

## TECHNICAL SESSIONS 2019

Welcome to the CWWA's 28th Annual Conference and Exhibition

The Technical Sessions takes place between

Tuesday 15th October and Thursday 17th October, 2019 and consist of

- Technical Seminars
- Technical Presentations
  - Panel Discussions
  - Trade Presentations

For more information, send an email to cwwatech@gmail.com

## What do you need to know about the Technical Sessions 2019?

The Plenary will take place in the Grand Lobby Atrium

The Technical Sessions will take place in three (3)
Conference Rooms

- Grenada Room
- Dominica Room
  - St Lucia Room
- You can pre-register for all Technical Seminars at cwwatech@gmail.com
- All Technical Presentations and Panel Discussions are open
  - All Trade Presentations are open

## **Technical Sessions Schedule Key**

Technical Seminars			
Technical Presentations			
Feature Technical Presentations			
Panel Discussions			
Trade Presentations			
Closed Sessions			

Schedule subject to change

## Tuesday

Plenary - Sable Room — 8:30 am to 10:30 am
Keynote Speaker - Prime Minister the Honourable Dr Timothy Harris

Panel Discussion - Securing the Caribbean's future : Financing the Water and Waste Sectors

	Tuesday			
Time	Grenada Room	Dominica Room	St Lucia Room	
10:30 am - 11:00 am	1	Break		
11:00 am - 11:30 an		Waste as a Problem to Waste as a Resource  Bob Paul - Extended Producer Responsibility - An Effective Policy for Encouraging a Circular	Operators without Borders -	
11:30 am - 12:00 pn	Water and Energy Nexus - hosted by Canada	Nicole T Garofano - Managing 'plastics' in SIDS using market- based instruments: case study analysis of Barbados and St	Caribbean interventions	
12:00 pm - 12:30 pn	1	Vincent & the Grenadines  Sian Cuffy-Young - Waste and entrepreneurship - boosting a burgeoning industry	Dr. Viviane Yargeau - Integrating ozonation in sewage lagoons for treating domestic wastewater	
12:30 pm - 1:00 pm	Greg Gilles Nevis Island Hamilton Well – Iron and Manganese Treatment Case Study using an Innovative WaterPOD based Oxidation & Filtration Technology with Backwash Recycling	Jonathan Haran - A vision towards  a holistic response - the  Sargassum Crisis Waste	Amanda Ramgobind - Sewer- mining at the Tucville Sewage Station, Georgetown Guyana	
1:00 pm - 1:30 pm	Lunch			
1:30 pm - 2:00 pm		Lunch		
2:00 pm - 2:30 pm	Trade Presentation	Technical Seminar - An Insurance Mutual Covering Natural Disaster Losses for Caribbean Water Utilities  Considering the vulnerability to natural disasters of water utilities in the Caribbean region and the varied types of losses resulting from natural disasters, having effective risk transfer solutions tailored to the needs of water utilities is critical to recovery efforts and the resiliency of water supply and treatment systems.	Dr. Quincy A. Edwards - Contaminants of Wastewater Origin in Groundwater in Barbados	
2:30 pm - 3:00 pm	Trade Presentation		Sherwayne Liverpool - Recycling of backwash effluent at the shelterbelt treatment: converting waste to resource	
3:00 pm - 3:30 pm	Trade Presentation		Special Meeting	
3:30 pm - 4:00 pm	Trade Presentation		Special Micelling	

 $4:00pm-5:00pm-Fifth\ Meeting\ of\ the\ CariWOP\ Steering\ Committee\ -\ (Invitation\ Only)\ -\ St\ Lucia\ Room$ 

<b></b>	Wednesday				
Time	Grenada Room	Dominica Room	St Lucia Room		
8:30 am - 9:00 am	Feature Technical Presentation - Integrating Water, Land and Ecosystems Management (IWEco) as a means of enhancing climate resilience: The case	Financing Caribbean Water Projects hosted by National Commercial Bank,	Anuradha Maharaj - Representing Surface-Groundwater interactions using a Coupled model: A Study of the Semi-Arid Hailiutu Catchment, China.		
9:00 am - 9:30 am	of St. Kitts and Nevis - hosted by Dr Halla Sahely – GEF IWEco St. Kitts and Nevis Project Coordinator		Amarnath Chinchamee & Aruna Rajballie & Navin Ramroop - An Approach to Quantifying Watershed		
9:30 am - 10:00 am	Desalination Hour Presentation 1 - Adam Simmonds & Dean Bedford - Sustainable Water Supplies for the Caribbean – The Necker Island Story Presentation 2 - Daniel Villessot - Solar seawater desalination, battery-free, reverse osmosis to produce drinking	Water and Sanitation Infrastructure Financing hosted by the US Environmental Protection Agency	Gayle Soo Chan - Building Resiliency to Climate Change in Ontario: Making the shift to collective impact		
10:00 am - 10:30 am			Shalini Ramsaran-Baksh - Building Climate Resilience in the Caroni Basin, Trinidad		
10:30 am - 11:00 am		Break			
11:00 am - 11:30 am	Technical Seminar - NRW and how to combat it  Stuart Hamilton – Introduction to IWA	Alon Tish - BOOT Financing as a Driver for Increased Capacity and Quality, while Reducing Water Consumption - Case Study	Tomesia Dundas & Melissa Benjamin - Outcomes from improvements in providing safe, adequate potable water		
11:30 am - 12:00 pm		Aubery Roberts & Melissa Benjamin - Financing Energy Efficient Climate Resilient Infrastructure for Georgetown City Guyana	Ramchand Jailal & Khemraj Persaud - Provision of Potable Water to the Hinterland Community of Paramakatoi, Region #8, Guyana		
12:00 pm - 12:30 pm	Alan Wyatt - Background to NRW in the Caribbean and how it measures up against the rest of the world  Roland Liemberger—10 key steps for	Nick St-Georges - Why Public-Private Partnerships (P3's) Projects Are Important for the Caribbean	Christine Thompson - Protecting Livelihood and Empowering of the Rural and Hinterland People through the provision of Clean Drinking Water		
12:30 pm - 1:00 pm	designing a successful NRW management PBC -  Mark Barnett—Jamaica PBC case study  Noam Komy - Bahamas PBC case study  Corrine Cathala - how to deal with an NRW program and international finance to deliver it -  Jan G. Janssens et al. — Performance-based PPP for Sustainable NRW  Reduction to unlock Private Sector Financing	Tesfa Francis—Financing Desalination Projects: the Antigua Experience	Kiera S. Fitzgerald - Breathing New Life into an Old Plant – Saving Resources, Reclaiming Water		
1:00 pm - 1:30 pm	Lunch				
1:30 pm - 2:00 pm	LUTICTI				
2:00 pm - 2:30 pm	Trade Presentation		Dr. Chris Metcalfe - Challenges in meeting the Sustainable Development Goal 6 for water and sanitation in the Caribbean		
2:30 pm - 3:00 pm	Trade Presentation		Kavita Ramnarine-Ramsawak - Comparative Study on Climate Change Impacts and Adaptation of the North and South Oropouche Hydrometric Areas, Trinidad		
3:00 pm - 3:30 pm	Trade Presentation		George Woolhouse & Miguel Montoute & Jason Ernest - Solutions to long-term water supply—demand balance challenges: Decision making under uncertainty in the Marquis catchment		
3:30 pm - 4:00 pm	Trade Presentation		Richard Atkinson - Development of Dry Season and Drought Management Plans for Trinidad and Tobago		

<b>T</b> :		Thursday	
Time	Grenada Room	Dominica Room	St Lucia Room
8:30 am - 9:00 am	Technical Seminar - Climate Resilience for the Water Sector - Presentation 1 - Integrating Climate Resilience in the Water Sector in the Caribbean: Moving from Regional to National Action –	Marlon Daniels and Nigel Niles - An Analysis of the Existing Legal Framework for the Determination of a Water Pricing Model for the Integrated Management of the Water Resources of Guyana	Erin Bennett - Watershed restoration as a tool for reducing coastal pollution from extreme rain events in the Caribbean
9:00 am - 9:30 am	Presented by Mr. George	Persis Kanaloa Ramírez Ramos - Challenges of IWRM adaptation in the Caribbean: Case study of the Dominican Republic	Dr Nick Jarritt - Building Flood Resilient Communities: Integrated Flood Risk Management in the British Virgin Islands
9:30 am - 10:00 am	Presentation 2 - Florida (USA) Water and Wastewater Resilience: Planning, Implementation, and Collaboration – Presented by Kevin Carter of Broward County Water and Wastewater Services Presentation 3 - Resilience of the	Dr. Deon Anderson - An investigative leadership approach towards building competence, bridging the skills gap and transforming the work ethics of water treatment personnel in Guyana	Glendon Diaz & Jason Johnson - Effective Condition Assessment: A Technical Evolution and Industry Leading Approach to Asset Management
10:00 am - 10:30 am	Mainalla lagge Compagn	Paul Fanner - Why Are NRW Levels So High In The Caribbean and What Can We Do To Reduce The Need For New Water Resources?	Pieter Doornenbal & Orin Browne & Angela Franklin - Building up knowledge on water resources in Guyana, from fieldwork to water management
10:30 am - 11:00 am		Break	
11:00 am - 11:30 am	Technical Seminar - Water and Wastewater problems — Alternatives and Innovative approaches to funding	Mainstreaming Gender in the Water and Sanitation Sector in the Caribbean - Panel Discussion	Allister Harry & Mark Veerasammy - Production of Alum from locally produced Bauxite in Guyana for Surface Water Treatment
11:30 am - 12:00 pm	company. David Ehrhardt - Castalia - Public Private	Presentation Sian Cuffy-Young - Women for change in waste - creation of a movement	Amelena Squires & Allister Harry - Using Moringa Oleifera Seed extract as a coagulant to improve the quality of Surface water
12:00 pm - 12:30 pm	Partnerships (PPP) and the benefits of private investment Corrine Cathala / IADB – CREW fund and how to fund a	Social Media and the Water and Sanitation Sector	Louise Abigail Alfred - Water and other sector synergies
12:30 pm - 1:00 pm	wastewater project Mark Barnett  – NWC – How a PPP may benefit a water company and the pit falls that may occur en route	Presentation - Leana Bradshaw - The Paradigm Shift Experienced in Customer Relationships, through Social Media Communication	Marsha Serville - Tracking sources of chemical and biological contamination in the Soufriere watershed, Saint Lucia
1:00 pm - 1:30 pm	Lunch		
1:30 pm - 2:00 pm 2:00 pm - 2:30 pm	Trade Presentation	Bringing Groundwater to the forefront Presentation 1 - Jawaharlall Ramjug - Estimation of groundwater recharge using a Water Balance approach in Rajasthan, India Presentation 2 - Angela Franklin - Building resilience through groundwater modelling Presentation 3 - Orin Browne - Promoting Economic designs or Water Wells Presentation 4 - Orin Browne - Promoting Water Security	Christine Thompson - Securing Livelihood through the Development of Climate Resilience Infrastructure in North Rupununi, Guyana
2:30 pm - 3:00 pm	Trade Presentation		Jumal Duncan & Nomalraj Bacchus Misir - Provision of Potable Water to the Remote Hinterland Community of Campbelltown, Region #8, Guyana
3:00 pm - 3:30 pm	Trade Presentation		Vanessa Williams - Education : Bridging the gap of social inequality in the Water and Waste water sector of Caribbean
3:30 pm - 4:00 pm	Trade Presentation	Through the Application of Managed Aquifer Recharge	