

## OFFICE OF THE SENIOR VICE PRESIDENT AND PROVOST PRESIDENTIAL DREAM COURSE The UNIVERSITY of OKLAHOMA

**CEES 4373/5373 Water Resources Management** 

**Distinguished Seminar Series** 

Feb 19 (Wednesday) 3:00-4:00pm National Weather Center 5600

Integrated Watershed Management: Balancing Competing Interests and Socio-economics of Maintaining a Water Economy.

Abstract: Water resources are an ever increasing concern that is continuously threatened by external anthropological forces that are applied within a watershed. Inputs ranging from non-point sources originating from agricultural practices applied on the landscape or point sources associated with waste water treatment plants can pose significant challenges to watershed scientists and lake managers alike. The Grand River Dam Authority (GRDA) manages more than 70,000 surface acres of lakes and Grand Lake is one of Oklahoma's most popular recreational destinations in Oklahoma. The economic impacts associated with the creation of the dam in 1940 are far reaching as the lake attracts tourism dollars throughout the 4-state region (Oklahoma, Kansas, Missouri and Arkansas) and provides a high quality of life, relatively low cost of living, and high property values. Additionally, the GRDA manages nearly 166 miles of scenic rivers in eastern Oklahoma where 63 miles are associated with the Illinois River providing another popular recreational activity associated with rafting, kayaking, and fishing. The transformation of northeast Oklahoma was primarily shaped by the abundant amount of water resources and competition for those limited resources can be difficult to manage. Furthermore the abundance of water and availability of low cost electricity is responsible for creating the largest rural industrial park in the nation home to nearly 80 companies ranging from very small to those among the Fortune 500. Water is a precious resource that provides not only recreational opportunities, but also serves as the foundation for economic growth and opportunity worldwide.



Dr. Darrell Townsend II Vice President Grand River Dam Authority

**Dr. Darrell Townsend II** currently serves as Vice President for Ecosystems and Watershed Management with the Grand River Dam Authority. He serves on the board of the Environmental Federation of Oklahoma, and the Grand Lake Watershed Alliance Foundation. He holds a doctorate in natural resource ecology from Oklahoma State University. His expertise lies in development and coordination of new and innovative approaches to multifaceted watershed management, focusing on broad-scale conservation and restoration throughout a complex multi-jurisdictional watershed.



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