

Environmental and Water Resources Engineering Seminar Series Presents:

Thursday, November 14th 2024, 3:30-4:30pm, ECJ 1.308



Trends in Wastewater Treatment from a National and Local Perspective

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Abstract

Increased population growth (particularly in Texas) as well as increasingly strict environmental regulations are requiring water quality professionals to innovate and to think differently about how we handle domestic sewage at municipal wastewater facilities. Ms. Doody will present an overview of how new wastewater treatment technologies are “intensifying treatment” to help wastewater facilities to achieve either increased flow capacity or increased nutrient removal within smaller footprints. It will include case studies on how “sludge densification” is helping two utilities in Kansas to achieve more reliable clarification of mixed liquor suspended solids (MLSS) and biological nutrient removal (BNR) in their secondary treatment processes, as well as two local case studies demonstrating how two utilities North of Austin are managing the provision of water and wastewater service to some of the fastest population growth in the United States. These strict nutrient levels combined with demand for reliable water supply is driving Texas utilities to implement Potable Reuse of highly treated wastewater effluent for drinking water supplies.



Background

Ms. Doody is an environmental engineer with CDM Smith in Austin Texas with 17 years of varied experience in wastewater treatment process design, treatability pilot testing, treatment facility upgrade design, and construction both locally in Central Texas and across the United States and the world including in Vietnam and Jordan. In addition to leading the design of wastewater facility upgrades, Alex also serves as CDM Smith’s Nutrient Removal Discipline Leader. She is a graduate of Rice University (B.S. Chemistry) and Stanford University (M.S. Environmental Engineering & Science), but she is married to a UT-Austin graduate and hopes that someday her three little ones will become Longhorns themselves (Hook ‘Em!)