To Commission Members

My name is Adam Jones, and I am Vice President of Massey Services, Inc., based here in Orange County. I am a 39-year veteran of the Green Industry, and for the last 32 years, I have been responsible for program development and technical training of our more than 2700 team members. At Massey Services, our ***PURPOSE*** is to provide beneficial services that protect health, food, property, and the quality of our environment. Our ***MISSION*** is to be the leader in providing an environmentally responsible and superior service. Over the last 42 years, Massey has received local recognition with the Orange County Environmental Excellence award as well as being recognized twice by the EPA as a leader in environmental stewardship for reducing risk to the environment from pesticides and nutrients, and for developing and championing practices that conserve water resources and mitigate urban pollution.

On February 8, 2022, you will be reviewing a proposed update of the Orange County fertilizer ordinance. This ordinance includes a summer rainy season ban with the removal of the current professional exemption. It also includes a limit of 3 lbs on Nitrogen per 1,000 square feet per year. Both of these provisions are bad public policy and bad for water quality. **Your EPC has recommended that you retain the professional exemption.**

The Orange County Commissioners first passed this ordinance in October 2009 after a series of comprehensive public workshops that allowed industry stakeholders to give input and provide OCEPD staff technical guidance related to the science of nutrient leaching through properly managed green spaces. When passed, Orange County's fertilizer ordinance was the most transparent and fair adoption process of any in the State. Unfortunately, due to intense political pressure, the version passed in 2009 was significantly more restrictive than the State-mandated Model Ordinance by including a fertilization blackout period during the summer growing season but also included an exemption from the blackout period for licensed commercial applicators trained in fertilizer best management practices.

It is important to note that in 2009, the body of scientific literature indicated that proper fertilization practices of the urban landscape were not a threat to groundwater. Intense political pressure from activist groups had resulted in a series of counties adopting a dangerous and misguided summer fertilization ban. During the Orange County ordinance development, scientists from the University of Florida issued a document (SL283) that warned government bodies such as Orange County of the potential unintended consequences of these bans. **This warning was ignored by the Orange County Commission.**

The History of State Regulation of Fertilizer In Florida

- In 2007 the Urban Turf Fertilizer Rule 5E- 1.003 F.A.C. was first adopted. The purpose of the rule is to protect Florida's natural water resources by limiting the amount of Nitrogen and Phosphorus on urban landscapes. This rule established a limit of 1 lb. of Nitrogen fertilizer per 1,000 square feet per application.
- In 2009 the legislature passed §403.9337 which required local governments with impaired water bodies under a TMDL to adopt at a minimum the Model Fertilizer Ordinance outlined in the statute. **The Orange County Ordinance was created in response to this statute.**

- January 8, 2015, The Florida Department of Agriculture and Consumer Services revised the Urban Turf Fertilizer Rule from its original version adopted in 2007. The changes were in response to the culmination of 8 years of turf research conducted by the University of Florida, funded by the Florida Department of Environmental Protection. This research was designed to answer the question of wether fertilization of urban greenspaces were responsible for Nitrate pollution in our groundwater and surface waters. **The answer to this question is no.** The research confirmed that properly fertilized and maintained green spaces were a net benefit to water quality in the urban environment. Based on this research the revised Urban Turf Rule increased the limit to 2 lbs of Nitrogen fertilizer per 1,000 square feet per application, and it limited the application of readily available Nitrogen to .7 lbs per 1,000 square feet. In 2017 this commission ignored this science and continued to limit the application of N fertilizer to 1 lb. per 1,000 square feet and .5 lbs of readily available nitrogen per 1,000 square feet and continued on the pathway of a summer rainy season ban.

THE FALLACY OF THE SUMMER RAINY SEASON BAN

The standard theory promoted by environmental activists for a summer rainy season fertilizer ban is that intense summer rainstorms will cause fertilizer applied to lawns to leach through the grass and down into the groundwater rapidly. If this theory were true, we would see seasonal increases in Nitrate concentrations in the wet season. We would also expect to see Nitrate concentration reductions due to banning summer fertilization in the numerous counties across Florida that have adopted summer fertilizer bans since 2007. Fertilizer restrictive ordinances, while created with good intentions, are failing to provide the expected results.

- **Orange County water quality data shows that there is no seasonality to Nitrate concentrations in the groundwater.**
- **Orange County's water quality is continuing to decline. Nitrate concentrations in well samples have not improved since 2009 despite the fertilizer ban being in place.**
- **No county in Florida has seen reductions of Nitrate concentrations in water due to a summer fertilizer ban. The only peer reviewed science on this subject infers that summer rainy season bans have increased Nitrate concentrations in water flux.**
    - **Please review and consider the recent publications that suggest fertilizer restrictive ordinances did not yield the expected influence (Krimsky et.al., 2021) or may, in fact, have actually increased the nitrogen flux in the water during rainy periods (Ivey et. al., 2020) – see attachments. Please refer to the attached articles**

The lack of seasonality and water quality improvement is evidence enough that this practice should not be part of any public policy and regulation.

THE FALLACY OF LOWER FERTILIZER RATES EQUALS LESS POLLUTION

The Orange County fertilizer ordinance update currently proposes a reduction to a maximum of 3 lbs. per 1000 square feet per year regardless of species. Activist groups are proposing a limit of 2 lbs per 1,000 square feet per year. University of Florida scientists (IFAS) recommends 2-5 lbs. per 1000 square feet per year for St. Augustinegrass in Central Florida. The FDEP funded research found 4 lbs. per year to be the lowest acceptable for minimum quality and highest performance in reducing potential leaching. Please refer to the attached peer-reviewed article Trenholm et al. (2012) "Nitrate Leaching

and Turf Quality in Established' Floratam' St. Augustinegrass and 'Empire' Zoysiagrass": Journal of Environmental Quality. Excerpts are highlighted yellow in the attached article:

The currently proposed limits of 2-3 pounds per 1,000 square feet will result in poorer quality lawns and increased leaching of N. **This is terrible public policy that will result in the unintended consequences that IFAS warned this commission about back in 2009.**

I implore this commission to retain the professional exemption and adjust the fertilizer limits to up to 4 lbs of Nitrogen per 1,000 square feet. The overwhelming scientific consensus says that properly fertilized and maintained lawns are essential strategies for reducing water pollution in the urban environment. The summer rainy season ban is bad policy and has the unintended consequence of continuing the decline of water quality in central Florida.

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