MOVING FLORIDA FORWARD ON LOW IMPACT DEVELOPMENT + GREEN STORMWATER INFRASTRUCTURE

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Water, whether in underground aquifers, freshwater springs, lakes and rivers, or estuaries and oceans, is both necessary for our lives and is the lifeblood of Florida's economy. Urban development, increasing demand for limited fresh water, and nutrient loading from residential and agricultural landscapes are driving hydrologic changes that threaten this critical natural resource. We must shift our mindset from "development as usual" to development that works in harmony with our land, soils, and water by encouraging natural drainage, conserving water, and reducing pollutants at their source. Low impact development and green stormwater infrastructure (LID+GSI) mimic natural systems and processes to store, filter and absorb stormwater. They employ engineered designs that help restore our water supply, improve water quality, and reduce flood risks.

The Florida Department of Environmental Protection is funding a project with UF's Program for Resource Efficient Communities and The Nature Conservancy to develop materials that will assist local governments, engineers and other professionals to design LID+GSI urban water management and to break down implementation barriers by educating communities about the economic and social benefits of practices that protect our water resources. The work began with a needs assessment of planners, engineers, and other professionals to identify problems preventing widespread adoption of LID+GSI in Florida and to guide the development of materials so that they are practical and actionable. Products to be generated include:

- A design guidance manual for LID+GSI, focusing on measures appropriate for sensitive groundwater areas
- A photo gallery of Florida's existing LID+GSI sites, highlighting aesthetically pleasing community assets with long-term stormwater benefits
- A local ordinance audit tool municipal governments can use to identify LID+GSI barriers in their local codes.

Session attendees will learn about the many practical benefits this project offers and how it fits with other stormwater initiatives in Florida.

PRESENTER BIO: Dr. Bean is an assistant professor and extension specialist in <u>urban water resources engineering</u>. His work focuses on the design, evaluation, and management of urban landscapes for water resource sustainability, water quantity and quality issues in urban stormwater, and promoting sustainable development to reduce nonpoint source pollution.