Dear CaribDA Members and Friends,

On behalf of the CaribDA Board, I would like to thank you all for your continued support of our organization. We have been actively increasing our membership and focusing on enhancing the benefits to our members. Remember that Membership Dues are due in June. There are a lot of new and exciting things happening in the Caribbean Desalination Association and you don’t want to miss out.

In addition, Board Elections are right around the corner! We encourage you in running for a Board Position, to be part of this tremendous organization that is committed to promote the appropriate use of desalination, desalination technology and water reuse in the Caribbean. Furthermore, if you know someone that would be an asset to the organization please email your nominations to CaribDA at adminassist@caribda.com by April 15 to be on the 2012 Nomination Slate.

There has been an increasing focus on operator training issues in the Caribbean and we are looking forward to our Pre-Conference Operator Workshop that will be held in Aruba in June at the CaribDA Biennial Conference which is held in conjunction with W.E.B. Aruba N.V. The Pre-Conference Workshop enables valuable learning, information sharing and networking amongst key operations staff from the region and beyond. We are pleased to be holding our conference jointly this year and celebrating W.E.B.’s 80th Anniversary. It will be an event you will not want to miss!

I would like to end this note by again thanking those members who have continued to support the organization and new members who have recently joined us. I encourage you to let us know your thoughts and needs from CaribDA in the future and welcome your active participation at forthcoming workshops and meetings.

Manuel Pereira
CaribDA Chairman
During the 2011 Holiday Season, The Virgin Islands Water and Power Authority (WAPA) experienced critical water shortages at the Randolph Harley Power Plant on St. Thomas. The shortages impacted over 5,500 residents, local businesses and several hundred thousand visiting tourists during the height of the holiday tourist season. The shortages were caused by challenging equipment failures WAPA faced while making much-needed repairs to their existing thermal desalination equipment.

With WAPA’s plant experiencing significant downtime and no water available in storage, immediate assistance was provided by the VI National Guard, who brought in a total of eight (8) seawater reverse osmosis units capable of producing 40,000 gallons per day each. While the temporary supply offered limited relief, it was not enough to replace the average daily demand of 1,800,000 gallons per day.

Having partnered with Seven Seas Water during an emergency situation on St. Croix in the past, and with an existing Build Own Operate (BOO) contract in place for water supply services on the island of St. Croix, WAPA was aware of Seven Seas Water’s capabilities to respond quickly by utilizing their containerized mobile desalination units. WAPA called on Seven Seas Water to provide an emergency supply of 2,000,000 gallons per day in the shortest timeframe possible.

A fast-track solution was paramount to mitigating the economic and social impacts caused by the water shortages that were occurring during the peak tourist season.

With an established public-private partnership, coordination of the quick delivery and installation was successfully achieved. Under a BOO arrangement, WAPA and Seven Seas partnered to avoid project delays by implementing a plan that ensured all the permitting and civil requirements were met on a fast track basis. Seven Seas Water shipped a total of eight SWRO units to St. Thomas in two phases. Eleven days from contract signing, three SWRO units arrived at the Randolph Harley Power Plant. The equipment was up and running, producing 750,000 gallons per day (GPD) a mere 29 days from contract signing. The second shipment of (3) three containers arrived 19 days from contract signing, meanwhile two additional Seven Seas Water 250,000 GPD containerized units were sent to St. Thomas from the existing Seven Seas Water facility on St. Croix.

All the units were installed, operating and providing a total capacity of 2,000,000 gallons per day a record setting 46 days from contract signing. The WAPA potable water holding tanks, which were virtually empty when the call was placed to SSW, were quickly filled with over 23 million gallons.

Seven Seas Water manages, operates and maintains the water facility, guaranteeing a reliable water source at a fixed cost per gallon over the entire term of the contract.
In 2010, Seven Seas Water bid on and won a very competitive international tender and subsequently signed a water sale agreement with WAPA to install a state-of-the-art SWRO system to replace WAPA’s aging thermal desalination equipment. In October 2011, while in the permitting process for the long-term project, the water emergency occurred on St. Thomas. Seven Seas Water was asked to immediately provide a short-term solution until the permanent plant could be constructed. Approval to proceed on the installation of the permanent SWRO facility was received in mid-February 2011. During the construction period the emergency containers will continue to operate. Once the permanent installation is producing water the containers will be removed and sent to another location. The new Seven Seas Water facility will produce all the drinking water for WAPA on St. Thomas and St. John for a water sale price that is less than half the cost of WAPA’s production with their thermal units.

**Job Board**

C.C.A. Limited - We are recruiting a Water Department Manager.  
(see [http://ccalimited.com/html/careers.html](http://ccalimited.com/html/careers.html) for more info)

**JOB TITLE:** Water Department Manager  
**POSITION GRADE:** 5  
**REPORTS TO:** Head of Services  
**PURPOSE OF POSITION:** To manage all aspects of the water department including technical, financial and staff management issues. To plan and oversee the effective maintenance and operation of all water production, water distribution, treatment and wastewater facilities.

**JOB LOCATION:** Located in Grand Bay, Canouan Island St Vincent & the Grenadines.  

To apply for this position, please email your CV to: [hr@ccalimited.com](mailto:hr@ccalimited.com)

**MEMBER SPOTLIGHT - WATER STANDARD**

By: Paul Choules, Water Standard

WATER STANDARD is a global water treatment company committed to delivering innovative water treatment and desalination solutions to the Oil & Gas and Water Industries, both onshore and offshore. With proprietary designs, patents and globally recognized management, WATER STANDARD supplies solutions for water-based enhanced oil recovery and produced water challenges, as well as for industrial and municipal applications.

WATER STANDARD, emerging as a leader in this field, delivers unique solutions for water-based enhanced oil recovery through its proprietary H2O Spectrum technology including the ability to provide customized water quality that enhances reservoir recovery at every step of the injection cycle; from low salinity, to low hardness, low sulfate flooding, or specialized qualities for CEOR.

WATER STANDARD’s proprietary water intake, concentrate discharge, and hybrid systems provide significant environmental and operational advantages over alternatives and an environmentally responsible and cost-effective solution to providing customized water on-demand. In GWI’s 2011 Produced Water Market Report, WATER STANDARD was identified as “the only treatment specialist to have locked on to the opportunities in desalination for enhanced oil recovery”. In addition, in Citigroup’s 2011 Water Sector Handbook, WATER STANDARD was listed “top” among “private companies in water that...have the potential to become impact players in the sector”.

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**MEMBER SPOTLIGHT - INTRODUCTION NALCO TO THE CARIBBEAN**

By: Anders Hallsby, NALCO Company

Introducing Nalco, an Ecolab Company

Nalco is a Global company with operations in 150 countries and more than 12,000 employees. In the Caribbean, Nalco provides products and services for industry, hospitality and municipal customers. Our focus has historically been on reducing water use and increasing the efficiency and reliability of the operation by providing expertise, innovative technology and the right chemicals for every application. Nalco has a local presence with sales engineers and technical experts based in Puerto Rico, Dominican Republic, Trinidad, and throughout Central and South America, servicing the entire Caribbean basin, backed up by research centers in the United States, Brazil, Europe and Asia. Nalco 3D TRASAR® technology is available for Cooling Systems, Boilers and Membranes, which allows our customers to improve the operational performance and reduce total cost of operation.

On December 1, 2011, Nalco became part of Ecolab. The merger brought together two highly complementary businesses – combining Nalco’s leading positions in water and energy services with Ecolab’s strengths in the food and beverage, healthcare and institutional markets. Together, Ecolab and Nalco are able to provide even more value to our customers in the Caribbean.
CaribDA 2012 Pre-Conference Workshop, Aruba
Understanding and Preventing Corrosion in Caribbean SWRO Plants

In conjunction with our Aruba Conference, CaribDA has the pleasure to announce that Dr. Glenn Byrne of Rolled Alloys will present a one day workshop discussing the different types of corrosion affecting SWRO plant high pressure piping, how to recognize the source and type of corrosion and how to prevent corrosion. Dr. Byrne has extensive experience in all phases of metallurgy and now leads a team that works proactively with specifiers and fabricators to refine and optimize purchase specifications and fabrication procedures and processes, welder training and qualification to optimize the sea water corrosion resistance and performance of corrosion resistant alloys in SWRO applications.

In order to provide a workshop that is of the greatest benefit to the membership, we ask that you submit in advance questions / concerns / topics of interest /pictures, etc. so that Dr. Byrne can be prepared to help you solve your problems. Please send your information to adminassist@caribda.com by May 1, 2012.

CaribDA 2012 Conference & Exposition, Aruba

in conjunction with the W.E.B. Aruba N.V.’s 80th Year Anniversary Celebration

OCTOBER 2012 - TBD
CaribDA Workshop, Bahamas

2012 Conference & Expo - Thank You Sponsors & Exhibitors!
Sponsorships & Exhibit Spaces are Still Available...Contact CaribDA Now to Register Your Company!
We need your input for the CaribDA News

- Member contributions are welcome. Please contact us by email at adminassist@caribda.com
- Take this opportunity to place your company or plant in the news
- Share your experiences with others
- If you are interested in joining the editorial staff, please contact us

Membership Update

By: Paul Choules, Water Standard

Since our last newsletter we have welcomed 9 new members!

- Ronald Colas
  Burns & McDonnell Engineering Company, Inc.
- George Schlutermann
  Burns & McDonnell Engineering Company, Inc.
- Alisha Cooley
  Fluid Equipment Development Company
- Mitch Sweat
  Southeast Industrial Sales
- Lucina Equihua
  Degremont
- Peter Waldron
  Toray Membrane USA, Inc.
- Tri Huynh
  Toray Membrane USA, Inc.
- Jacob White
  Burns & McDonnell Engineering Company, Inc.
- Felipe Pinto
  Dow Water Solutions

Board of Directors

Executive Officers

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<th>COMPANY</th>
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<td>Manuel Pereira - Pres</td>
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Board of Directors

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<tr>
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<td><a href="mailto:john.thompson@desalco.com">john.thompson@desalco.com</a></td>
</tr>
</tbody>
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Board Elections

Deadline to Nominate is April 15th!

Please email your Nominations today! If you are interested in running for a Board Position or know someone that would be an asset to the organization please email your nominations to: adminassist@caribda.com

Check us out on the web!

www.caribda.com