



Conservation a Key Strategy for Reducing Demands in Polk County

Polk County, which includes 17 municipalities, is the fifth largest county in Florida and lies wholly within the Central Florida Water Initiative (CFWI) planning region. Fresh groundwater from the Upper Floridan aquifer is the principal source of water supply within Polk County, currently meeting approximately 96 percent of existing water supply demands. Based on the 2020 CFWI Regional Water Supply Plan, total water use across the region is projected to increase from approximately 667 million gallons per day (mgd) to approximately 908 mgd by 2040, a 36% increase. Polk County also lies within the geographical boundaries of the Southwest Florida Water Management District's (District) Southern Water Use Caution Area (SWUCA) where there are additional limitations to available traditional groundwater quantities to meet future water needs. Moreover, Polk has several lakes that are not meeting their minimum flows and levels (MFLs) and multiple stressed wetlands. To address current and future demands, the District is partnering with the Polk Regional Water Cooperative (PRWC) to identify and develop non-traditional, alternative water supplies (AWS). In addition, robust conservation strategies must be utilized to stretch currently available water quantities and prevent further degradation of water resources.

The District is partnering with the PRWC to implement conservation strategies countywide. The PRWC completed a Demand Management Plan (DMP) in September 2020 that will serve as the blueprint for the PRWC's future conservation efforts. The DMP was co-funded by the District for the purpose of quantifying long-term conservation potential, developing an implementation strategy, and estimating the financial benefits that reduced demand has on the timing and scale of AWS development. The DMP identifies 6.6 mgd of passive water savings and up to 5 mgd of active water savings over the 20-year planning horizon. A reduction in demand of this magnitude could result in a substantial reduction of nearly \$100 million in AWS costs.

One of the chief strategies included in the DMP is the recommended implementation of mandatory Florida Water Star (FWS) standards for all new construction. To date, six Polk County municipalities have adopted FWS ordinances and several others are in the evaluation process. The FWS program addresses new construction; however, to address existing homes/businesses, other conservation programs must be implemented. Many of these programs are co-funded by the District and the Florida Department of Environmental Protection and include conservation kits (showerheads, dye tabs, faucet aerators, etc.), rain sensors, smart irrigation controllers, high-efficiency toilet rebates, irrigation system evaluations, and irrigation restriction enforcement. See prwcwater.org/water-conservation/ for more information.

Another highly successful offering by the PRWC, its members and the District is the free landscape and irrigation evaluation program for utility customers. To be eligible, participants must have a working automatic sprinkler system with a time clock and monthly usage exceeding 15,000 gallons. A licensed irrigation contractor will go to their home to evaluate the irrigation system for inefficiencies, check to ensure that everything is working properly, install a working rain sensor if necessary, then provide a written report to the homeowner and the water utility. The reports typically recommend things like reducing over spray, fixing leaks and broken heads, capping unnecessary heads and, most importantly, adjusting run times and run schedule. When implemented, these small tweaks to their irrigation system can result in significant water cost savings – as much as \$840 per year (based on respective utility water rates and average water savings) – while conserving one of our most precious natural resources. View a video of the program here: youtube.com/watch?v=LyctzjwRFRY.

Over and above these efforts, the District offers funding for eligible projects under the Water Incentives Supporting Efficiency (WISE) program. WISE focuses on non-agricultural water users and is a 50/50 cost-share program offering up to \$20,000 of District funds per project. The City of Lakeland recently implemented a successful WISE program project with the installation of a weather station at its 180-acre Oak Hill Burial Park. The new weather station is connected to the existing irrigation controller and uses onsite weather data to reduce/prevent unnecessary irrigation. The total project cost was \$5,510 (split 50/50 between Lakeland and the District). Given a 20% reduction in water use (13,699 gpd savings), this is a very cost-effective project (\$0.16 per thousand gallons saved), and a true win for both the City and the District. This is just one example of a WISE program project. Both government and private sector entities within the District's jurisdictional boundaries are eligible for project consideration. To learn more, visit WaterMatters.org/WISE.

It takes a multi-prong effort to achieve conservation goals since a “one size fits all” approach doesn't work for every potential partner. As population continues to surge, we will continue to see greater limitations on traditional groundwater supplies, making conservation a critical component in meeting the demands for today and tomorrow. For more information on water conservation in the CFWI visit cfwiwater.com/waterconservation.html.