BAY-FRIENDLY FERTILIZING TOOLS FOR RECLAIMED WATER USERS

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When it comes to how much nitrogen-based fertilizer to apply, many do not consider their irrigation water source. Those with reclaimed water may be receiving significant amounts of nitrogen through regular irrigation applications, and therefore, may not require nitrogen-based fertilizer amendments for healthy turf grass growth. We calculated the amount of total nitrogen and nitrate in reclaimed water using data from three Sarasota County water reclamation facilities. During 2020 the cumulative amount of total nitrogen applied from weekly irrigation applications ranged from 1.5 to 3.3 pounds per 1000 square feet across the three facilities. On average, nitrate-nitrogen made up between 80 – 91 percent of the total nitrogen in reclaimed water. As a result, homeowners with Bahia, St. Augustine, and Zoysia grasses who receive reclaimed water from two of the three water reclamation facilities had ample amounts of nitrogen-based fertilizer and do not need to amend their soils. To communicate these findings to reclaimed water users, we developed two interactive tools. One tool is geared toward residential customers and the other for golf course superintendents. Both tools offer the most up-todate information on nitrogen concentrations in reclaimed water produced by Sarasota County's three water reclamation facilities. Each tool has a built-in calculator to help users determine the cumulative amount of nitrogen applied to their landscape through weekly irrigation practices. The goal of these tools is to reduce the application of nitrogen-based fertilizer, curbing local nitrogen pollution, and improving water quality.

PRESENTER BIO: Dr. Tyrna is the Water Resources Agent for UF|IFAS Extension Sarasota County. She has worked in water resource education for nearly 20 years and is currently responsible for creating education programs and volunteer opportunities that result in improved water quality and a reduction in water use in Sarasota County.