

TO: Ms. Kim Ornberg, PE, Manager
Watershed Management Division

Seminole County Board of County Commissioners

FROM: Mac Carraway, Executive Director
Environmental Research & Education Foundation (EREF)

DATE: February 20, 2017

SUBJECT: Proposed Fertilizer Ordinance

Dear Ms. Ornberg:

Thank you again for your recent response to our submittal regarding the Seminole County draft fertilizer ordinance. The purpose of this email is to clarify our prior submittal and to respond to your comments as appropriate. As a representative of the green industry, we are committed to dispelling the myth of low-hanging fruit in such matters by supporting effective means of protecting water quality in Florida. Accordingly, while we may have differing views about policy and strategy details, our goals are entirely consistent with those underlying your efforts on this ordinance.

Our overall recommendations are summarized as follows:

- If restrictions are to be employed at all, water-quality protection is best achieved by winter (NOT summer) restrictions. The latest and best research confirms that summer restrictions create a risk of increasing nutrient leaching throughout Florida. There is no comparable research to support the summer bans. Creating a summer ban actually compounds the risk of nutrient leaching.**
- Exemptions should be provided for all BMP-driven activities including golf/sports turf, farming, research AND licensed lawn-care professionals.**
- Education and behavioral change should be the number one priority in addressing water-quality protection.**

Please accept the following additional detailed comments:

- With respect to summer versus winter restrictions, the conclusions reached in the FDEP leaching study referred to in our prior submittal cover the entire state of Florida, not just the cooler climates represented by Hernando and Alachua counties as referred to in your response. While the average temperatures in Seminole County may be different than in those two counties, the study's conclusions are based on seasonal turfgrass physiology and apply equally to Seminole County, and would represent a more effective approach to nutrient management. We encourage you

to review the FDEP study's conclusions and further to invite Dr. Laurie Trenholm to Seminole County to discuss the study results with you, consistent with the efforts of the three other counties who entertained additional restrictions during 2016 (all arriving at using a winter focus).

- ❑ We are certainly aware of summer rainfall and soil-moisture issues and disagree with the proposition of material summer nutrient runoff. Unfortunately, the issue of summer rainfall has long been the principal justification for summer blackouts (See **Exhibit 1**). Once again, referring to the FDEP study, the leaching of nutrients during the summer (the active growing season for turf and landscapes), even in conditions of saturation and excessive nutrient application, is minimal. Shifting fertilizer ("catch up") applications to the winter season when plant vigor and nutrient usage has declined, which is the inevitable outcome of a summer fertilizer blackout, ignores this reality and clearly places Seminole County at greater risk of the nutrient leaching it is trying to prevent.
- ❑ Proponents of summer blackouts suggest that lawns and landscapes can remain healthy and unaffected without summer applications. Unfortunately, the experience of residents in blackout areas know differently, experiencing systematic turf decline and failure, especially in new installations which cannot be adequately established as they are deprived of nutrition during their active growing season.
- ❑ There is no credible research or other documentary evidence that existing summer blackouts in Florida have had any beneficial impact on local water quality. The information published about actual outcomes in those areas indicate that the blackouts have had no material impact on water quality. That information confirms what makes sense - that the commitment to large-scale reclaimed water projects, surface water and stormwater management projects, septic tank reform, etc., all by both government and industry, led to the excellent outcomes like those in the Tampa Bay area (see our prior submittal). Unfortunately, in the Brevard County area, the passage of summer blackouts has done nothing to improve water quality in that area, despite the promises and claims of blackout proponents at the time of their passage.
- ❑ Your response did not address the issue of exemptions. While your draft ordinance wisely includes BMP-driven exemptions for golf, sports, education and farming, it does not include one for licensed lawn care professionals. Those professionals have been at the forefront of creating and implementing robust water-quality protective management practices for decades. They are your first and best line of defense in ensuring responsible fertilizer use. Failure to include licensed lawn care professionals puts Seminole County in the position of arbitrarily and unnecessarily picking winners and losers in drafting the ordinance. To support the inclusion of such an exemption, we have provided an analysis as **Exhibit 2** showing that exempting these professionals (using your own starting point) is numerically immaterial to any potential outcome from your draft ordinance, regardless of whether it employs summer or winter restrictions.
- ❑ EREF firmly believes that education is the real answer to establishing responsible fertilizer use and minimizing nutrient impacts on local water quality. While restrictive

ordinances are generally unenforced and are most often justified on the basis that they are educational, they are a historically a poor substitute for real education and outreach. There are excellent examples of this kind of education being done by WMD's, the green industry and others to truly impact consumer behavior.

- ❑ We would appreciate you amplifying on Seminole County's expectations of actual and measurable outcomes to the proposed ordinance. For example, will you be performing any before and after water-quality sampling, and if so, has that methodology been vetted for statistical or nutrient-source-identifying (e.g. isotopic) validity? Do you have baseline data established and if so, can you share that with us?

CONCLUSIONS:

While seeming complex at first glance, this is a straight-forward issue and it follows a clear path of common sense:

- ❑ **DO responsibly feed landscapes when they are most efficiently taking up nutrients and doing their highly-efficient job at filtration.**
- ❑ **DON'T feed landscapes when their root systems and plant vigor are seasonally in decline and their value as filters is minimized.**
- ❑ **DO focus on persistent, creative and multi-modal education and behavioral change.**
- ❑ **DON'T punish the good guys.**

We certainly appreciate the effort Seminole County is investing in this process. Thank you for your continued willingness to consider our input. We look forward to meeting with you and in engaging further with you and the Seminole County Commission on this matter.