

MANAGING NUTRIENTS IN THE WEKIVA SPRINGS WATERSHED: PROVOKING BEHAVIOR CHANGE IN RESIDENTIAL FERTILIZER USERS

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Seminole County (SC) is home to the Wekiva Springs River, a National Wild & Scenic River and an Outstanding Florida Waterbody, and the St. Johns River, which includes the oxbow Lakes Harney, Monroe and Jesup. These waterbodies *are all impaired by nutrients* and have Basin Management Action Plans, defined as the "blueprint" for restoring impaired waters. These water resources are economically and environmentally tied to the area through recreation, property values, wildlife support and aquifer recharge. Research on the Wekiva Springs Basin shows 26% of all nitrate entering the basin was from urban turfgrass fertilizer. The SC fertilizer ordinance of 2017 further funded the Florida-Friendly program and tasked staff with educating the public.

September 2018 - May 2019 the Florida-Friendly Landscaping Agent and the Seminole County Fertilizer Educator offered Fertilizer Workshops. Workshops targeted homeowners and HOA's, offered a free bag of Florida-Friendly fertilizer to each participant and educated participants on water quality issues and Best Management Practices (BMP's) for residential landscapes.

17,454 people were educated about fertilizer BMP's by way of 27 different workshops and mass media; of those, 288 completed reflective post-surveys which revealed 97.2% increased their knowledge on the impacts stormwater (including fertilizer run-off) has on local waterbodies, 98.8% intended to use the information to fertilize their yard appropriately, and 95.3% were more confident they could fertilize appropriately. In a 6 month follow up survey, 86.1% of class participants reported they were currently using BMP's or had recommended BMP's to their landscaper as a result of the fertilizer workshop.

These educational efforts resulted in data that shows effective and significant behavior changes which seeks to reduce local levels of nitrogen and phosphorous, pollutants that lead to harmful algae blooms and impairments. Participants better understand sources of water contamination resulting from fertilizer misuse and have acted to change those behaviors.

PRESENTER BIO: Tina McIntyre is a Florida-Friendly Landscaping Agent who came to Extension with 10 years of experience; four as Senior Biologist at the Orange County Environmental Protection Division and six at the University of Central Florida Arboretum as Program Coordinator and Professor. She specializes in water quality/quantity and landscape BMP's.