GRU GROUNDWATER RECHARGE WETLANDS – PAST, PRESENT AND FUTURE

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Gainesville Regional Utilities (GRU) is constructing a groundwater recharge wetland park in western Alachua County in order increase aquifer recharge and support flows to the Santa Fe and Ichetucknee Rivers. The project will provide a public park and wildlife habitat in addition to beneficially using reclaimed water to recharge the Floridan aquifer with high quality, low nutrient water. A groundwater recharge wetland is a man-made wetland built on sandy soils. Reclaimed water is continuously fed to the wetland to sustain a healthy ecosystem. Natural wetland processes reduce nutrients in the water to low levels as it percolates into the ground and recharges the aquifer. GRU began operating its first demonstration recharge wetland at the Kanapaha Middle School (KMS) in 2008 and currently operates three recharge wetlands in addition to the Sweetwater Wetlands Park. The new recharge wetland will be located on a 75-acre site and will provide 3 million gallons per day (MGD) of recharge initially, with plans to expand up to 5 MGD. This project is part of the North Florida Regional Water Supply Plan and is a centerpiece in GRU's water reuse program that will allow GRU to continue to provide 100 percent beneficial reuse of reclaimed water. The performance and water quality data collected from these systems demonstrates the ability to attain a high water quality with nitrate levels below 1 mg/L. Alachua County plans to partner with GRU to manage public access and provide enhanced public park facilities. GRU will present an overview of its experience with groundwater recharge wetlands and summarize performance and water quality data, and will describe the wetland project that is currently underway.

PRESENTER BIO: Kristen Sealey is a utility engineer with 15 years of experience in the water resources industry. She has planned, designed, implemented and managed groundwater recharge wetlands throughout her career. She was the task manager for GRU's first demonstration wetland and is the project manager for the large wetland GRU is creating.