May 4, 2021



Commissioner Bill Proctor, District 1 Commissioner Jimbo Jackson, District 2 Commissioner Rick Minor, District 3 Commissioner Brian Welch, District 4 Commissioner Kristin Dozier, District 5 Commissioner Nick Maddox, At Large Commissioner Carolyn Cummings, At Large

301 S. Monroe Street 5th Floor Tallahassee, FL. 32301

RE: Sierra Club Support for a Strict Rainy Season Application Ban Urban Fertilizer Ordinance

Dear Commissioners:

We appreciate you considering the impacts from urban fertilizer to your watershed and hope that you will re-read <u>Sierra Club's letter of April 6</u> in which we laid out the rationale for a strong ordinance including a strict rainy season application ban.

The draft ordinance to be considered on May 11 does not include a rainy season ban. The Sierra Club cannot support this draft ordinance because a rainy season ban is the backbone of any effective ordinance and without it the ordinance cannot protect water quality. Rain events are always potential pollution events.

Leon County's precipitation amounts more than double from May to June, marking the beginning of the rainy season as in most of the rest of the state. In Leon County the rainfall amounts decline from August to September rather than from September to October as in most of the state. While the Sierra Club prefers a 4-month rainy season ban, especially considering the frequency of late-season hurricanes, we would support a strict, no exemptions 3-month rainy season nitrogen and phosphorus ban for Leon County.

Table1: https://www.usclimatedata.com/climate/tallahassee/florida/united-states/usf10479

	Jan	Feb	Mar	Apr	May	Jun
Average high in °F	64	67	74	80	87	91
Average low in °F	39	42	47	52	62	69
Av. precipitation in inch	4.34	4.85	5.94	3.06	3.47	7.73
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	Jul	Aug	Sep	Oct	Nov	Dec
Average high in °F	92	92	88	81	73	65
Average low in °F	72	72	68	57	47	41
Av. precipitation in inch	7.17	7.35	4.69	3.23	3.50	3.90

The Sierra Club opposes fertilizer ordinances that do not recognize the pollution potential that comes with every rainfall event that is over 1/4 inch of rain.

The "1/4 inch" standard comes from the Green Industries-Best Management Practices (GI-BMP) training materials used to train licensed fertilizer applicators and the UF IFAS/FDEP Florida Yards & Neighborhoods (FYN) Manual:

GI-BMP Training Irrigation Module, page 29: "Application of 1/4 inch of water should be sufficient to solubilize most of the urea and move it into the turfgrass root zone. Too much water can lead to runoff or leaching of nitrate into ground and surface waters." http://ffl.ifas.ufl.edu/gibmp-resources/English/Module-4-Irrigation_SpeakerNotes_2016-06.pdf

GI-BMP Training Fertilizer Module, page 20: "Application of 1/4 inch of water should be sufficient to solubilize most of the urea and move it into the turfgrass root zone." http://ffl.ifas.ufl.edu/gibmp-resources/English/Module-5-Fertilizer_SpeakerNotes_2016-06.pdf

UF IFAS/FDEP Florida Yards & Neighborhoods (FYN) Manual, page 28: "How do I water-in fertilizer? Most fertilizers need to be watered-in to move fertilizer just below the soil surface to grass roots. This process requires only about 1/4 inch of irrigation water." http://ffl.ifas.ufl.edu/materials/FYN_Handbook_2015_web.pdf

The current draft ordinance that prohibits fertilizer application before a 1-inch rain event provides no protection from leaching. Due to the imprecise nature of weather predictions, the prohibition of applying Nitrogen before a 1-inch rain event will be impossible to follow and enforce. It is not a substitute for a blackout period.

Further, turf health science directs turf managers to apply less Nitrogen. The longer the growing season, the longer turf can "digest" applied Nitrogen. Since North Florida has a shorter growing season than South Florida, North Florida turf digests less and therefore *needs* less Nitrogen.

Florida's turf receives atmospheric deposition of Nitrogen from summer lightning storms, Nitrogenrich grass clippings (due to increased mowing during the summer), and a steady release of Nitrogen for months when a slow-release Nitrogen product is used before the rainy season begins. Consequently, turf throughout Florida has not only survived rainy season blackout periods for the past 14 years but in fact turf health has improved. Less Nitrogen applied has led to less fungal disease and pest invasion (i.e., the greener the grass, the more palatable it is to fungus and chinch bugs).

As of today, there are 14 counties and more than 100 municipalities that have led the way on strict rainy season ban urban fertilizer ordinances. They did so, in the face of opposition by turf growers, agrochemical purveyors, and their partners at UF-IFAS, because they know the water quality in their jurisdiction is the key to keeping their local economies and quality of life healthy.

As to enforcement, please consider this: There has never been a time that police stopped every driver to see if he/she/they were wearing a seat belt. But over time, education about the reasons why seatbelts were a good idea has led us to high rates of seatbelt use. Wise management of urban fertilizer is our new "seat belt."

On May 11, we urge you to put the County's taxpayers, their quality of life, and the area's water-dependent economy first and vote to include a strict rainy season ban in your urban fertilizer ordinance.

Respectfully,

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cc: Nawfal Ezzagaghi: EzzagaghiN@leoncountyfl.gov