

April 2014

## 2014 Water Symposium Concludes

By Carilyne Vance



The University of the District of Columbia for the second consecutive year hosted the National Capital Region Water Resources Symposium, “*Water Resources and Water Infrastructures: Emerging Problems and Solutions*,” bringing together experts from governmental agencies, academia, the private sector, and non-profits to discuss sustainable management of water resources and infrastructure in the region, as well as nationally and internationally. The program included panelists, breakout sessions poster displays and a keynote by George Hawkins, general manager, District of Columbia Water and Sewer Authority (DC Water).

DC Water moves over 300 million gallons of enriched water around the District and treats water for Montgomery and Prince George’s Counties in Maryland and Fairfax and Loudon Counties in Virginia. Future challenges exist for this under-recognized and life sustaining entity. DC Water maintains and monitors over 1300 miles of pipes, four pumping stations, five reservoirs, five in-ground holding tanks and also maintains over 1800 sewer lines. Faced with a pipe system that is over 100 years old, DC water must not only maintain but upgrade this system while keeping operating costs down.

The Blue Plains Advanced Wastewater Treatment Plant is located in Southwest DC and provides wastewater treatment for over 325 million gallons a day, while reducing the levels of phosphorus and nitrogen flowing into the Chesapeake Bay. This reduction of nutrients has slowed the growth of algae in the water system, thereby increasing indigenous fish and wildlife populations.

The innovation does not stop there. DC Water has partnered with the local academic community to recruit Ph.D. candidates to work on biomass power which will turn digester byproduct into methane which produces steam and then into power for use in DC Water facilities. This would cut the municipality’s Carbon footprint by one-third and reduce its truck traffic by one-half. DC Water is also using these academic teams to put a plan in place to sell the Class A bio-solids from Blue Plains. This cash-flow project would have a 13 year payback and would be a major revenue earner for the municipality, ultimately leading to decreased consumer rates.

“We were pleased to host another successful



symposium in partnership with the American Water Resources Association. Now more than ever, people are making the connection between water and its impact on sustaining our quality of life, from things taking for granted such as washing the dishes, to new development in DC, an increasingly progressive urban center,” said Dr. Tolessa Deksissa, Director of UDC’s Water Resources Research Institute and Professional Science Master’s Water Resource Management Program. “Therefore, water challenges and opportunities must be addressed in a sustainable manner.”

View [photos](#) of the event on our Facebook page.

*Water Resources and Water Infrastructures: Emerging Problems and Solutions* was hosted by the AWRA-National Capital Region Section and the Water Resources Research Institute (WRI), part of the Center for Sustainable Development of CAUSES. Funded by USGS, the Institute provides seed grants to innovative water-related projects that identify problems of and contribute solutions to DC water issues. For more information on CAUSES, visit [www.udc.edu/causes](http://www.udc.edu/causes). For questions, please contact [tdeksissa@udc.edu](mailto:tdeksissa@udc.edu) or at (202) 274-5273.



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#### **About WRI**

Established in 1973, the mission of Water Resources Research Institute (WRI) is to provide the District of Columbia with interdisciplinary research support to identify DC water resources problems and contribute to their solution. Areas of focus include drinking water source protection, stormwater management and planning, water safety, and watershed stewardship. The Institute coordinates, facilitates, and disseminates water resources-related research projects through seed grants to faculty members from the consortium of universities in the greater Metropolitan Washington area. The Institute supports collaborative training and research that engages not only faculty members and students, but also a broad array of stakeholders to address regional water issues in a holistic way.

#### **About the University of the District of Columbia**

An HBCU, urban land-grant, and the only public university in the nation's capital, The University of the District of Columbia is committed to a broad mission of education, research and community service. Established by abolitionist Myrtilla Miner in 1851, the University of DC offers Associate's, Bachelor's and Master's Degrees and a host of workplace development services designed to create opportunities for student success. The University is comprised of the [College of Agriculture, Urban Sustainability and Environmental Sciences](#), [College of Arts and Sciences](#), [School of Business and Public Administration](#), [School of Engineering and Applied Sciences](#), a [Community College](#) and the [David A. Clarke School of Law](#). To learn more, visit [www.udc.edu](http://www.udc.edu). The University of the District of Columbia is an Equal Opportunity/ Affirmative Action institution. Minorities, women, veterans and persons with disabilities are encouraged to apply. For a full version of the University's EO Policy Statement, please visit: [http://www.udc.edu/equal\\_opportunity](http://www.udc.edu/equal_opportunity). The University of the District of Columbia is accredited by the Middle States Commission on Higher Education - 3624 Market Street - Philadelphia, PA 19104 - 267.284.5000.