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Using a Science Café Format to Educate Homeowners on Stormwater Ponds

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Lakewood Ranch Protect Our Ponds is a group of residents, governance, and University of Florida researchers along with Manatee County Extension. This advisory board provides guidance for community education to the residents on their 320 stormwater ponds. Outreach topics include stormwater pond functions, pond maintenance, landscape maintenance effects on stormwater ponds, pollution runoff, and the best management practices in the landscape. A variety of outreach efforts have been tried to attract the attention of the community. One very successful attempt was a Science Café. This outreach event featured presentations about stormwater ponds, stormwater runoff, and how residents can protect local waterways. Local and University experts also had information tables with displays and there was a time to ask an expert. Attendees were provided light refreshments that had a pond theme—algae wraps, pond punch, and aquatic vegetables. As this educational outreach was advertised we found an interesting attraction to the event from the community. We only allowed 50 attendees to register and advertised it as "limited." This small detail had community members signing up quickly and resulted in a waiting list.

Community stormwater ponds are important for water quality because of their ecological function, and they also serve an aesthetic purpose and increase property value. Homeowners in communities desire a clean look to their stormwater ponds, which demands that pond managers utilize short-term solutions (such as copper sulfate treatments) that could create long-term problems for water quality and pond health.

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Program Objectives

An educational outreach program with four points was developed based on the information we obtained from the focus groups, advisory board, and pre-survey results. The Science Café design will, first, let homeowners know what the ponds do and how they can be maintained. Second, make sure homeowners are talking to their landscapers about the fertilizer ordinance and how it affects pond health. Third, make sure homeowners know about the fertilizer ordinance and follow it. Finally, help homeowners become more comfortable with buffer zones and shoreline plantings to help improve pond health.

One goal of this project is to encourage homeowners to be more engaged in the health of their ponds. This outreach event featured presentations about stormwater ponds, stormwater runoff, and how residents can protect local waterways. Local and University experts also had information tables with displays and there was a time to ask an expert. Light refreshments were provided to attendees and had a pond theme—algae wraps, pond punch, and aquatic vegetables.

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Impacts and Discussion

A survey showed that there was little understanding of the link between landscape management and the health of the stormwater ponds, but a packed "Science Café" held by UF/ IFAS specialists and Lakewood Ranch management helped to bridge the knowledge gap.

According to the pre-survey:

- 65% of residents did not know about the Manatee County ban on summer applications of nitrogen fertilizer.
- 78% of them had fertilizer applied by professionals who should be aware of the rules (although half of the residents

didn't know that the county ordinance requires their lawn service to be certified).

• 48% of residents did not know that stormwater from their lawns and streets drained into stormwater ponds or that the ponds were connected to each other.

Most attendees were surprised when they learned that their lakes were actually stormwater ponds, and that those ponds drained into the Braden River, the source of drinking water for the City of Bradenton.