

## ACES Workshop Summary

### **I. Title:**

**Land Use Codes and Ecological Services: Actively engaging the opportunities and constraints of restoring ecological function through responsible site design (*limited to 30 ppl*)**

### **Description:**

The primary goal of the workshop is to create a dynamic learning experience that examines the role of ecological services in the built environment. The workshop will focus on integrating ecologically sound water management approaches into site design. After the workshop, attendees will be familiar with the following concepts and technical issues:

- Knowledge of the stormwater treatment chain
- Knowledge of the impact of land use codes on ecological services
- Application of simple stormwater calculations for ecological site design
- Application of a design process in mitigating the effects of stormwater on-site
- Knowledge of the relationship between land use codes and design for ecological services

### **Agenda:**

Workshop Agenda consists of two parts:

#### 1. Site Design retrofit (charrette, hands-on activity) – **1 hr**

Divide participants into groups (5-7 people) with group leader(s) (1-2 people).

All groups conduct a site visit (typical commercial site, in walking proximity to the conference location; site TBD).

Groups inventory existing site conditions and analyze the opportunities/constraints in relation to water in the landscape.

Groups return to workshop room.

#### 2. Introductory presentations covering - **1 hr**

Topics: stormwater treatment chain, land use codes, ecological site design

#### 3. Groups develop conceptual plans that integrate ecologically based water management approaches covered in the introductory presentations into the site design retrofit. - **3 hrs**

#### 4. Concluding session - **1 hr**

Compare site design retrofits with land use codes (codes to range from progressive to minimal).

Use site design retrofits to reveal opportunities/constraints for implementing ecological water management in the built environment.

Discuss implications and ramifications of land use codes on ecological services in the built environment.

## **II. Discussion:**

Funded research through the partnership between the Northern Gulf Institute (NGI) and the National Oceanographic and Atmospheric Administration (NOAA) investigating the relationship between land use ordinances and Non Governmental Organizations (NGOs) influence on water quality provides the underpinning for this proposed workshop.

With the implications of a changing climate and a growing population, the landscape and its ecological and social processes require analysis and understanding in order to promote and ensure their stability and resilience. Human activity has an impact on the environment. Because the human population is increasing and because trends show much of this increase occurring in coastal areas, it is important to understand the affects of growth on water quality.

The division of political boundaries range from federal, state, county down to municipal governances, and thus requires a holistic approach for understanding watershed regulations and codes. Community resiliency can only occur through wise management and public responsibility in regards to regional watersheds and water quality. Enacting a code or ordinance and its subsequent enforcement is important, but may be difficult to due to budget, equipment, and well-trained personnel and may not adequately address ecological services.

The workshop could significantly benefit the communities where workshop attendees provide civil, professional, or volunteer services by increasing their understanding of integrating ecological services with site design. In addition, the workshop will benefit the attendees by enhancing their awareness of the influence and impact regulatory codes, ordinances and NGO efforts have on watersheds by improving their understanding of the relationship between regulatory action and water quality.

### **Target Audience:**

- Policy makers
- Developers
- NGOs
- Urban and regional planners
- Design professionals

## **III. Organizer's Qualifications**

*Jason B. Walker*, ASLA is an Assistant Professor in the Department of Landscape Architecture at Mississippi State University. Professor Walker's research focuses on sustainability in the built environment and pedagogy – teaching and learning in the design studio. Following Hurricane Katrina, Professor Walker organized and coordinated "Design Week: After the Storm", a workshop (charrette) held at Mississippi State University in January 2006. Approximately 150 Mississippi State University students and 20 faculty members, as well as other professionals representing multiple disciplines, participated to research, analyze, and propose solutions for the rebuilding effort along the Katrina affected Mississippi Gulf Coast. The interdisciplinary student, faculty, and professional participants included representatives from architecture, civil engineering, business, the natural sciences, landscape contracting and management, and landscape architecture.

Design Week received an Award of Excellence in Community Service, the highest recognition given by the Mississippi Chapter of the American Society of Landscape Architects (MSASLA). In addition to creating an interdisciplinary teaching event, Design Week offered the opportunity for scholarship by using a framework for teaching sustainability and evaluating the charrette's merit as an affective pedagogical approach for fostering sustainability in design education. The findings led to refereed conference presentations and a publication in the *International Journal of Sustainability in Higher Education*, which is the only academic journal that examines sustainability as it applies specifically to higher education institutions.

*Timothy Schauwecker*, Ph.D. has a joint appointment with the Mississippi Agriculture & Forestry Experiment Station and the Department of Landscape Architecture at Mississippi State University. He teaches the Watershed Management courses in the landscape architecture program. His research interests include Best Management Practice Design and Implementation, Watershed Management, Habitat Restoration, and Conservation Planning. As a researcher for the Mississippi Agriculture and Forestry Experiment Station (MAFES), he is administering research into the effectiveness of vegetated swales.

Professors Walker and Schauwecker are currently conducting funded research through NOAA investigation the relationship between land use codes and NGOs on water quality in the Northern Gulf of Mexico. A two-day workshop (similar to this proposal) will be conducted at Weeks Bay, AL in November 17-18, 2008.

#### **IV. Tentatively Confirmed / Proposed Speakers / Charrette Leaders**

Wayne Wilkerson, Department of Landscape Architecture, MSU  
Michael Seymour, Department of Landscape Architecture, MSU  
Chris Campany, Department of Landscape Architecture, MSU  
Charles Taze Fulford III, Department of Landscape Architecture, MSU  
Timothy Schauwecker, Mississippi Agriculture & Forestry Experiment Station, MSU  
Austin Moore, MLA Candidate, Department of Landscape Architecture, MSU  
Jason B. Walker, Department of Landscape Architecture, MSU

#### **V. Workshop organizers**

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