

REUSE, RESTORE, RECHARGE, REDUCE, & RECREATE—THE OCALA WETLAND RECHARGE PARK

Gabriela Sullivan¹, Allison Lewis²

¹City of Ocala Engineering and Water Resources, Ocala, FL, USA

²Jacobs, Tampa, FL USA

Silver Springs is world famous for its crystal-clear waters and is the ecological and economic engine in the area. However, Silver Springs is subject to restrictive Total Maximum Daily Load (TMDL) regulations for nitrate and has a recovery strategy to help meet its established Minimum Flows and Levels (MFL).

The City of Ocala, located within the Silver Springs springshed, constructed a treatment wetland park designed for groundwater recharge to offset their use of groundwater and nutrient loads associated with municipal water and wastewater management. This 35-acre infiltration wetland system treats up to 5 million gallons per day (mgd) of reclaimed water and stormwater to recharge the aquifer, protect water quality, and recover and enhance the flows to Silver Springs.

Based on wetland treatment performance calculations at rates assessed from other groundwater recharge wetlands in the state, it is estimated that this system will remove up to 29,000 pounds per year of total nitrogen, 23,000 pounds per year of nitrate, and 30,000 pounds per year of total phosphorus.

The wetland park provides a unique opportunity to address water supply and water quality while giving back to the community. In addition to the environmental benefits that drive this project, the City created a public park with educational exhibits related to wetland ecology and the park's connectivity to Florida springs. The wetland park includes boardwalks, trails, lookouts, and other park amenities for public enjoyment. Since opening in September 2020, over 100,000 visitors and 170 bird species have been observed at the park. In 2021, the park's innovation was recognized by the National Recreation and Park Association as they awarded the park with both the 2021 Innovation in Conservation Award and the 2021 Best in Innovation Award. In 2023, it was listed on the Great Florida Birding and Wildlife Trail by FWC.

PRESENTER BIO: Gabriela Sullivan is the Water Conservation Coordinator for the City of Ocala. She graduated from the University of Florida in 2021 with a bachelor's degree in natural resource conservation. Gabriela's interests in conservation behavior and environmental education guide her approach to addressing water issues on an individual and community level.