



5th Annual Water Symposium

The Future of Water in a Green World *Developing Green Infrastructure*

June 18, 2015

McKimmon Center, Raleigh, NC

8:00 – 8:30 a.m. Registration/Check-in

8:30 a.m. Welcome Cyndy Allison, NCGIC President

8:45 a.m. Opening Keynote Address: Water resilience and flexibility through green

Trevor Clements, Director, Water Resources, TetraTech, Research Triangle Park, North Carolina

Flexible resilience is the ideal for managing water in the future, whether it's juggling water resources and creating resilient supply during times of drought or mitigating flooding to protect property and the environment in torrential downpours. Increasingly policy makers, regulators and utilities are beginning to see water as a single resource and green infrastructure as an asset. Trevor will inspire the audience to think of water singularly as a resource no matter what the management issue at hand. He'll touch on new realizations of integrated water management, of how to create community and common ground across disciplines and utilities, and how green infrastructure is more than just an approach for stormwater.

9:40-10:35 a.m. Creatively incenting and financing green infrastructure implementation

Seth Brown, PE, Senior Technical Advisor, Water Environment Federation, Alexandria and Principal/Founder, Storm & Stream Solutions, LLC

Treating and managing stormwater through decentralized, vegetation-based green infrastructure creates a new paradigm for calculating the costs and benefits associated with upfront, capital and ongoing/maintenance. The definition of benefit now goes beyond strictly financial to include social and environmental co-benefits as well economic development for urban areas. Green infrastructure retrofits on public land and rights-of-way as well as private property will be needed to handle the volumes of stormwater required. Seth will discuss how some communities have established creative non-traditional funding and financing strategies to implement green infrastructure.

10:35-10:50 a.m. Break

10:50-11:45 a.m. Green infrastructure is creating opportunity in North Carolina

Bill Holman, North Carolina State Director, The Conservation Fund, Chapel Hill, NC

Cities across the state of North Carolina are using green infrastructure in varying degrees by developing innovative programs to protect and restore water quality and to secure long-term sustainable water supply. Green infrastructure going under the name of Low Impact Development is sweeping into just about all new development. Bill will provide an update on where and how green infrastructure is being successfully implemented on the ground in North Carolina and how we can support additional efforts. The great news is that green infrastructure is creating jobs and business opportunities right here, right now.

11:45-12:20 p.m. Lunch and visit with sponsors

12:20-12:30 p.m. The Blue Green Innovator of the Year Award

12:30-1:10 p.m. Update from the Dean, NC State College of Agriculture and Life Sciences

Dr. Rich Linton, Dean, NC State University College of Agriculture & Life Sciences, Raleigh, NC

Dean Linton is re-shaping the College of Ag & Life Sciences around the concept of partnerships with industry, state and municipal leaders, farmers and other stakeholders across the state to address the issues we face today. Multidisciplinary innovations will drive plant sciences in the future. Rich will talk about how the College of Ag and Life Sciences is bringing students, faculty/staff and industry together to grow North Carolina's agricultural economy and benefit the public.

1:10-2:05 p.m. Green infrastructure performance on the ground: Real data from the real world

Emily McCoy, PLA, ASLA, Director of Integrative Research, Andropogon Associates, Philadelphia, Pennsylvania

How well does green infrastructure function on the ground? Are the design and engineering calculations reflective of reality? How do green stormwater features perform over time? How do soil, vegetation and human behavior influence this performance? These are just a few of the questions Emily McCoy and her colleagues are tackling in their mission to understand the true effectiveness of green infrastructure practices. Emily will share insights based on three years of data gathered at Shoemaker Green at the University of Pennsylvania, Philadelphia. In a nutshell: Shoemaker Green is functioning well beyond its design goals. She'll share insights into their findings on soils, amendments, plants and other general observations.

2:05-3:00 p.m. Green infrastructure momentum in Raleigh

Kevin Boyer, PE, Stormwater Engineer, Stormwater Management Division, the City of Raleigh, Raleigh, NC

Ranked as one of the nation's best cities for business, careers, and quality living, Raleigh also is among the fastest-growing. The City is facing the challenges of both encouraging economic development and protecting the environment. Raleigh recently adopted an action plan for advancing green infrastructure and low impact development for managing stormwater in ways to better protect water quality and stream health. Kevin will discuss how the City is fostering collaboration and communication among public and private stakeholders and implementing a green infrastructure agenda that's beneficial and economically viable.

3:00-3:15 p.m. Break

3:15-4:10 p.m. Integrating stormwater & water conservation into urban landscapes & soils

Dr. Barrett L. Kays, President, Landis, PLLC, Raleigh, NC

Dr. Kays is both a landscape architect and soil scientist who takes an innovative holistic approach to the fundamentals of rebuilding our cities using green solutions to reduce stormwater runoff, improve water quality, and reduce landscape irrigation. Kays uses the soils in our cities as a reservoir to reduce or eliminate runoff during wet periods and to store water for dry periods. The concept envisions the landscapes of our cities as the key infrastructure for water management and new green urbanism. He will show examples of his projects in New York, Philadelphia, Washington, Greensboro, and San Francisco metro areas.

4:10-4:45 p.m. Wrap up

Introducers and Graphic Reporters each share key take aways from the day

Graphic Reporters: Sarah Bruce and Mike Schlegel, Triangle J Council of Government

4:45 p.m. Symposium concludes