Water Institute Symposium: Viewpoint from a Graduate Student
By: Courtney Reijo, Water Institute Graduate Fellow, School of Forest Resources and Conservation
Date: February 23rd, 2012

The 2012 Water Institute Symposium was a great success as it brought together a very diverse group of people—including scientists, managers, academia, lawyers, students, engineers, industry people, policy-makers, and more—to share perspectives on the main theme, titled "Nutrient Dynamics, Policy and Management in Watersheds." Hundreds of people joined together to discuss the complex issues of nutrients in water systems. Research, technologies, governance, and management techniques—aimed towards enhanced understanding of nutrient dynamics and integrated solutions in water management—were deliberated over the course of the conference.

One main underlying theme in all discussions was that nutrient management issues are "wicked" problems that require interdisciplinary, multi-agency, forward-thinking solutions. Each topic area of discourse—including stormwater design systems, groundwater supply, utility infrastructure, sustainable land development, spring ecosystem dynamics, agricultural best management practices, current water regulations—highlighted the complexity of managing both water quality and quantity in order to improve water today for a sustainable tomorrow.

Increased sources of nutrient enrichment have greatly altered entire ecosystems, however, identifying problems and *wanting* to fix them has been the first step towards recovery and restoration. Beyond this viewpoint, symposium attendees reassured that we, as citizens aware of the large nutrient issues around us, have the ability to look at problems, identify them, and work together to try to find solutions. This requires multi-perspective approaches that, similar to the several main topics/themes of the symposium, address quality of life, human infrastructure, social thinking, market financing, public participation, efficient technology, and—often our own "limiting nutrient"—funding.

Although we have learned to more effectively manage our land and water in the face of increased nutrient enrichment, further public education and financial support is needed to make a difference at large scales. Complex, large-scale water quality problems can often be met with doubtful perspectives. Countering this, the closing symposium panel emphasized the need to look at the successes that have occurred at local scales and to keep a positive outlook on the future of our water. This closing message was one of many noted throughout the diverse dialogues that took place at the symposium. Overall, this event was one that in itself supported the messages mentioned as it brought different facets of the public together to talk about current water issues, increase awareness, and determine what steps are needed in order to ensure sustainable water resources in the future.

Water Institute Symposium: Viewpoint from a Graduate Student
By: Grant Weinkam, Water Institute Graduate Fellow, Environmental Engineering Sciences
Date: February 23rd, 2012

The 2012 Water Institute Symposium gathered presenters from around the country to focus on issues surrounding "Nutrient Dynamics, Policy and Management in Watersheds". This was an especially relevant topic in light of the current state of numeric nutrient criteria (NNC) in Florida, and Governor Rick Scott's recent signing of Florida DEP's NNC standards on Thursday February 16th.
The speakers, from industry, government, and academic backgrounds, covered a wide variety of aspects associated with nutrient management and the challenges of today and tomorrow.
Representatives from agricultural groups addressed challenges of "How to meet the needs of a growing population without negatively impacting water quality?", and also the necessity for the public and policy

makers to understand the impact that legacy loads will have on the environment for decades and even centuries to come.

Urban and utility spokespeople covered strategies implementing reclaimed water usage, groundwater recharge, upgrading waste water facilities, and the need for designing new developments in light of upcoming water quality and quantity issues throughout the state.

Due to the fact that a reliable supply of clean water is such a universal need the Water Institute Symposium was successful in bringing together constituents from all factions of society to discuss methods to reduce nutrient loads and restore impacted systems. The final plenary session, manned by policy and scientific experts in the field, took all these factors into consideration and addressed some of the most important issues in successful nutrient management and water quality; emphasizing the importance of educating the public on the science behind current situations and having realistic expectations for time frames and costs associated with system transition into their future state.