# Green Infrastructure and Water Management in Growing Metropolitan Areas

14 – 16 January 2014

Patel College of Global Sustainability at the University of South Florida Tampa, Florida, U.S. A.

#### **Call for Abstracts**

Green infrastructure can be an effective and efficient means of managing stormwater flows and pollutant loading. Beyond these core functions, green infrastructure offers multiple ecosystem services and health and well-being benefits— offering a significant advantage over conventional gray infrastructure. Despite these noted benefits, municipal leaders face significant challenges when attempting to implement green infrastructure strategies in new and existing development.

Green Infrastructure in Growing Metropolitan Areas will address the challenges and opportunities surrounding green infrastructure. The event will bring together scientists, engineers, urban planners, and urban natural resource managers to highlight the latest developments in the science behind of green infrastructure, illustrate new and innovative policy, demonstrate innovative engineering techniques, and outline emerging urban design models useful in protecting the water resources within the world's growing metropolitan regions.

Practitioners and researchers from across the full range of engineering, urban and landscape design, natural resource management and social science disciplines are invited to submit abstracts for oral and poster presentations. The abstracts should cover one out of the four conference topics:

- 1. **Defining the Benefits of Green Infrastructure:** Theme will focus on scientific foundation of the use of green infrastructure in managing urban water, including surface water and ground water recharge, as well as identify the gaps in our present knowledge.
- **2. Barriers to Green Infrastructure Implementation:** Theme will focus on scientific inquiry and cost-benefit analysis that address the perception that performance is unknown, concerns about regulatory agency acceptance of green infrastructure, maintenance requirements and costs, conflicting legal mandates, and the lack of staff expertise.
- **3. Funding Green Infrastructure Design, Implementation and Maintenance:** Theme will focus on investigations into the true economic costs and benefits of transforming a municipal gray infrastructure system into a mixed gray-green system and the implementation costs, as well as long-term maintenance costs of green infrastructure.

**4. Implementation Strategies for Governments, Communities and Developers:** Theme will address the organization and implementation of public policy, including land planning regulation and green infrastructure site development procedures.

Submitted abstracts will be reviewed by the Green Infrastructure in Growing Metropolitan Areas scientific committee. The authors of the accepted abstract will be notified by October 15, 2013. The authors must confirm their attendance by registering for the conference by December 15, 2013. The accepted and confirmed abstracts will be published in the conference proceedings of the "Green Infrastructure and Water Management in Growing Metropolitan Regions Conference". After the conference, selected abstracts will be invited to contribute a full-paper to a special edition of a journal.

Conference Organizers: <u>University of South Florida's Patel College of Global Sustainability</u> and the <u>University of Florida IFAS</u> with additional financial support from the <u>U.S. Forest Service.</u>

**Abstract Submittal:** Download abstract template and submit abstract <u>Here</u> or go to <a href="http://usfweb3.usf.edu/PGS/abstractform.aspx">http://usfweb3.usf.edu/PGS/abstractform.aspx</a>

# **Important Dates:**

September 15, 2013 Deadline to Submit Abstracts

October 15, 2013 Notification of Abstract Acceptance

December 15, 2013 Deadline for Early Registration

January 6, 2014 Deadline for Registration

**Registration & Logistics:** Click <a href="http://patel.usf.edu/patel-center/2014-green-infrastructure-conference/">http://patel.usf.edu/patel-center/2014-green-infrastructure-conference/</a> (contact skoures@usf.edu if you have trouble viewing website)

**Contact:** For questions and conference details please contact Bessie Skoures at <a href="mailto:skoures@usf.edu">skoures@usf.edu</a>









# Green Infrastructure and Water Management in Growing Metropolitan Regions

January 14-16, 2014

Patel College of Global Sustainability at the University of South Florida

Tampa, Florida USA

#### **Conference Themes**

## **Defining the Benefits of Green Infrastructure**

The scientific investigation of the impacts green infrastructure on water movement and quality is broad and growing. Beyond these two related functions, green infrastructure research has identified numerous secondary environmental, economic, and social benefits not offered by conventional stormwater management approaches. The successful implementation of green infrastructure will require a clear science-based understanding of the significance of urban stormwater, and how we can conserve and mimic natural systems to manage urban runoff. This theme will focus on scientific foundation of the use of green infrastructure in managing urban water, including surface water and ground water recharge, as well as identify the gaps in our present knowledge. Example topics include:

- stormwater management and green infrastructure case studies
- the costs and benefits of specific green infrastructure projects
- results of green infrastructure research and evaluation
- social benefits of green infrastructure
- decision support tools for locating or designing green infrastructure
- environmental impacts of conventional and green infrastructure projects

#### **Barriers to Green Infrastructure Implementation**

The management of storm water has relied largely on the construction and maintenance of grey infrastructure for hundreds of years. The reliance on grey infrastructure has dominated the existing regulatory environment, water management technical design standards, training and certification requirements of public and private experts, and the perceptions and attitudes of the public. This theme will focus on scientific inquiry and cost-benefit analysis that address the perception that performance is unknown, concerns about regulatory agency acceptance of green infrastructure, maintenance requirements and costs, conflicting legal mandates, and the lack of staff expertise. Example topics include:

- local, state or national regulations affecting green infrastructure projects
- public/decision maker attitudes toward using green infrastructure for water management
- technical standards and green infrastructure design approaches
- limitations of staff and consultant knowledge and experience
- overcoming the barriers to implementing green infrastructure
- true limits of current green infrastructure designs

## **Funding Green Infrastructure Design, Implementation and Maintenance**

Lack of funding is consistently cited as a barrier to the implementation of green infrastructure. The perception that green infrastructure practices are untested emerging technologies fosters uncertainty about short-term design and implementation costs, as well as long-term maintenance costs. This theme will focus on investigations into the true economic costs and benefits of transforming a municipal gray infrastructure system into a mixed gray-green system. Example topics include:

- funding sources for green infrastructure projects
- leveraging the social, environmental and economic benefits within the funding arena
- demonstrating the cost-benefit of a project to government staff and politicians
- public-private partnerships for implementing and maintaining green infrastructure
- strategies for transitioning from gray to green infrastructure

#### Implementation Strategies for Governments, Communities and Developers

Green infrastructure represents a holistic method of urban water management that integrates watershed wide land planning and site-specific design elements that promote a municipality's natural ability to absorb stormwater where it falls. This theme will address the organization and implementation of public policy, including land planning regulation and green infrastructure site development procedures. Example topics include:

- promote implementation of green infrastructure to address urban stormwater
- re-writing local, state and national water management regulations
- fostering public support and/or overcoming public and political resistance
- choosing the most appropriate design or location for green infrastructure
- adapting generic solutions to specific local conditions