



CARIBBEAN WATER AND
WASTEWATER ASSOCIATION

Volume 1 Issue 2
June 2017

The CWWA InfoStructure

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Message from the President



In 2014, the Board of the CWWA embarked on an exercise to develop a Strategic Plan for the Association. It was an exercise that involved the identification of areas which the CWWA needed to address in order to ensure its growth and sustainability. As a membership association, the area that was quickly identified was the need to strengthen the National Chapters of the CWWA, thereby increasing its membership base. Since 2016, a concerted effort has been made at the level of individual Board Members and the Secretariat. Steps have been taken to update and streamline

the invoicing system and soon the membership arrangements will be reviewed by the Board. Others include concerted effort to start or even resuscitate National Chapters. We are very happy to report that Grenada has taken steps to resuscitate the National Chapter. On World Water Day, existing and potential members attended a luncheon at which the president spoke about the need for the water and waste management sectors in Grenada to mobilize and to strengthen the fraternity. Similarly, in Jamaica, Noel Whyte, Vice President of the CWWA and Mark Barnett of the National Water Commission (NWC) have taken on the leadership role in organizing a series of professional lectures, some of which have received corporate sponsorship to realize the events. The intention is to use these occasions to bring professionals together to discuss common issues, to give voice to some of the issues and to build the capacity of individuals through lectures and training opportunities.

The Trinidad Chapter has been very active and under the leadership of CWWA PRO, Sara Jade Govia and Marissa McMillan have organized a number of events for members and interested persons. The CWWA Chapter is also working very closely with the Secretariat to organize this year's Conference in coordination with the Guyana Water Inc.

For the future, there is need to encourage young professionals as well as more women in the sector through the establishment of special arms of the CWWA. The matter of a Past President's Section is also in the making in order to ensure that the years of experience and expertise which reside among this group can be used for the benefit of all. It is a slow process but much is dependent on the commitment and will of members at the country level to assist in this regard. We stand ready to provide support to any country or sector which wishes to organize itself. Just call on us!!

Yours Sincerely,
Alphonsus Daniel
President

CARIBBEAN WATER AND
WASTEWATER ASSOCIATION

**26th Annual Conference
and Exhibition**

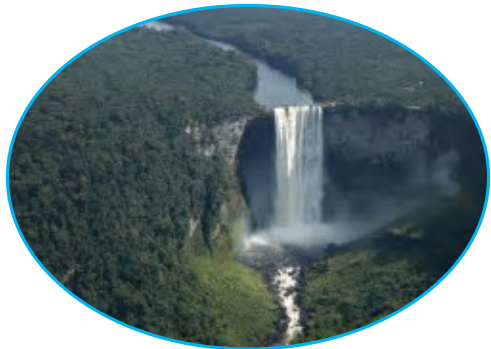
*Promoting Innovation & Creativity
in Water, Wastewater
and Waste Management*

Guyana Water Inc.

**Save
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October 16th-20th, 2017
Marriott Hotel | Georgetown, Guyana

2017 Conference & Exhibition: GUYANA



The perfect Amazonian location – nestled between the Caribbean and South America. The home of the majestic Kaieteur Falls – the world’s largest single-drop waterfall, the most pristine rainforest and countless rapids, rivers and waterfalls throughout the country. A nature lover’s paradise – Guyana - where the excitement is this year as the Caribbean Water and Wastewater Association (CWWA) collaborates with Guyana’s “water guardian”, the Guyana Water Incorporated (GWI) to host the 26th Annual Conference and Exhibition from the 16 to 20th October at the Marriott Hotel, Georgetown, Guyana.

“Guyana” is the Amerindian word for “land of many waters” or “water people”, making this year’s host to over 400 persons, including experts, industry professional and service providers in the water and waste management sectors from across the globe, the most appropriate choice.

Come and participate in this high level event and enjoy the engaging presentations by experts from the Caribbean, North America, Latin America and Europe while experiencing the warmth and hospitality of the land of six peoples, indulge in the unique blends of food, world renowned rum and rich cultural diversity and heritage, under the theme, “Promoting Innovation and Creativity in Water, Wastewater and Waste Management”.

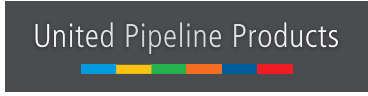
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Guyana to host regional water conference

Starbroek News 5 Jun 2017

The 26th anniversary conference and exhibition of the Caribbean Water and Wastewater Association (CWWA), to be held in October, will bring together over 400 participants from the Caribbean, Latin America, North America and Europe, who will engage to share ideas, information, and new technologies in water, wastewater and waste management.

The theme of this year's conference, which is being hosted in Guyana for the first time, is "Promoting Innovation and Creativity in Water, Wastewater and Waste Management."

The conference, which will be held from October 16th to October 20th at the Marriott Hotel Guyana, will target not only high-level policy makers, but the regular man as well, in a bid to disseminate information on water and wastewater management, and the challenges being faced as far as resource distribution goes, in the regions and locally. It will also focus on waste management, which is a new focus for the conference.

"...The focus will be on when our people come together what new have we discovered? What new have we learnt? What can we promote and demonstrate to others through the network? Solutions to problems that one country might have developed which they can share with another country," Executive Director of the CWWA Patricia Aquing stated at the launch of the conference last Friday at the Marriott Hotel.

Describing the event as more than just a "jamboree," Aquing stated that the coordinators of the conference will seek to build synergy between the event and its relevance to the local population.

She said that by the end of the conference, it is hoped that the average citizen will better understand and appreciate the challenges that come with water distribution.

"...at the end of the day if we view water as a human right, it means all our populations must have access to potable water and water availability, so the quality and the quantity are important... And so the significance of water is not about just getting water in a tap, water is a development issue and that's what we have been trying to stress. Development meaning that when you don't have water in the quantity or when you don't have available water, every aspect of your economy is going to be affected," she asserted. Noting that oftentimes conferences are "far removed from the ordinary citizens," Guyana Water Incorporated's Managing Director Dr. Richard Van West Charles, who also spoke at the launch, said that these events act as platforms for knowledge sharing, which can result in better practices.

Furthermore, he highlighted the role the conference can play in advancing Guyana towards fulfilling its Sustainable Development Goals, while noting that research plays an important role in influencing policy and driving development.

"We have to put this in the context of the sustainable development goals which have got to be met and in terms of the area of wastewater, we all know that Guyana is lagging far behind. Sometimes in many of our developing countries, research is seen as a luxury, but in essence when we look at the thrust for development in the developed world, what drives development is knowledge and hence the relevance of this conference to what we are doing in Guyana as we seek to make the change, as we seek to impact on the lives of many of our citizens," Dr. Van West-Charles stated.

As far as water distribution in Guyana goes, Van West-Charles said that water quality management is the highest priority for Guyana Water Incorporated at the moment.

"I wouldn't say Guyana is water stressed. The important thing with respect to water and its link to human health is that we ensure that the water that people consume is of a good quality. And we have embarked aggressively on a strategy looking at the coastland. That's why you heard of the mini labs and the testing kits and so we want to, as a priority, we're moving in every region right now to ensure that the schools have good quality water. In the hinterland, we are looking at the sources where they combine either from springs or from rivers to ensure that those are filtered properly for consumption," he said in a comment to this newspaper afterwards.

Minister within the Ministry of Communities Dawn Hastings, during her keynote address, noted that with Guyana being known as the "Land of Many Waters," water is often taken for granted. She acknowledged that several local communities have only just been granted access to potable water.

"...And you know GWI has a lot of first times in this year in 2017. Every time I go to speak or I go to commission a new well or a new water distribution unit, I keep hearing, "this is the first time." For the first time the residents at Moleson Creek, Jackson are receiving potable water to their home. Then I was up on the highway in Waiakabra, Silver Hill, it was for the very first time that the residents there, Guyanese like any one of us, were able to receive their water supply..." Hastings related.

Meanwhile, according to a Guyana Water Incorporated statement, included on the agenda for the October conference will also be the 13th High Level Forum of Caribbean Ministers Responsible for Water (HLF13), which will assemble ministers from all Caribbean countries, water utility managers and development partners, to discuss matters related to the water sector, and an exhibition featuring over 60 exhibitors, who will showcase the products and services they offer in the water and wastewater sector.



2017 CWWA Conference Planning Committee

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CWWA Conference and Exhibition

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CLICK YOUR SELECTION TO LINK!



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Georgetown**

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WITHOUT BREAKFAST
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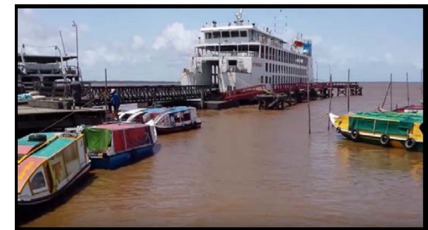


THREE EXCITING TOURS!

The CWWA and Guyana Water Incorporated have arranged three exciting tours for participants. Each tour will include technical aspects of water, wastewater and waste management, coupled with a few stops at interesting sites in Guyana where nature abounds. Our goal is to introduce you to the "land of many waters," our Amazonian neighbor, to allow you to get a sense of it's wonderful culture.



BERBICE RIVER TOUR



ESSEQUIBO TOUR



DEMERARA TOUR

**CLICK HERE TO DOWNLOAD TECHNICAL TOUR
PACKAGE DESCRIPTIONS.**

Exxon Moving Ahead with Investment in Guyana



It's a done deal. Exxon Mobile Corporation is moving full speed ahead with its multi-billion-dollar investment which will essentially transform Guyana into the world's newest oil-producing country.

With the Government's regulatory approval of the deal and the issuing of the production licence last week, the United States oil giant said it was ready to proceed with the phase one development for the Liza field that has been described as one of the largest oil discoveries of the past ten years.

The field, which is part of the Stabroek block, is located offshore Guyana and measures 6.6 million acres, or 26,800 square kilometres.

According to Demerara Waves online news, the Liza Phase 1 development includes a subsea production system and a floating production, storage and offloading (FPSO) vessel designed to produce up to 120,000 barrels of oil per day.

Production is expected to begin by 2020, less than five years after discovery of the field. Phase 1 is expected to cost just over \$4.4 billion, which includes a lease capitalization cost of approximately \$1.2 billion for the FPSO facility, and will develop approximately 450 million barrels of oil.

"We're excited about the tremendous potential of the Liza field and accelerating first production through a phased development in this lower cost environment," said Liam Mallon, president, ExxonMobil Development Company.

"We will work closely with the Government, our co-venturers and the Guyanese people in developing this world-class resource that will have long-term and meaningful benefits for the country and its citizens," he said. Source: Caribbean360, Friday June 22, 2017

Think forward...



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CWWA Conducts Training Course for Wastewater Operators in Antigua

Persons from several Caribbean countries attended a training course for wastewater operators in Antigua from the 16th to 20th May at the Rex Halcyon Cove Hotel. The course was organized by the CWWA under the aegis of the Global Programme of Action (GPA) Global Wastewater Initiative (GW2I) of UN Environment. The CWWA is the coordinator of the Caribbean GW2I Platform. The Water Department of the Antigua Public Utility Authority hosted the event and provided logistical support. A total of 26 persons from Grenada, Dominica, St. Kitts and Nevis, Guyana, Montserrat, Jamaica, Guyana and Antigua participated in the course which was facilitated by Alphonsus Daniel, President of the CWWA.



Participants benefitted from very interactive sessions in which they were able to share their country experiences on the challenges they faced in the design of wastewater systems, from the practical level to the matter of policy and legislation. Some of the topics included: design considerations which must be taken into account for extreme weather conditions, obviously linking it to Climate Change to which countries of the region are very vulnerable. The health impacts of wastewater were also addressed including the treatment of septic tank effluent. Participants benefitted from elements of the design of two and three compartment systems. They also ventured outside of the training venue to do soil percolation tests.

At the end of the training, participants received certificates. In a written assessment of the course, many positive statements were made:

“Course was timely and provided for skills that are not very popular in the islands. Numerous examples were provided and the instructors vast experience shared.”

“This course was very informative and gave everyone, from beginner to expert, a practical and tangible experience of wastewater systems.”

“I think the course is very timely and gives me an avenue to allow me to make more informed decisions...It (will) also assists me in my daily job.”

Jamaica National Section Lecture Series

Topic: Digital Disruption - Transforming the Utilities Sector



The increasing global interconnectedness of persons and processes and the resulting quantum shift in how we transact business and conduct our personal affairs, was the theme of the first Lecture in a series planned by the Jamaica Section of the Caribbean Water and Wastewater Association.

Mervyn Eyre, Head of Managed Infrastructure Services Americas and Caribbean Region at Fujitsu, took participants on a thought provoking journey as he demonstrated the different ways in which disruptions to the status quo are now taking place with the digitization, convergence and remote control of business processes.

He noted the generalized use of communication applications such as WhatsApp which has “disrupted” the revenue base of the traditional telecommunications industry and is likely to create even greater “disruptions” with the company’s recent acquisition by social media giant Facebook.

Drawing on examples of how disruptive changes have taken place in industries such as financial services, medicine, government and the utilities, to name a few, he challenged persons in leadership to lead the change through innovation instead of resisting and being left behind.

During the question and answer session, Mr. Eyre responded to questions about global safety and security issues that can result when access to multiple layers of information falls into the wrong hands. There was also a provocative question about who will control the ‘disrupters’ of the ‘disruption’ which includes alternative professionals like hackers who are dedicated to using the technology to create outcomes for their own purposes. The recent examples of hackers attempting to influence election outcomes in the U.S. and France were given.

Master of Ceremony, and VP of CWWA, Mr. Noel Whyte reminded the audience of the paradigm shift in how services are being delivered in the utility sectors, largely brought about by the increasing use of technology in the processes. He also noted that there was now a greater need for collaboration between various disciplines, particularly as the utilities seek to provide a greater customer experience.

The presentation was well received from the wide ranging audience comprising engineers, technologists, contractors and leaders in the water and sanitation fields. Special welcome was extended to the following persons:

- Mr. Mark Barnett President of the National Water Commission who brought the welcome.
- Mr. Vincent Sweeney Head of the United Nations Environment Programme (Jamaica) (UNEP)
- Mr. Herbert Thomas Managing Director of the Water Resources Authority (RWA)
- Ms. Sharonmae Shirley CEO of Jamaica National Agency for Accreditation (JNAAC)



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Member Spotlight! Victaulic

Since 1919, Victaulic has been the originator and world's leading producer of mechanical pipe joining solutions. Used in the most demanding markets, Victaulic's innovative piping technologies and services put people to work faster while increasing safety, ensuring reliability and maximizing efficiency. Victaulic's technology includes mechanical couplings for grooved, shouldered or plain end piping, fittings, valves, sprinklers, fire protection devices, accessories, and pipe preparation tools used for a wide array of applications and piping materials.

The concept of joining pipes with bolted mechanical couplings emerged during the First World War to rapidly provide allied troops with water and fuel. In 1919, the Victory Pipe Joint Company was formed and by combining the words "victory" and "hydraulics," the name was shortened to Victaulic in 1922. The company began focusing on commercial applications, aiming to bring to market their new and innovative method of joining pipes.



In large-diameter water and wastewater applications, Victaulic's grooved mechanical joints and bolted split sleeve couplings (VBSP) are faster, safer, and easier to install in the field compared to welded, threaded, and flanged joints. No flame is required for installation, eliminating the safety risks associated with welding and allowing the couplings to be installed in any weather condition. The use of mechanical pipe joining solutions reduces fabrication costs, material handling and transport costs, labor time, and downtime, reducing total installed costs by as much as one-third compared to welding and flanging and creating long-term efficiencies for the owner. Additionally, Victaulic offers a wide range of piping system solutions for piping materials such as carbon steel, ductile iron, and HDPE, among others.

The UN Environment GEMS/Water Capacity Development Centre is pleased to let you know that the UN Environment GEMS/Water Postgraduate Diploma in Freshwater Quality Monitoring and Assessment is now open for applications. This is a two-year, part-time programme offered on-line through University College Cork. **You can find further information, including details of the modules, the application process, and the fees, HERE: <https://www.ucc.ie/en/gemsdc/postgraduatediploma/and>**

Applicants from low-income countries that participate in the GEMS/Water network, and who are supported with a letter from the nominated government focal point for the UN Environment GEMS/Water programme, can avail of a special fee reduction to €500 per year for two years (this is a reduction of nearly 90% of the University's normal fee for non-EU students). Applicants from non-EU countries have until 25th August to submit their applications and we strongly recommend that they contact us at gemsdcadmin@ucc.ie before starting the application process.



School of
**Biological, Earth and
Environmental Sciences**

Postgraduate Diploma FRESHWATER QUALITY MONITORING AND ASSESSMENT



Through its global scoping exercise and bilateral discussions with the water and education sectors in developing countries the Capacity Development Centre identified a need for a flexible, advanced course for individuals involved in water quality management. In addition, the new UN Agenda 2030 Sustainable Development Goal for water (SDG 6) is leading to an increased demand for knowledge, understanding and capacity in water quality monitoring and assessment worldwide. This Postgraduate Diploma in Freshwater Quality Monitoring and Assessment addresses these needs by enabling the development of expertise in countries through online learning.

The Postgraduate Diploma focuses on all aspects of water quality monitoring including: monitoring programme design, quality assurance, data analysis and presentation, monitoring and assessment of rivers, lakes and groundwater, and water quality monitoring with biological and ecological methods and with particulate material. There is also an opportunity to take part in a field workshop during the second year of the programme.

The programme aims to recruit highly-motivated, enthusiastic students who may be (i) currently involved in water quality monitoring, (ii) part of the UN Environment GEMS/Water network, and/or (iii) seeking to specialise in water quality monitoring and assessment, and who wish to study on a flexible, part-time basis.

Modules

The PG Diploma in Freshwater Quality Monitoring and Assessment is a part-time programme taken over two full years commencing in October 2017, and every second year thereafter. To be awarded the Diploma students must complete and pass 30 credits from Year 1 and 30 credits from Year 2.

Teaching will be online with the exception of module EV6004, which is a field-based module in a developing country and/or in Ireland. Students can exit the course after completion of EV6001, EV6002 and EV6003 with a Postgraduate Certificate in Water Quality Monitoring and Assessment.



Year 1

- EV6001 Monitoring programme design for freshwater bodies (10 credits)
- EV6002 Quality assurance in freshwater quality monitoring programmes (10 credits)
- EV6003 Data handling and presentation for freshwater quality monitoring programmes (10 credits)

Year 2

- EV6005 Monitoring and assessment of surface waters (10 credits)
- EV6007 Monitoring and assessment of groundwater (10 credits)

and any two from the following

- EV6004 Freshwater quality monitoring in the field (5 credits)
- EV6008 Freshwater quality monitoring using biological and ecological methods (5 credits)
- EV6009 Freshwater quality monitoring with particulate material (5 credits)

Regional Conference on the Sustainable Development Goals to be held in Jamaica 28-30 June, 2017



More than 200 delegates, including high-level ministers and technical experts from 18 Caribbean countries will meet in Kingston 28 – 30 June 2017 to advance and accelerate regional action on the most comprehensive blueprint for eliminating extreme poverty, reducing inequality, and protecting the planet the world has ever seen – the Sustainable Development Goals (SDGs).

The 17 SDGs, commonly known around the globe as Agenda 2030 will take centre stage at Caribbean Action 2030: Regional Conference on the Sustainable Development Goals when delegates seek to advance regional action in the areas of resources mobilization, civil society participation, strong evidence base for policy and capacity building.

For more information please visit: <http://www.jm.undp.org>. Additional information can be found at the conference website: <http://www.caribbeanaction2030.com>

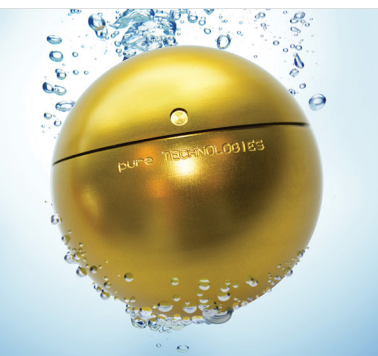


5th CAWASA Annual Water Operators Conference
Fort Young Hotel Roseau, Commonwealth of Dominica, W.I.
June 29-30, 2017

Conference on Waste Management in the Caribbean Conference
4 to 6th July, Kingston Jamaica
Organised by UN Environment and supported by the Ministry of Environment Jamaica, The Kingdom of



Manage Your Pipelines



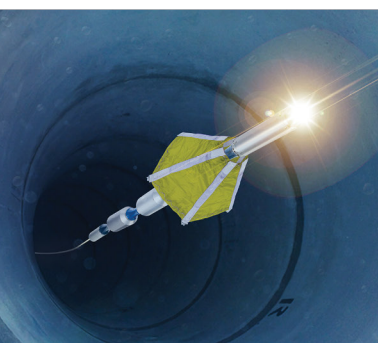
Leak Detection

Pure Technologies offers a variety of leak detection solutions that can help utilities reduce their non-revenue water loss system-wide. Our SmartBall® and Sahara® inline leak detection tools offer unparalleled leak detection sensitivity and location accuracy.



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A Dominican Water Resources Adventure



The Brazilian National Water Agency (ANA) and Brazilian International Agency for Technical Cooperation (ABC) hosted the second phase of its Caribbean workshops in collaboration with the Dominica Water and Sewerage Company Limited (DOWASCO) on the island of Dominica between Monday 27th and Friday 31st of March, 2017.

The training session content covered a cross-section of topics, which included Water Resources Management, Water Quality, Implementation and Operation of a Hydrological and Hydrogeological Network and Water Sector Governance through a National Policy for Water Resources. The countries that participated in the workshop included Barbados, Bahamas, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St Lucia, St Kitts and Nevis, St Vincent, Suriname and Trinidad and Tobago.

FINANCING WATER UTILITIES OF THE CARIBBEAN: TOWARDS EFFICIENT AND FINANCIALLY SUSTAINABLE SERVICES May 3-5, 2017 Montego Bay, Jamaica

The Inter-American Development Bank (IDB), Government of Jamaica (GOJ) and National Water Commission of Jamaica (NWC) hosted a water sector conference on Financing Water Utilities of the Caribbean: Towards Efficient and Financially Sustainable Services. This was held between May 3 - 5, 2017 at the RIU Hotel, Montego Bay, Jamaica. The objective of the Conference was to "...assist regional water and sewerage utilities in the formulation and financing of action plans that will result in consumers having greater access to reliable water and sewerage services at the least possible cost..."

Objectives of Meeting/Conference/Workshop/Training:

Develop an action plan to improve the accountability and credibility of the utility in providing greater access to water and sewerage services.

Discuss the current performance of utilities and benchmarking practices in other countries.

Formulate strategies for improvements in water sector policy and strategic plans.

Examine and identify financing options to achieve financial and operational self sufficiency of water utilities, including successful public private partnerships (PPPs).

Identify partnerships between regional counterparts responsible for water utilities, water sector regulation and policy development.

The Conference consisted of Caribbean representatives of water and sewerage utilities, private water and wastewater operators, water resource regulators, economic regulators, international development partners, and Ministries with responsibility for finance, public utilities and planning. These organisations function in the water and wastewater sectors at the regional and local levels.



In the following link you will find our new publication, **Evaluation of Smart Water Infrastructure Technologies**. <https://publications.iadb.org/handle/11319/8329>

The objective of this document is to present an assessment of the current situation in the application of Smart Water Infrastructure

Technologies (SWIT) and to provide a summary of potential key recommendations for the integration of such technologies by water service providers in the Latin American and Caribbean region. This publication is an initial review of the SWIT concept that would be complemented by further evaluations, readers' comments and suggestions are therefore welcome, and can be sent to Yvon Mellinger (YVONM@iadb.org) who has been working on both the topic and this publication.

ANNUAL ENVIRONMENTAL CELEBRATIONS Q3 2017

July

World Environment Day- 5th

World Ocean Day - 8th

September

International day for the preservation of the Ozone Layer- 16th

Gov't commemorates World Environment Day



Planning Minister Camille Robinson-Regis is urging citizens to preserve and conserve the environment in light of World Environment Day 2017, celebrated on June 5.

In acknowledging this year's theme "Connecting People to Nature", Minister Robinson-Regis sought to remind the general public that success lies in the capacity of every citizen to become informed and take personal responsibility for their actions as it relates to the protection of the environment.

She noted that Trinidad and Tobago depends on its biological resources to support livelihoods mainly through agriculture, fishing, recreation, tourism, and culture.

The Planning Minister said however that this country's biodiversity has been negatively impacted by deforestation, illegal logging, forest fires and indiscriminate quarrying, adding that this must be curtailed.

Minister Robinson-Regis also noted that natural threats such as climate change also have a negative effect on this country's biodiversity.

She acknowledged that Trinidad and Tobago and the wider Caribbean stand to suffer immensely from climate change, noting that analyses have revealed that a large number of terrestrial plants and animals may eventually become extinct.

Bleaching in corals, which are species that are sensitive to small increases in temperature, is also expected to occur and this can have a negative effect on the reefs in Buccoo and Charlotteville in Tobago.

The Minister stated that Government is committed to doing all that is necessary to preserve the integrity, diversity, and productivity of our fragile environment, which include measures to mitigate climate change as well as protect our biodiversity.

She said Government has already taken critical strides to strengthen the protection of the natural environment.

Source: looptt.com

Why 'hydro-politics' will shape the 21st Century Source: BBC.com

The 2008 James Bond film *Quantum of Solace* pits 007 against an evil criminal syndicate bent on global domination. Sounds par for the course... but this particular network of baddies isn't using lasers or missiles to cause havoc.

No, the Quantum organisation has a uniquely dastardly plan: seizing control of Bolivia's water supply.

While the evil syndicate's role in the film might not be entirely realistic, this piece of fiction does raise a scenario that is worth considering seriously: what would happen if a country's water supply was cut off? What would be the global fallout?

Think about it: sure, we need water to survive. But it also fuels a country's commerce, trade, innovation and economic success. This has been the case for time immemorial, from the Nile in Ancient Egypt to the Amazon in the Brazilian rainforest.

While bodies of water typically help form natural borders of countries, several nations tend to share access to rivers or lakes – the Nile runs through nearly a dozen countries alone, for example. Given how conflict-prone humankind is, it's surprising there haven't been more dust-ups of a "hydro-political" nature.

Bodies of water have always formed natural boundaries between countries, forcing people to figure out ways to share water peaceably. (Credit: Getty Images)

Experts agree: if there was no access to water, there would be no world peace. That's why one of the grand challenges of the next few decades could be maintaining this ultra-sensitive stasis of water management. In the 21st Century, freshwater supplies are drying up, climate change is raising sea levels and altering borders, explosive population growth is straining world resources, and global hyper-nationalism is testing diplomatic relations. Meanwhile, water demand is expected to go up 55% between 2000 and 2050. In the coming century, in terms of its value as a global resource, it's been described as "the next oil."

So what can we do to guarantee global access to water – and thus global peace?

World peace hinges on hydro-politics - [click here to read more.](#)



Bodies of water have always formed natural boundaries between countries, forcing people to figure out ways to share water peaceably (credit: Getty Images)

Venue:

Santa Barbara Beach & Golf Resort, Curacao
Santa Barbara Plantation, Porta Bianco, Nicuport, Curacao, Dutch Caribbean

A group rate of \$165 single/double has been arranged for this program plus appropriate taxes for reservations made on or before 5:00 p.m. local time on 28th May 2018 based upon availability. Make lodging arrangements directly with the hotel by Ph: (855) 590-2266 or the Property Mgr. + (599) 840-1235 - be sure to mention CaribDA 2018 Conference for the group rate. Self Parking is available complimentary. Complimentary Wireless Internet is available in the Conference & Meeting Space.

All guest rooms are subject to 25.5% taxes. Additional Food & Beverage and Event related charges are subject to a service charge of 15% and 5% sales tax. Please note, service charge and tax are subject to change.

"Bon Vivir to Curacao"



Call for Abstracts – Student Session

Deadline for submission of abstracts is 30th November 2017

SUBMISSION OF ABSTRACTS

Call for Abstracts: CaribDA will coordinate a three-day program of technical presentations and posters. We invite Students to submit abstracts on the subjects of desalination and waste water reuse and related topics listed below (please use these reference numbers in your submittal):

- | | |
|---|---|
| 1. Technology & Innovations | 5. Seawater RO Applications |
| 2. Planning & Management | 6. Desalination using Green Energy |
| 3. Finance & Economics | 7. Thermal Desalination |
| 4. Regulations & the Environment | 8. Other |

All abstracts must be submitted using the Required Student Abstract Submission Form found at www.caribda.com

Page 1 (Submittal & Contact Information):

- Applicable Session(s) (listed on Page 2 of the Call for Presentation or Poster - please reference a Primary Session or, if applicable, an Alternate Session as well)
- Title of Presentation
- Primary Author: salutation, first name, middle initial, last name, suffix, job title, company, mailing address, phone, cell, fax, email and website
- Biography of Primary Author to be included (brief one paragraph)
- Co-Author(s): include all information listed above for each Co-Author
- Presenter's name (only one Presentation will be allowed for a Presenter)
- Contact person, title, phone, and email
- Disclosure: if subject matter previously presented or published (when and where)

Page 2 (Abstract of Presentation or Poster):

Abstracts should be a full page, single-spaced, approximately 200-500 words in length and provide an overview of the paper and its relevance to the theme of the Conference.

Submit to:

Abstracts must be submitted in the Required Abstract Submission Form to CaribDA via email at caribda@caribda.com

If the file is too large to send via email, by the deadline send to the Highgate address: [click here](#)

Questions and Submittal processed by:

Caribbean Desalination Association (CaribDA)
2409 SE Dixie Hwy. • Stuart, FL 34996

Click to link for more information!

NatureTech.Solutions Prize for Technical Innovation Now Available at CFVI



Click here for more information.

The Community Foundation of the Virgin Islands (CFVI) is now accepting applications for the 2017 NatureTech.Solutions Award for technical innovation. Supported by the Potter Fund for NatureTech Solutions at CFVI, this \$3,000 prize will be awarded to projects that have been built to increase the effectiveness of natural or cultural resource management in small islands in the Eastern Caribbean. The Potter Fund for NatureTech Solutions, established by Kincey and Bruce Potter, is a legacy of Island Resources Foundation, which provided technical assistance to conservation organizations and activities in small islands while based in the USVI from 1971-2016. "Kincey and I have spent some of the best years of our lives in the insular Caribbean, especially the Virgin Islands," said Bruce Potter. "We are delighted to be able to partner with the Foundation to use the Potter Fund for NatureTech.Solutions and the resources shared from Island Resources Foundation's legacy to provide a prize to stimulate and support innovations to improve the management and conservation of resources in the small islands of the Caribbean."

Welcome New Members!

Jermaine Collie
Water & Sewerage Corp- Bahamas (IDV)

Rensforde Joseph
Guyana Water Incorporated, Guyana

Deon Anderson
Guyana Water Incorporated, Guyana

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CWWA Executive Council 2016/2017



From Left to Right: Past President - Jason Johnson; Ordinary Member - Marissa McMillan; Secretary - Candice Santana; Vice President - Noel Whyte; President - Alphonsus Daniel; Vice President - Ivan Rodrigues; Treasurer - Winston Jailal; Public Relations Officer - Sara-Jade Govia; Ordinary Member - Marlon Daniels



ABOUT US

The Caribbean Water and Wastewater Association (CWWA) is a regional non-governmental organization established by an Act of Parliament in Trinidad & Tobago in 1991. The CWWA is a grouping of water, wastewater and solid waste professionals in the public and private sectors.

VISION

The preeminent Association of professionals, practitioners for water and waste sectors in the Caribbean

MISSION

CWWA brings together the water and sanitation community in the Caribbean towards the protection of public health and the promotion of sustainable development. Through collective leadership, CWWA positively influences advancements in technology, education, science, management, and country and regional policies in the water and sanitation field

AIMS AND OBJECTIVES

- To promote education and training in water supply, wastewater and solid waste disposal to ensure an adequacy of trained manpower and well-informed members of the public.
- To encourage the study, research and development in water supply, wastewater and solid waste disposal, and the publication of the results of such work, so as to provide for appropriate and dynamic technological advances in the Caribbean.

BENEFITS & ACTIVITIES

- Our annual Conference and Exhibition** - rotates in a different Caribbean Island and promotes:
 - Technical Paper Presentations
 - Regional Water Ministerial Forum
 - Technical Training Sessions
 - Exhibition of new technology and systems

- Venue for meeting of regional bodies such as CEHI, CAWASA, IWCAM and GWP-C

- Award Ceremony where individuals are recognized for:
 - prolonged and outstanding service to the sector and
 - for overall excellence in the presentation of technical papers

Inter-sector collaboration and technical co-operation partners:

- AIDIS - Inter-American Association of Sanitary and Environmental Engineering
- PAHO - Pan American Health Organization
- CRew - Caribbean Regional Fund for Wastewater Management
- CARIWOP - Water Operators Partnership for the Caribbean
- UN-HABITAT - United Nations Human Settlements Program
- IADB-Inter-American Development Bank
- CDB - Caribbean Development Bank
- UNEP - United Nations Environment Program
- CWWA-Canada Water and Wastewater Association
- CEHI-Caribbean Environmental Health Institute
- CAWASA- Caribbean Water and Sewerage Authority
- GWP -C Global Water Partnership- Caribbean
- CaribDA-Caribbean Desalination Association

- CWWA Newsletter and News in the Sector**
Members receive an electronic copy of the CWWA 'INFOstructure' Newsletter, and receive online Sector News which keeps them informed on current regional and international developments.

- Training and Development**
Promote new developments in water supply and waste disposal through seminars & workshops.

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