



Lower Floridan Aquifer Cost-Share Projects Help to Lessen Impacts to Water Resources

The conclusions of the Central Florida Water Initiative (CFWI) 2020 Regional Water Supply Plan indicate that water users in the region will need to move to alternative and nontraditional water supply sources rather than continue to use groundwater from the Upper Floridan aquifer to meet water needs through 2040 while protecting water resources.

The St. Johns River Water Management District (SJRWMD) is collaborating with two local utilities on cost-share projects within the CFWI planning area that are predicted to have a beneficial impact on water resources in the region. These two projects involve the conversion of an Upper Floridan aquifer well to a Lower Floridan aquifer well and a reactivation and repurposing of an existing Lower Floridan aquifer well.

Depending on where you are within the CFWI region, withdrawing groundwater from the Lower Floridan aquifer has been shown to have less impact on water resources at the surface, such as wetlands and springs, than withdrawing groundwater from the Upper Floridan aquifer. This is primarily due to the Upper Floridan aquifer being closer to the surface than the Lower Floridan aquifer and the fact that in some areas a geologic unit of confinement exists between the Upper and Lower Floridan aquifers.



Casselberry South Plant, Casselberry, Florida

The first project is the City of Casselberry's conversion of an Upper Floridan aquifer well to a Lower Floridan aquifer well. The city is in Seminole County southwest of Lake Jesup and the city's water supply system serves approximately 50,000 people.

The project will modify one of the city's existing Upper Floridan aquifer wells to extend it to the Lower Floridan aquifer. The well is currently 490 feet and will be extended to a depth of 1,200 feet and will be constructed to then draw solely from the Lower Floridan aquifer. Eventually, the city's plan is to withdraw more water from the Lower Floridan aquifer well and less water from existing Upper Floridan aquifer wellfields, which are located closer to regional water bodies such as lakes and springs, thus

decreasing the possibility of impacting water resources at the surface. This project is scheduled to be completed by July 2022. SJRWMD is providing \$113,750 toward the \$603,000 construction cost.

The second project is Southlake Utilities Reuse, LLC's proposal to reactivate an existing Lower Floridan aquifer well that was determined to be unsuitable for potable water supplies. Once reactivated the well will be used for irrigation water supply and for future blending with Upper Floridan aquifer water sources for potable supply. Southlake Utilities is a private utility located in southern Lake County south of Lake Louisa. The water utility currently serves a population of approximately 9,970.

The use of the Lower Floridan aquifer for irrigation and blending will reduce the amount of potable water withdrawn from the Upper Floridan aquifer and will reduce the potential for impacts to area surface waters. Groundwater modeling completed as part of this cost-share application indicates that this project is predicted to have a benefit to Boggy Marsh and the Green Swamp, which is directly adjacent to the Southlake Utilities service area.

This project is scheduled to be completed by Sept. 30, 2022. SJRWMD is providing \$181,555 toward the \$726,205 construction cost.

These projects are only two examples of the numerous alternative water supply projects that are being proposed and constructed within CFWI through use of cost-share funds through the water management districts and the Florida Department of Environmental Protection.

Lou Donnangelo, Bureau Chief of the Bureau of Project Management at SJRWMD, stated that "SJRWMD is gearing up again in anticipation of our FY2022-2023 Cost-Share Funding Initiative and I would encourage CFWI stakeholders to visit the SJRWMD website or reach out to me and my team to learn more about cost-share opportunities."

SJRWMD has three distinct cost-share programs: Districtwide, Rural Economic Development Initiative (REDI)/Innovative, and Agricultural. [Click here](#) to learn more.