



**2014  
2015**

# College of Engineering Speaker Series

**JAN  
22**

**Karen Kabbes, Kabbes Engineering, Inc.**

President

Current President of ASCE Environmental & Water Resources Institute

## **“Water Resources: Sustaining Quality and Quantity or What Will Be the State of Our Water Resources When Today’s Students Rule the World?”**

The U.S. Global Change Research Program’s Third National Climate Assessment Report indicates that in the future United States, generally wet places will be wetter and the dry places will be drier. What does that mean to our country and our world in the future? As a nation, should we be worried about California, a state struggling with water supply concerns that then exports water across the country supplying almost half of our nation’s fruits, nuts and vegetables? What about the impact of continued development and redevelopment of our land on water quality and our natural world? We have plenty of data showing the negative impact of impervious surfaces and stormwater runoff on fish and wildlife. How do we balance a variety of issues with long and short term public needs and build sustainable communities that can withstand and quickly return from both manmade and natural disasters? A number of engineering approaches are being used or considered to address future water quantity and quality needs. Additionally, infrastructure rating systems, such as the Envision™ infrastructure sustainability rating system, offers a framework to assess and compare some of these strategies. The most promising approaches are often born out of a nexus of various disciplines. Forcing engineers to broaden their horizons and continue to work collaboratively with others including sociologists, economist, biologists and others has provided new strategies to address and effectively deliver viable approaches to water resources concerns. Finding new ways and new approaches to successfully address these challenges will be the ongoing work of tomorrow’s water resources professionals.

*Karen C. Kabbes is president of Kabbes Engineering, Inc. (KEI) a water resources and environmental engineering firm located in Barrington, IL, specializing in sustainable watershed and waterway restoration, permitting and modeling. A registered professional engineer in the State of Illinois, Ms. Kabbes has personally authored or led teams developing state water resource legislation and programs, state floodway rules, and a variety of water resources related ordinances covering municipal wastewater water reuse, local floodplain development, and county wide floodplain, stormwater, water quality, and wetland and soil erosion control. She headed a state floodplain modeling and regulatory program, served as executive director of a public waterway agency and was the chief county stormwater engineer for one the largest counties in the Chicago metropolitan area. Through KEI, her work includes sustainable infrastructure and watershed projects throughout the Midwest, including stormwater infiltration, dam removal and stream restoration projects. Ms. Kabbes has worked on waterway restoration and sediment removal projects across the United States and in Europe. She chaired ASCE’s Sustainable Infrastructure Project Rating System Subcommittee, which was tasked with overseeing development and assisting in the preparation of the Institute for Sustainable Infrastructure’s Envision™ sustainable infrastructure rating system. Representing the ASCE’s Environmental and Water Resources Institute, she spent three years helping to write the 2009 Performance Benchmarks and Guideline for the Sustainable Sites Initiative (SITES) green infrastructure rating system. The U.S. Green Building Council (USGBC), the developers of the Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™ was also a stakeholder in the Initiative. Ms. Kabbes has received a number of personal professional awards and the firm’s projects have won both state and national awards. She was elected as the 2014 President of the ASCE’s Environmental and Water Resources Institute. Ms. Kabbes is a Diplomate of the American Academy of Water Resources Engineers, a Certified Floodplain Manager and an Envision Sustainability Professional. She has a B.S. in Civil Engineering from University of Illinois in Champaign-Urbana and a M.A.S. in Public Policy Analysis from the University of Illinois in Chicago.*

### **Receptions @ 5 pm**

601 Nedderman Hall (Rady Room)

### **Lectures @ 6 pm**

100 Nedderman Hall

### **[www.uta.edu/engineering/speakerseries](http://www.uta.edu/engineering/speakerseries)**

While we do not anticipate changes to the schedule, circumstances sometimes arise that cause a lecture to be rescheduled or canceled. Please check the College of Engineering website for the most up-to-date schedule of speakers.

Parking is available in Lot 36 (NE corner of Cooper Street and UTA Blvd). No permit is required.