really give meaning and improvement to pillar four, which is programming. These are the activities that will seek to attract the necessary revenues, awareness raising, and knowledge sharing. With these, I expect that the CWWA will have a stronger foothold as the experts in water and waste within the Caribbean.

MOVING AWAY FROM INCINERATION



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- Cost competitive
- ONLY ELECTRICITY REQUIRED
- NO PRESSURE OR STEAM GENERATOR
- No water consumption
- No LIQUID EFFLUENT
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