Project #8508

NWRUSA WWTF AQUIFER STORAGE AND RECOVERY FACILITY

POLK COUNTY, FL

Data Points

- **Size:** 1.5 MGD
- **Scope:** Design and construction administration
- **Duration:** 48 months

Project Components

- Start-up
- Feasibility study
- Final design
- Permitting
- Construction management

Key Benefits

- Confirmed feasibility of well and assisted in the determination of the optimum storage zone

Background

Polk County Utilities (PCU) Northwest Wastewater Treatment Facility (WWTF) is a 3 MGD three-month rolling average flow (3MRAF) advanced secondary domestic wastewater treatment facility. Plant capacity is limited to 1.5 MGD 3MRAF based on the reuse system permitted capacity. The facility was designed and is operating to utilize public access reuse as its primary effluent disposal option.

As a result of a study entitled "Polk County Utilities Northwest Wastewater Treatment Facility Reclaimed Water ASR Feasibility Evaluation" (ASRus and Reiss, January 2011), it was determined that the storage of reclaimed water in an ASR system injected into the Lower Floridan Aquifer would be feasible in this area of Polk County. The study recommended that PCU proceed with the design, permitting, and construction of an ASR Exploratory Well to a depth of up to 3,000 feet. The purpose of this Exploratory Well would be to confirm the feasibility of the well and assist in the determination of the optimum storage zone for the project.

Reiss conducted general project coordination and management activities, including administrative activities for this authorization, as well as coordination with PCU staff and PCU Project Manager Representatives. Reiss provided support to PCU and the contractor in obtaining a well construction permit from SWFWMD to construct the proposed ASR Well and associated monitoring wells as well as preparing the FDEP Class V Injection Well Construction Permit Application. Reiss completed final design, bidding services, and construction services by the end of 2016.