

March 2014

The Droplet

Florida Water Environment Association **Integrated Water Resources Committee**

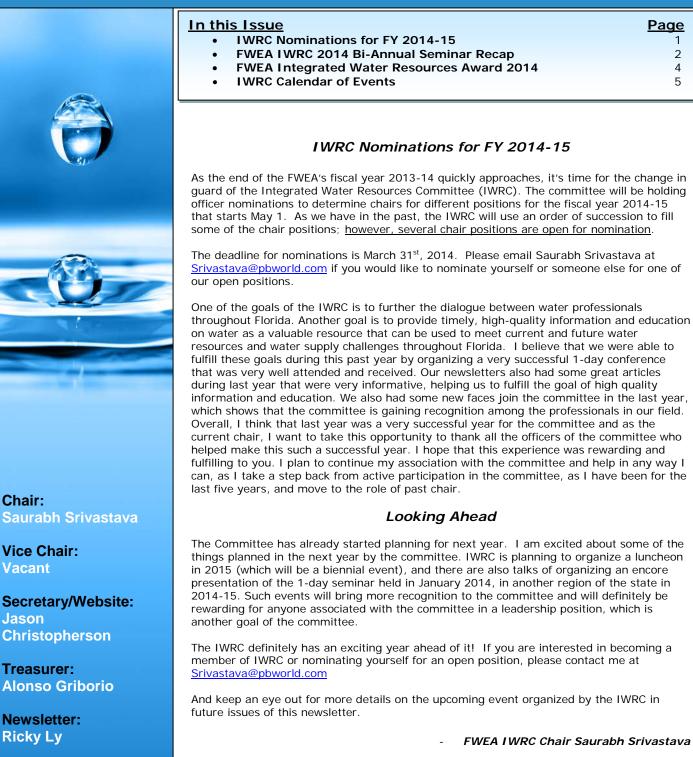
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FWEA IWRC Chair Saurabh Srivastava

FWEA Integrated Water Resources 2014 Seminar "Sustainable Solutions Utilities are Implementing for Integrated Water Resources"

FWEA Integrated Water Resources Committee (IWRC) held our biennial one-day conference on Friday, January 30, 2014 at the Second Harvest Food Bank in Orlando, Florida. The focus of this conference was "Sustainable Solutions Utilities are Implementing for Integrated Water Resources". The conference focused on some of the current issues related to the water resources profession such as utility management, nutrient management, stormwater controls, state of Florida's regulations and much more. The conference was a great success and was very well attended. Attendees earned 5 PDH credits for the conference. Thanks to those of you who were able to participate in the conference either as speakers or attendees.

Presentations included Nutrient Numeric Criteria in Florida by Thomas Frick, Director -Division of Environmental Assessment and Restoration, Florida Department of Environmental Protection; City of Apopka's Reclaimed Water Utility History presented by Robert Elmquist, City of Apopka and C. Scott Lee, AECOM; An Integrated Approach to Reuse and Nutrient Reduction at Cranes Roost Treatment Facility presented by Chris Radar, PE, Director of Engineering - City of Altamonte Springs Public Works; Funding Advanced Wastewater Treatment While Reducing O&M Costs by Flip Mellinger, Director, Marion County Utilities; Can Aquifer Storage Recovery play a role in Florida's stormwater management? by Mark McNeal, Chief Executive Officer, ASRus, LLC; Lessons Learned from Three Decades of Integrated Water Resource Management by Kirk Martin, CDM Smith; Analytical Master Planner: A new tool for bringing cloud and crowd sourcing to traditional water utility master planning by Stephen Bourne, Atkins; Integrated Stormwater Management to Support Climate Change Resiliency by Mike Schmidt, CDM Smith; Water Conserv II – Reclaimed Water as Part of a Sustainable Water Resources Plan by David MacIntyre, Parsons Brinkerhoff; and Nutrient Criteria Implementation by David Childs, Hopping Green & Sams.

FWEA Integrated Water Resources 2014 Seminar Photos "Sustainable Solutions Utilities are Implementing for Integrated Water Resources" January 30, 2014 at the Second Harvest Food Bank



Saurabh Srivastava; Leslie Turner; Leslie Gowdish and John Herbert

Officer Contact Information

Chair: Saurabh Srivastava srivastava@pbworld.com

Vice Chair: Vacant

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Treasurer: Alonso Griborio agriborio@hazenandsawyer.com

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Scott Lee and Bob Elmquist



Mark McNeal, presenting on Aquifer Storage Recovery



Registration Desk at the atrium of the Second Harvest Food Bank



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FWEA Integrated Water Resources Award 2014



Tracy Mercer, MBA, Public Utilities Director, City of Clearwater

Tracy Mercer began working for the City of Clearwater eight years ago as the Public Utilities Director. Her 30-year career entails management of operations, maintenance and capital improvement projects of several or all departments within a respective municipality or county. Her diverse duties and experiences have helped create for her an open mind that quickly analyses situations, personalities and the larger scheme of challenges. As director, she carries the ultimate responsibility of three enterprise utilities encompassing water supply, treatment and distribution; wastewater collection, advanced wastewater treatment and reclaimed water, for 108,000 residents and nearly as many visitors annually. Tracy manages an annual operating budget of \$68M, a five-year capital improvement program of \$172M, and employs a department staff of 171 full time positions.

CITY OF CLEARWATER - Ms. Mercer's holistic approach of water management exemplifies the term 'integrated water resources'. Clearwater, a built-out and densely-populated coastal community has limited options for water resources, being surrounded on all sides and below by salt water. Restrictions on conventional groundwater sources and emerging constraints on water resources management, such as increasing limits on conventional supplies, NNC, TMDLs, climate change, and response to sea level rise in Florida must be incorporated into new disciplines of thought in the business of managing water, especially when dedicated to an earnest walk to self-sufficiency in meeting demand. Tracy has presented Clearwater's ever-morphing Integrated Water Management Strategy, referred to as "The Future of Our Water" to many audiences. The strategy began with the city's reclaimed water plan as the "new" technology to reach a zero discharge, and has since come to include the following projects that all began construction in 2013: expansion of an RO treatment plant; building an additional RO brackish water treatment plant; the introduction of groundwater replenishment as a viable way to recharge the aquifer (pilot); and a septic-to-sewer conversion project to protect the integrity of surface waters. Another near future technology for Clearwater is automated meter reading (2016).

REGIONAL COLLABORATION - Tracy Mercer's brainchild, called MoM, is a dynamic group of local, municipal utility professionals in north Pinellas County, who share ideas on water utility related technologies, regulations, training, policies and experiences. MoM stands for "Meeting of the Minds", and the concept has just been submitted for several industry and governmental awards due to the collective, positive outcomes of the various member utilities from monthly group discussions and continuous sharing.

RESEARCH AND DEVELOPMENT – Clearwater is researching or working on projects in the following technologies/areas: Brackish Reverse Osmosis, Groundwater Replenishment, Deep Well Injection, Septic to Sewer Conversion, Biosolids Waste-to-Energy, Regional Biosolids Facility, TMDLs – NNC, Growing Future Operators in Water & Wastewater Treatment Industries.

PUBLIC EDUCATION PRESENTATIONS – Ms. Mercer has given the following presentations to many audiences and at conferences: Integrated Water Management Strategy: The Future of Our Water; Clearwater Public Utilities; Stormwater Management; Careers in Public Works; Public Works Day Open House & Inaugural Top Ops Competition; Reclaimed Water Projects; Septic to Sewer Conversion Project; and Generations at Work.

FEATURES - Clearwater has been showcased twice as an example by the USEPA: <u>Case Study</u>: Clearwater, FL Abates Sanitary Sewer Overflows Using the EPA Region 4 Management, Operations and Maintenance Approach; and <u>Case Study</u>: Evolution of the City of Clearwater's Integrated Water Management Strategy, which was picked up by the USEPA and included in their Guidelines for Water Reuse (Mercer et al, 2012).

IWRC Calendar of Events		
Date	Description	
March 31	Nominations due for FWEA IWRC Board	
April 8	Monthly IWRC Teleconference	
May 6	Monthly IWRC Teleconference	
June 3	Monthly IWRC Teleconference	

IWRC Goals and Focus

The goals of the IWRC are:

- To further the dialogue between water professionals throughout Florida to meet our growing needs in all areas of water resources.
- To provide timely, high-quality information and education on water as a valuable resource that can be used to meet current and future water resources and water supply challenges throughout Florida.
- To provide rewarding leadership opportunities to water professionals at all levels of experience.

The focus of the IWRC encompasses the following areas of water resources practice:

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- water quality
- watershed and stormwater management
- water supply
- water conservation and reuse
- ecological and hydrologic restoration
- groundwater recharge
- hydrologic and hydraulic modeling
- funding and grant opportunities
- regulations and policies

Engineering

Planning Construction

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Our work has a lasting ripple effect