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## 2015 CONFERENCE & EXHIBITION

**24<sup>th</sup> Annual Conference and Exhibition**  
MIAMI

**CWWA**  
CARIBBEAN WATER AND WASTEWATER ASSOCIATION  
American Water Works Association  
FloridaSection

**AIDIS**  
INTER-AMERICAN ASSOCIATION OF SANITARY AND ENVIRONMENTAL ENGINEERING

"Improving the Quality of Life with Water & Waste Management Solutions"

**EARLY BIRD REGISTRATION DEADLINE EXTENDED TO AUGUST 31!**  
**MEMBERS - \$350 NON-MEMBERS - \$525**  
**AFTER AUGUST 3**  
**MEMBERS - \$400 NON-MEMBERS - \$600**

**Attend informative presentations...**

**Mingle with the experts...**

**Learn about vendor products & services!**

**24<sup>th</sup> Annual Conference and Exhibition**  
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**DEADLINES TO GET NOTICED**  
**HAVE BEEN EXTENDED TO AUGUST 3RD!**

**Sponsorship Opportunities!**  
 WHAT BETTER WAY TO SHOW YOUR SUPPORT!  
 A VARIETY OF SPONSORSHIP LEVELS AVAILABLE!

DIAMOND - \$35,000
PLATINUM - \$25,000
GOLD - \$20,000
SILVER - \$10,000
PEARL - \$7,500
MARBLE - \$5,000
QUARTZ - \$5,000
SAPPHIRE - \$4,500
COPPER - \$3,500
GARNET - \$1,000
BAG INSERTS - \$1,000

**Link to Conference Website**

**Conference Magazine Advertising**  
 PROMOTE YOUR COMPANY WITH A DISPLAY AD!

Full Page - \$1500
Half Page - \$900
Quarter Page - \$600
Business Card Size - \$400

and more options available!

**Trade Presentations** NEW!

**RESERVE YOUR SPOT NOW TO SHOW OFF YOUR COMPANY'S PRODUCTS OR SERVICES!!**

Are you eager to show off a new product or explain your companies services?  
 New this year - Trade Presentations will be going on all day Monday, Tuesday and Wednesday! Reserve your time slot now! \$1,000 Member / \$1,200 Non Member



## SECRETARIAT UPDATE

### WELCOME



Patricia Aquing  
Executive Director

We are pleased to introduce **Mrs. Patricia Aquing** our newly-appointed Executive Director for CWWA. Mrs. Aquing assumed duties from July 13 2015. Mrs. Aquing is a national of Trinidad and Tobago who brings 27 years of experience in the Development field in the Caribbean and internationally. Up until recently, she was the Executive Director of the Caribbean Environmental Health Institute (CEHI) located in St. Lucia, the technical arm of CARICOM responsible for Environmental Management among 16 Member States. CEHI has since merged into the Caribbean Public Health Agency (CARPHA). Prior to her appointment as the Executive Director of CEHI in 2006, she held the post of Programme Director over an eight year period.

She has a wealth of experience in the region and is a well-respected professional in the water sector, as well as the broader area of Sustainable Development and the Environment. Worthy of mention is that during her leadership as Head of CEHI, the seminal Regional Project funded by the Global Environment Facility (GEF)/UNEP/UNDP on Integrated Watershed and Coastal Areas Management (IWCAM) in Caribbean Small Island States, was co-executed by CEHI. Prior to her joining CEHI, she worked with the International Labour Organisation (ILO) a UN Specialised Agency.

Mrs. Aquing is charged with rolling out of the Association's Strategic Plan. She has a proven track record of resource mobilisation, partnership building with donors and technical agencies and programme development. She will be working with the CWWA Team to put the Association on an accelerated growth path, including increasing our membership base as well as growing the waste management sector as an integral part of our mandate.

Please join us in welcoming Patricia onboard, as we wish her a long and rewarding relationship with the Association.

### CWWA MEMBERSHIP



### It's almost here!!!

There are **24** more days to our 2015 Conference and Exhibition. Have you checked your membership status? Are you registered to attend? Financial members receive great discounts on Conference rates.

**CHECK YOUR MEMBERSHIP STATUS  
NOW!!**

<http://www.cwwa.net/new/index.php/membership-info/member-status>



## INSIDE EUROPE



**Desalination for the Environment:  
Clean Water and Energy**

22–26 May 2016, Marriott Park Hotel, Rome, Italy




### Deadlines

#### Abstracts 30 November 2015

Notification of acceptance 30 December 2015

Papers 28 February 2016

### Contact

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### TOPICS

- Feedwater pretreatment for desalination
- Seawater desalination by reverse osmosis
- Brackish water desalination
- Nanofiltration, ultrafiltration, microfiltration in water treatment processes
- Forward osmosis
- Pressure retarded osmosis
- Removal of specific compounds
- Membrane performance and maintenance
- Membrane reuse
- Fouling
- Biofilms
- SDI/MFI
- Pre-treatment and post-treatment of desalinated water
- Recent developments in desalination
- Advanced wastewater treatment, ETC.

For further details visit: [www.desline.com](http://www.desline.com), [www.edsoc.com](http://www.edsoc.com)

## Water and Development Congress & Exhibition



19 - 22 OCTOBER, 2015 / DEAD SEA, JORDAN  
[www.iwa-network.org/WDCE2015](http://www.iwa-network.org/WDCE2015)

IWA Water and Development Congress & Exhibition 2015 (WDCE2015), focusing on the possibility to brand your company towards 1500 global decision makers (e.g. utility leaders, governments, contractors, consultants, industry end users):

1. Floor plan update:
2. Preliminary Exhibitors list:
3. Programme update:
4. 10 reasons to exhibit:

Exhibitors get the opportunity to meet the high level congress delegates, be involved in 1-to-1 meeting programme, meet international delegations and organize your own Business Forum as part of the Congress. Also, you can attend Special Forums like Red Sea - Dead Sea Forum and specific country Forums. Don't hesitate, book your stand space today.

For further information contact: IWA Exhibition Management at [info@iwa-exhibitions.com](mailto:info@iwa-exhibitions.com) or call us at the Exhibition secretariat: +31 70 3820028.

### **ADDITIONALLY:**

We are organizing a session on "The impacts of seawater desalination on the marine and coastal environment" (ID# 9245) within the upcoming 2016 Ocean Sciences Meeting to be held in New Orleans (21-26 February 2016)

<http://osm.agu.org/2016/>. Abstract submission deadline:

September 25, 2015.



## GWP REACHES OUT

### COURSE SPONSORSHIP

GWP is currently offering sponsorship for eligible participants to complete the online course *“Integrated and Adaptive Water Resources Planning, Management and Governance”*. The course is provided by McGill University, the Faculty of Agricultural and Environmental Sciences.

Full details and instructions on how to apply available here: <http://www.gwp.org/en/gwp-in-action/News-and-Activities/Sponsorship-Available-for-McGill-University-Course/>

Application deadline: **21 August 2015**



### NEW RESOURCES

In light of continued efforts and partnerships to share knowledge on Rainwater Harvesting (RWH) best practices in the Caribbean, we are pleased to announce the release of a series of new RWH resources which can be found in our updated online Caribbean Rainwater Harvesting Toolbox which carries a new web address:

[www.caribbeanrainwaterharvestingtoolbox.com](http://www.caribbeanrainwaterharvestingtoolbox.com).

Most of the new resources within the RWH Toolbox are the outputs of a recently held Rainwater Harvesting Knowledge Network Forum hosted by the Global Water Partnership-Caribbean (GWP-C) in partnership with GEF International Waters Learning Exchange and Resource Network, GEF Amazon Project Caribbean Aqua-Terrestrial Solutions (CATS) funded by the German Federal Ministry for Economic Cooperation and Development through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the Environmental Health and Sustainable Development Department and the Caribbean Public Health Agency (CARPHA).

GWP-C has also updated its existing Rainwater Harvesting (RWH) Travelling Demonstration Model. The first version was done in partnership with the Caribbean Environmental Health Institute (CEHI) now subsumed under the Caribbean Public Health Agency (CARPHA) in 2010. The updated of the RWH Model has been designed and built by GWP-C in partnership with CARPHA, the Water Resources Authority (WRA) of Jamaica (WRA), and the National Institute for Higher Education, Research Science and Technology (NIHERST) of Trinidad and Tobago (NIHERST).



## Aging Pipes Are Poisoning America's Tap Water

In Flint, Michigan, lead, copper, and bacteria are contaminating the drinking supply and making residents ill. If other cities fail to fix their old pipes, the problem could soon become a lot more common. FLINT, Mich.—Melissa Mays looks around the emergency room at a frail, elderly man in a wheelchair and a woman with a hacking cough and can't quite believe she's here. Until a few months ago, she was healthy—an active mother of three boys who found time to go to the gym while holding down a job as a media consultant and doing publicity for bands. But lately, she's been feeling sluggish. She's developed a rash on her leg, and clumps of her hair are falling out. She ended up in the emergency room last week after feeling “like [her] brain exploded,” hearing pops, and experiencing severe pain in one side of her head.

Mays blames her sudden spate of health problems on the water in her hometown of Flint. She says it has a blue tint when it comes out of her faucet, and lab results indicate it has high amounts of copper and lead. Her family hasn't been drinking the water for some months, but they have been bathing in it, since they have no alternative. “It set off a train wreck in my system,” Mays told me, sitting in the emergency room. Later, doctors would put her on beta blockers after finding problems in the arteries around her brain. In the past 16 months, abnormally high levels of E. coli, trihalomethanes, lead, and copper have been found in the city's water, which comes from the local river (a dead body and an abandoned car were also found in the same river). Mays and other residents say that the city government endangered their health when it stopped buying water from Detroit last year and instead started selling residents treated water from the Flint River. “I've never seen a first-world city have such disregard for human safety,” she told me.

*To read more visit: <http://www.theatlantic.com/business/archive/2015/07/dont-drink-the-water/399803/>*

## California Drought Could Wipe Cities Off Map If Their Water Runs Out

TULARE COUNTY (CBS13) — The epicenter of California's drought crisis is in the Central Valley, where there are growing fears the drought could wipe entire towns off of the map. Wells are going dry, jobs are harder to come by and families are already moving, either to different states or even Mexico in search of work. Before visiting Tulare County, a place where wells have gone dry and some people are living in third-world conditions, we went to a place deep in the Mojave Desert that offers a dire warning of what can happen when the water runs out.

Desolate and deserted, Dave Leimbach is one of the few left in Lockhart. “We didn't ask for this,” he said. Once home to hundreds, it's an all but abandoned and forgotten ghost town in the Mojave that barely a half-dozen people call home.

The sun set slowly on the old farming town when the nearby lake dried up. “I've been out here since 1980,” he said. “And they're all gone. All of them.” Hundreds of miles away, communities similarly built on farming are struggling as water is scarce. Orchards have been ripped out, and farm jobs are few. Many worry new ghost towns could be on the horizon in Central California. In these parts, Donna Johnson is affectionately known as the water lady. She's delivering water to a needy family in East Porterville, a devastated town we've visited before. Dozens more wells have run dry since our last trip. Most of the Tulare County community south of Fresno still has no water.

*To read more visit: <http://sacramento.cbslocal.com/2015/07/28/california-drought-could-wipe-cities-off-map-if-their-water-runs-out/>*



## Saltwater Marshes of the Eastern US

The extensive estuarine saltwater marshes of eastern North America are large, flat, grassy areas that are flooded daily by the semidiurnal tides of the Atlantic Ocean. Most areas experience two high tides and two low tides each day, but when the high and low tides are about the same height, the pattern is known as semidiurnal tides. Most of these marshes are found behind some protective barriers that protect their fragile ecosystem from the full forces of ocean waves. (Credit: Linda & Dr. Dick Busher). Smooth cordgrass, *Spartina alterniflora*, is the dominant plant that grows within these saltwater marshes. Smooth cordgrass is a perennial grass and is native to the Gulf and Atlantic Coast of North America. In the 1970s it was introduced to the salt marshes along the West Coast of North America to help control erosion, but has now become a major invasive plant problem to the native plants of the West Coast marshes.

Wildlife is abundant in these North American salt marshes. Greenhead flies, *Tabanus nigrovittatus* and mosquitoes can be overwhelming. Mussels, crabs, snails and amphibians are common. Small fish are abundant which draws many wading birds, like the Greater yellowleg, *Tringa melanoleuca*, shown here. The marshes are a favorite of the many migratory birds who pass over them on their annual journeys. Canadian geese, *Branta canadensis*, are commonly found feeding on the leaves of the acres and acres of smooth cordgrass

For further details visit: <http://www.livescience.com/51642-saltwater-marshes-photos.html>



## SECTOR NEWS



WASTEWATER Acting managing director of the Environmental Management Authority (EMA) Gayatri Badri Maharaj, left, joins other attendees at the National Workshop for Component 2 of the GEF CReW Project, Lauretta Burke senior associate, World Resource Institute (WRI); EMA assistant manager Vidjaya Ramkhalawan, and WRI associate Erin Gray. PHOTO Courtesy the Environmental Management Authority

TRINIDAD and Tobago has the highest population access to centralized wastewater systems in the Caribbean. Also 95 per cent of total domestic wastewater is neither treated nor disposed of appropriately in the region. These were some of the findings of a report from the Global Environment Facility funded Caribbean Regional Fund for Wastewater Management (GEF CReW Project). The findings were released during the second National Workshop for Component 2 of the GEF CReW Project hosted by the Environmental Management Authority (EMA) on July 14.

According to the report compiled under the GEF CReW, "Review of the Access to, Availability of, and Organizational Readiness for, Uptake of Funding for the Wastewater Sector in Selected Participating Countries" March 2014: - Only 20 percent of the domestic wastewater produced in the Caribbean is collected.

**To read more visit:** <http://www.newsday.co.tt/news/0,214343.html>



*Residents get government-supplied potable water in Santo Domingo, Dominican Republic, on May 12, 2015. Photographer: Erika Santelices/AFP via Getty Images*

Californians are suffering an historic drought, Brazilians are rationing water and Chile's Atacama Desert is creeping south. Now Caribbean nations from Jamaica to Trinidad that have been praying for rain are counting their losses. A region vulnerable to devastating hurricanes, the Caribbean is enduring its worst drought in at least five years due to the El Nino weather pattern. The phenomenon, which has dried Canadian wheat fields, caused palm oil prices to rise and risks boosting global food inflation, is leaving some islands with as little as half their average rainfall.

Puerto Rico has reduced access to water for almost 350,000 customers. Dominican mango growers are producing less than half of the more than 100 varieties they grow due to a dearth of rain and dependable irrigation systems. In western Jamaica, a brush fire exacerbated by dry conditions destroyed hundreds of acres of the famed Blue Mountain coffee crop.

**To read more visit:**

<http://www.bloomberg.com/news/articles/2015-07-10/water-water-everywhere-caribbean-adds-to-global-drought>