

# MEMORANDUM

Substitute  
Agenda Item No. 5(D)

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**TO:** Honorable Chairman Jose “Pepe” Diaz  
and Members, Board of County Commissioners

**DATE:** April 20, 2021

**FROM:** Geri Bonzon-Keenan  
County Attorney

**SUBJECT:** Ordinance relating to regulation of fertilizer; creating Chapter 18C of the Code of Miami-Dade County, Florida; regulating fertilizer application and usage in the incorporated and unincorporated areas; adopting the Florida Department of Environmental Protection’s Model Ordinance for Florida-Friendly Fertilizer Use for Urban Landscapes; providing for additional and more stringent standards than the model ordinance, including an annual period during which fertilizer application generally would be prohibited and limitations on nitrogen and phosphorus; providing enforcement authority to Department Director; amending section 8CC of the Code; providing for enforcement by civil penalty; directing the County Mayor to conduct an educational campaign, make recommendations as to areas of County parks which could be modified to require less fertilization, make recommendations as to water quality testing related to fertilizer, and to prepare reports for this Board

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**This substitute differs from the original version of the ordinance as follows: (1) it increases the fertilizer allowance for nitrogen from 2 to 4 pounds, as measured per 1000 square foot area per calendar year; (2) it provides that the annual fertilizer "restricted period" shall not be enforced until after October 31, 2021; and (3) it provides that the uncodified requirements related to County parks in Section 5 of the ordinance may be modified by resolution.**

The accompanying ordinance was prepared and placed on the agenda at the request of Co-Prime Sponsors Commissioner Eileen Higgins and Commissioner Rebeca Sosa and Co-Sponsor Commissioner Sally A. Heyman.

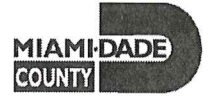


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Geri Bonzon-Keenan  
County Attorney

GBK/uw

# Memorandum



**Date:** April 20, 2021

**To:** Honorable Chairman Jose "Pepe" Diaz  
and Members, Board of County Commissioners

**From:** Daniella Levine Cava  
Mayor

A handwritten signature in blue ink that reads "Daniella Levine Cava".

**Subject:** Fiscal Impact Statement for Ordinance Relating to Regulation of Fertilizer

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A final comprehensive fiscal impact cannot be determined at this time; however, the department will absorb implementation in the short term through existing activities such as environmental compliance on non-agricultural properties, which includes regular inspections and responses to complaints, as well as educational efforts. Instances of educational efforts that will commence immediately include, but are not limited to, informational language in environmental-related permits, such as those for trees or business operations, as well as traditional methods in the department. Over time, the department will add staffing, capital or education and outreach funding as necessary, beyond the initial enforcement and educational campaign roll out, to ensure proper adherence by residents and businesses.

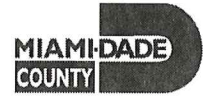
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Jimmy Morales  
Chief Operations Officer

FIS0222 210553

# Memorandum



**Date:** April 20, 2021

**To:** Honorable Chairman Jose "Pepe" Diaz  
and Members, Board of County Commissioners

**From:** Daniella Levine Cava  
Mayor

A handwritten signature in blue ink that reads "Daniella Levine Cava".

**Subject:** Social Equity Statement for Ordinance Relating to Regulation of Fertilizer Application and Usage in the Incorporated and Unincorporated Areas of Miami-Dade County

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The proposed ordinance creates Chapter 18C of the County Code as the "Miami-Dade County Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes" in order to minimize the negative environmental effects from the misuse and overuse of fertilizers on urban landscapes.

This ordinance will establish minimum standards for the County to (1) regulate the proper use of fertilizers by any applicator; (2) require proper training of commercial and institutional fertilizer applicators; (3) establish training and licensing requirements; (4) establish a prohibited application period; and (5) specify allowable fertilizer application rates/methods, fertilizer-free zones, low maintenance zones, and exemptions. This ordinance also directs the County Mayor to conduct an educational campaign to encourage compliance and better educate County residents, property owners, and fertilizer applicators about the importance of the proper application of fertilizer.

If the proposed Ordinance is adopted, the community and visitors could benefit from the improved water quality of water bodies such as Biscayne Bay that would allow more recreational and commercial opportunities. Miami-Dade's tourism economy is dependent on a healthy environment. The 2004 South Florida Water Management District study of the economic importance of Biscayne Bay showed that Biscayne Bay provided "\$12.7 billion in additional county production, \$6.3 billion in income to county residents, 137,600 jobs and \$627 million in tax revenue." Protecting Biscayne Bay from nutrient pollution, including fertilizer runoff would benefit Miami-Dade residents and businesses, including the avoided cost of remediating water bodies affected by fertilizer overuse and resultant algal blooms, seagrass die offs, fish kills, and other water quality issues.

There could be a monetary burden associated with this Ordinance to the fertilizer industry by the loss of sales/retail revenue, the training required for fertilizer applicators, and the potential loss of business during the restricted period from May 15 to October 31.

A handwritten signature in black ink that appears to read "Jimmy Morales".  

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Jimmy Morales  
Chief Operations Officer



## MEMORANDUM

(Revised)

**TO:** Honorable Chairman Jose "Pepe" Diaz  
and Members, Board of County Commissioners

**DATE:** April 20, 2021

**FROM:**   
Gen Bonzon-Keenan  
County Attorney

**SUBJECT:** Substitute  
Agenda Item No. 5(D)

Please note any items checked.

- ☐ "3-Day Rule" for committees applicable if raised
- ☒ 6 weeks required between first reading and public hearing
- ☒ 4 weeks notification to municipal officials required prior to public hearing
- ☐ Decreases revenues or increases expenditures without balancing budget
- ☐ Budget required
- ☐ Statement of fiscal impact required
- ☐ Statement of social equity required
- ☐ Ordinance creating a new board requires detailed County Mayor's report for public hearing
- ☒ No committee review
- ☐ Applicable legislation requires more than a majority vote (i.e., 2/3's present \_\_\_\_, 2/3 membership \_\_\_\_, 3/5's \_\_\_\_, unanimous \_\_\_\_, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) \_\_\_\_, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) \_\_\_\_, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) \_\_\_\_ to approve
- ☐ Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved \_\_\_\_\_ Mayor  
Veto \_\_\_\_\_  
Override \_\_\_\_\_

Substitute  
Agenda Item No. 5(D)  
4-20-21

ORDINANCE NO. \_\_\_\_\_

ORDINANCE RELATING TO REGULATION OF FERTILIZER; CREATING CHAPTER 18C OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA; REGULATING FERTILIZER APPLICATION AND USAGE IN THE INCORPORATED AND UNINCORPORATED AREAS; ADOPTING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S MODEL ORDINANCE FOR FLORIDA-FRIENDLY FERTILIZER USE FOR URBAN LANDSCAPES; PROVIDING FOR ADDITIONAL AND MORE STRINGENT STANDARDS THAN THE MODEL ORDINANCE, INCLUDING AN ANNUAL PERIOD DURING WHICH FERTILIZER APPLICATION GENERALLY WOULD BE PROHIBITED AND LIMITATIONS ON NITROGEN AND PHOSPHORUS; PROVIDING ENFORCEMENT AUTHORITY TO DEPARTMENT DIRECTOR; AMENDING SECTION 8CC OF THE CODE; PROVIDING FOR ENFORCEMENT BY CIVIL PENALTY; DIRECTING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO CONDUCT AN EDUCATIONAL CAMPAIGN, MAKE RECOMMENDATIONS AS TO AREAS OF COUNTY PARKS WHICH COULD BE MODIFIED TO REQUIRE LESS FERTILIZATION, MAKE RECOMMENDATIONS AS TO WATER QUALITY TESTING RELATED TO FERTILIZER, AND TO PREPARE REPORTS FOR THIS BOARD; PROVIDING SEVERABILITY, INCLUSION OF THE CODE, AND AN EFFECTIVE DATE

**WHEREAS**, the excessive and improper use of fertilizers can contribute to water quality issues and can lead to water quality degradation; and

**WHEREAS**, the excessive and improper use of fertilizer can also be economically inefficient, for example by leading property owners and residents to waste money by applying too much fertilizer or by applying fertilizer during periods of heavy rain, when it will be washed away; and

**WHEREAS**, section 403.9337, Florida Statutes, requires county and municipal governments that are “located within the watershed of a water body or water segment that is listed as impaired by nutrients pursuant to section 403.067,” Florida Statutes, to, at a minimum, adopt the State of Florida’s model ordinance for Florida-Friendly Fertilizer Use for Urban Landscapes to regulate the application of fertilizer “as a mechanism for protecting local surface and groundwater quality;” and

**WHEREAS**, the Florida Department of Environmental Protection (FDEP) has confirmed that Miami-Dade County is located within the watershed of a water body or water segment that is listed as impaired by nutrients pursuant to section 403.067, Florida Statutes, and therefore, Miami-Dade County is required to, at a minimum, adopt the state’s model ordinance; and

**WHEREAS**, section 403.9337, Florida Statutes, also expressly allows local governments to adopt additional or more stringent standards than the model ordinance after taking certain enumerated actions, and many local governments throughout the state have done so; and

**WHEREAS**, pursuant to section 403.9337, to adopt additional or more stringent standards than the model ordinance, a local government must (1) demonstrate, as part of a comprehensive program to address nonpoint sources of nutrient pollution that is science-based and economically and technically feasible, that additional or more stringent standards are necessary to adequately address urban fertilizer contributions to nonpoint source nutrient loading to a water body, and (2) consider all input received from various state agencies and other relevant scientific information; and

**WHEREAS**, the County has met the requirements in section 403.9337 for the adoption of additional or more stringent standards than the model ordinance; and

**WHEREAS**, this ordinance is stricter than the State of Florida's model ordinance in certain respects, as it:

- establishes an annual period between May 15 and October 31 during which fertilizer application generally would be prohibited;
- requires larger fertilizer-free zones next to bodies of water than the model provides;
- sets quantitative limits on using fertilizer containing nitrogen; and
- prohibits using fertilizer containing phosphorus unless a soil test shows a phosphorus deficiency at the particular location where it is to be applied; and

**WHEREAS**, this ordinance provides for certain tailored exceptions related to limited uses such as vegetable and community gardens, athletic fields, golf courses, and parks, and establishes separate criteria for golf courses, athletic fields, and parks, under certain circumstances, which are designed to reduce the need for fertilization at such locations and to provide greater awareness of fertilizer needs and usage through robust testing and reporting requirements; and

**WHEREAS**, currently, the County has a comprehensive program to address non-point sources of nutrient pollution that includes, but is not limited to, the following:

- requiring property owners to connect to the sanitary sewer system as a condition of certain development approvals for property that is within a feasible distance to a sewer line, unless the property owner obtains a variance;
- regulating and enforcing the County's clean-up target levels for contaminants in soil and water, as provided in chapter 24 of the County Code;
- requiring review and approval by the Miami-Dade County Department of Regulatory



and Economic Resources' Division of Environmental Resources Management (DERM) prior to construction, installation, or alteration of outfalls or overflow systems discharging to waterbodies of Miami-Dade County; and

- regulating activities involving dewatering of groundwater and surface water; and

**WHEREAS**, a rigorous study conducted by DERM of the County's water quality and seagrass survey data and a review of relevant scientific literature and academic studies indicate that chronic, low-level nutrient loading; acute, pulsed nutrient loading; or a combination of both are likely linked to seagrass loss in Biscayne Bay, as cited in the County's January 28, 2019 Study on the Decline of Seagrass and Hardbottom Habitat (available online at: <http://www.miamidade.gov/mayor/library/memos-and-reports/2019/01/01.28.19-Report-on-the-Findings-of-the-Countys-Study-on-the-Dcline-of-Seagrass-and-Hardbottom-Habitat-in-Biscayne-Bay-Directive-No-171537.pdf>); and

**WHEREAS**, urban fertilizers contribute some degree of nutrient loading to the County's watershed, and reducing all forms of avoidable nutrient loading is important to protect water resources; and

**WHEREAS**, based on a rigorous study and review of scientific information by County staff, additional actions are needed to address nonpoint source nutrient loading to water bodies in Miami-Dade County, including nutrients that may come from urban fertilizer, to protect water resources; and

**WHEREAS**, in particular, FDEP's 2008 "Florida Friendly Best Management Practices for Protection of Water Resources by the Green Industries" (the "Florida Friendly BMPs") specifically implicates phosphorus "as a cause of increased algae growth in surface water impoundments;" and



**WHEREAS**, according to the Florida Friendly BMPs, because “[m]any Florida soils are high in extractable P [phosphorus] and may never require P [phosphorus] fertilization for optimum turfgrass growth,” the Florida Friendly BMPs “strongly recommends soil testing before” phosphorus fertilization and recommends that phosphorus fertilization “always be based on reliable soil or tissue test recommendations;” and

**WHEREAS**, similarly, for landscape plants, the Florida Friendly BMPs generally recommend that “phosphorus content of the fertilizer should be zero unless a soil or tissue test indicates a need for additional fertilizer;” and

**WHEREAS**, in addition to considering FDEP’s Florida Friendly BMPs, the County has considered all relevant scientific information, including any other input provided by the FDEP, the Florida Department of Agriculture and Consumer Services, and the University of Florida Institute of Food and Agricultural Sciences, on the need for additional or more stringent provisions to address fertilizer use as a contributor to water quality degradation; and

**WHEREAS**, the relevant scientific information that has been considered is on file with DERM and is available upon request; and

**WHEREAS**, this ordinance provides for certain exemptions from its regulations, such as for bona fide farm operations; and

**WHEREAS**, this Board wishes to adopt these regulations related to fertilizer, which are consistent with and, where appropriate, add to or are stricter than, FDEP’s model ordinance; and

**WHEREAS**, this Board also wishes to direct the County Mayor or County Mayor's designee to conduct an educational campaign to encourage compliance and better educate County residents, property owners, and fertilizer applicators about the proper application of fertilizer and the importance thereof, together with environmentally-sound landscaping practices that may reduce or eliminate the need for fertilizer,

**BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA:**

**Section 1.** The foregoing recitals are incorporated into this ordinance and are approved.

**Section 2.** Chapter 18C of the Code of Miami-Dade County, Florida is hereby created to read as follows:<sup>1</sup>

**>>Chapter 18C – Miami-Dade County Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes**

**Sec. 18C-1. - Short Title and Applicability.**

(A) This chapter shall be known and may be cited as the "Miami-Dade County Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes".

(B) Applicability; Exemptions.

(1) This chapter shall be a minimum standard and shall apply to both the incorporated and unincorporated areas.

(a) In the unincorporated areas, this chapter shall be enforced by the County, and in the incorporated areas, this chapter shall be enforced by the municipalities.

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<sup>1</sup> Words stricken through and/or [[double bracketed]] shall be deleted. Words underscored and/or >>double arrowed<< constitute the amendment proposed. Remaining provisions are now in effect and remain unchanged.

- (b) Any municipality may establish and enforce more stringent regulations as such municipality may deem necessary.
  - (c) It is provided, however, that if the provisions herein are not enforced within a municipality, the County may enforce such provisions.
  - (d) The penalties in chapter 8CC for violations of this chapter shall also be a minimum standard and shall apply to both the incorporated and unincorporated areas.
  - (e) Notwithstanding anything stated to the contrary in this chapter, subsections (A) and (B) of section 18C-8 shall not constitute required minimum standards for municipalities when municipalities are enforcing this chapter, nor shall municipalities be authorized to exercise the enforcement authority cited in those subsections.
- (2) This chapter shall be applicable to and shall regulate any and all applicators and areas of application of fertilizer, unless such applicator or area is specifically exempted by the terms of this chapter. This chapter shall be prospective only, and shall not be construed to impair any existing contracts.
- (3) The provisions set forth in this chapter shall not apply to:
  - (a) Bona fide farm operations, as defined in the Florida Right to Farm Act, section 823.14, Florida Statutes, as may be amended;
  - (b) Other properties that are not subject to or covered by the Florida Right to Farm Act but that have pastures used for grazing livestock;
  - (c) Any lands used for bona fide scientific research, including, but not limited to, research on the effects of fertilizer use on urban stormwater, water quality, agronomics, or horticulture; and
  - (d) Athletic fields located in professional or elite sports stadiums or arenas, which shall include Hard Rock Stadium and similar athletic fields, as determined by the Director.

- (4) The provisions set forth in this chapter in section 18C-4(A)(1) related to the restricted period, section 18C-4(C)(3) related to limitations on nitrogen, and section 18(C)-4(C)(4) related to limitations on phosphorus, shall not apply to:
  - (a) Vegetable and community gardens, defined as a plot of ground where herbs, fruits, flowers, or vegetables are cultivated for human ingestion and not for commercial sale;
  - (b) Yard waste compost, mulches, or other similar materials that are primarily organic in nature and are applied to improve the physical condition of the soil; or
  - (c) Tree trunk injection fertilization treatments that are performed by a certified arborist.
- (5) The provisions set forth in this chapter in sections 18C-4(A)(1), (A)(2)(c), (B)(1)-(2) and (C)(1)-(4) shall not apply to the following uses, which shall instead be subject to section 18C-8:
  - (a) Golf courses; and
  - (b) High impact areas in public parks and athletic fields.

**Sec. 18C-2. - Legislative Intent, Findings, and Purpose.**

- (A) The Board of County Commissioners hereby finds that the use of fertilizers on urban landscapes within Miami-Dade County contributes to adverse effects on surface and ground waters within the County, by impairing surface waters with excessive nutrients and by impairing surface and groundwater aquifers with increased levels of nitrogen and phosphorus. Accordingly, the Board of County Commissioners finds it appropriate to regulate the use of fertilizer on urban landscapes as provided in this chapter, including, but not limited to, those provisions that are stricter than those contained in the Florida Department of Environmental Protection's Model Ordinance for Florida - Friendly Fertilizer Use on Urban Landscapes.
- (B) It is the intent of this chapter to establish minimum standards for Miami-Dade County to: regulate the proper use of fertilizers by any applicator; require proper training of commercial and institutional fertilizer applicators; establish training and licensing requirements; establish a prohibited

application period; and specify allowable fertilizer application rates and methods, fertilizer-free zones, low maintenance zones, and exemptions, with the goal of minimizing the negative secondary and cumulative environmental effects associated with the misuse and overuse of fertilizers on urban landscapes. Secondary and cumulative effects related to excess nutrients, such as algal blooms and seagrass impacts have been observed in and on water bodies in Miami-Dade County. Collectively, these water bodies are an asset that is critical to the environmental, recreational, cultural, and economic well-being of Miami-Dade County residents and the health of the public. Overgrowth of algae and vegetation can also hinder the effectiveness of flood attenuation provided by natural and constructed stormwater conveyances. Regulation of nutrients, including both phosphorus and nitrogen contained in fertilizer, will help improve and maintain water and habitat quality.

**Sec. 18C-3. - Definitions.**

For this chapter, the following terms shall have the meanings set forth in this section unless the context clearly indicates otherwise:

- (1) “Application” or “apply” means the actual physical deposit of fertilizer to turf, landscape plants, or the ground.
- (2) “Applicator” means any person who applies fertilizer on turf, landscape plants, or the ground in Miami-Dade County.
- (3) “Commercial applicator” means any person who applies fertilizer for payment or other consideration to property not owned by the person applying the fertilizer or the employer of the applicator. It is provided, however, that, in accordance with section 482.1562(9), Florida Statutes, this classification shall not apply to yard workers who apply fertilizer only to individual residential properties using fertilizer and equipment provided by the residential property owner or resident.

- (4) “Department” means the Miami-Dade County Division of Environmental Resources Management of the Department of Regulatory and Economic Resources or the successor department responsible for environmental regulation.
- (5) “Fertilize,” “fertilizing,” or “fertilization” means the act of applying fertilizer to turf, specialized turf, or landscape plants.
- (6) “Fertilizer” means any substance or mixture of substances that contains one or more recognized plant nutrients and promotes plant growth, or controls soil acidity or alkalinity, or provides other soil enrichment, or provides other corrective measures to the soil.
- (7) “Florida-friendly landscaping” means quality, low-maintenance landscapes that conserve water, protect the environment, are adaptable to local conditions, and are drought tolerant. The principles of such landscaping include planting the right plant in the right place, efficient watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling yard waste reduction of stormwater runoff, and waterfront protection. Additional components include practices such as landscape planning and design, soil analysis, the appropriate use of solid waste compost and minimizing the use of irrigation, pesticides, and fertilizers.
- (8) “Green infrastructure” means a management approach engineered-as-natural ecosystems such as green roofs, porous pavement, swales and rain gardens that largely rely on using soil and vegetation to infiltrate, evapotranspire, or harvest stormwater runoff and reduce flows to drainage collection systems. This practice aims to preserve, restore and create green space using soils, vegetation, and rainwater harvest techniques.
- (9) “High-impact areas in public parks” means turf grass areas that are heavily utilized by pedestrian traffic

year-round. High-impact areas within County public parks will be identified by the Director of the Parks, Recreation and Open Spaces Department, or successor department.

- (10) “Institutional applicator” means any person, other than a private, non-commercial or commercial applicator (unless such definitions also apply under the circumstances), that applies fertilizer for the purpose of maintaining turf or landscape plants. Institutional applicators shall include, but shall not be limited to, owners, managers, or employees of public lands, schools, parks, religious institutions, utilities, industrial or business sites, and any residential properties maintained in condominium or other common ownership.
- (11) “Landscape plant” means any native or exotic tree, shrub, or groundcover, excluding turf.
- (12) “Low impact development (LID)” refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat. LID is an approach to land development or redevelopment that works with nature to manage stormwater as close to its source as possible.
- (13) “Person” means any natural person and any business, corporation, limited liability company, partnership, limited partnership, association, club, organization, and any other group of people acting as an organized entity.
- (14) “Saturated soil” means a soil in which the voids are filled with water. Saturation does not require flow. For the purposes of this chapter, soils shall be considered saturated if standing water is present or if the pressure of a person standing on the soil causes the release of free water.
- (15) “Slow release nitrogen” means nitrogen in a form that delays its availability for plant uptake and use after application, or that extends its availability to the plant



longer than a reference rapid or quick release product, and may also be referred to as controlled release nitrogen, timed release nitrogen, slowly available nitrogen, or water insoluble nitrogen.

(16) “Specialized turf” means areas of grass used for golf courses, athletic fields, and high impact areas, and other similar activities.

(17) “Turf” means a piece of grass-covered soil held together by the roots of the grass, and may also be referred to as sod or lawn.

(18) “Urban landscape” means a previous area on residential, commercial, industrial, institutional, highway rights-of-way, or other nonagricultural land that is planted with turf or landscape plants, including horticultural plants, within Miami-Dade County.

**Sec. 18C-4. - Regulations on applying fertilizer on urban landscapes**

**(A) *Restrictions on timing of fertilizer application.***

(1) *Restricted period from May 15 to October 31 of each year. No applicator shall apply fertilizers containing nitrogen or phosphorus to turf or landscape plants during the period each year beginning on May 15 and ending on October 31 (the “restricted period”).*

(2) *Additional restrictions outside of the restricted period. No applicator shall apply fertilizers containing nitrogen or phosphorus:*

(a) *During any period for which the National Weather Service has issued any of the following advisories for any portion of Miami-Dade County:*

(i) *A flood watch or warning, a tropical storm watch or warning, or a hurricane watch or warning; or*

(ii) *Rain greater than or equal to two inches in a 24-hour period is forecasted.*

(b) *Before seeding or sodding a site.*

- (c) For the first 60 days after seeding or sodding, except when hydro-seeding or sprigging for temporary or permanent erosion control in an emergency situation, such as a wildfire, or in accordance with the Stormwater Pollution Prevention Plan for that site.

(B) *Restrictions on location of fertilizer application.*

- (1) No applicator shall apply fertilizers containing nitrogen or phosphorus to:

- (a) Saturated soil; or
- (b) Turf that is dead or not actively growing.

(2) *Fertilizer-free zones.*

- (a) In addition to the foregoing restrictions, fertilizer shall not be applied within 20 feet of any of the following, which area shall be referred to as a “fertilizer-free zone”:

- (i) from the top of the bank of any pond, stream, watercourse, lake, surface waterbody, stormwater drain, or canal;
- (ii) any wetland as defined in accordance with chapter 62-340 of the Florida Administrative Code;
- (iii) from the top of a seawall; or
- (iv) Biscayne Bay.

(3) *Voluntary low-maintenance zones.*

- (a) A “low-maintenance zone” is a 10-foot zone around any pond, stream, water course, lake, surface waterbody, stormwater drain, Biscayne Bay, canal, wetland, or top of a seawall that is planted and managed to eliminate the need for fertilization and minimize the need for watering or mowing.

- (b) Each property owner is encouraged, but not required, to:

- (i) maintain a low-maintenance zone;
- (ii) not deposit or leave any mowed or vegetative material in the low-maintenance zone;
- (iii) install a swale or berm system at the landward edge of the low-

- maintenance zone, to capture and filter runoff; and
- (iv) take care to prevent the overspray of aquatic weed products within a low-maintenance zone.

(C) *Fertilizer Content and Application Rates.* Application of fertilizer, where and when permitted in accordance with subsections (A) and (B), is subject to the following additional provisions.

- (1) *Lowest recommended rates.* For turf and landscape plants, applicators are encouraged to only apply fertilizer at the lowest recommended rate according to the Florida Department of Environmental Protection's 2008 "Florida Green Industries Best Management Practices for Protection of Water Resources in Florida," as may be amended.
- (2) *Fertilizer label instructions.* Applicators shall not apply fertilizer in violation of fertilizer label directions. This shall not be construed to authorize an applicator to violate any other provision of this ordinance.
- (3) *Limitations on nitrogen.* It shall be a violation of this section to apply fertilizers containing nitrogen to turf or landscape plants in concentrations, rates, or frequencies inconsistent with the following:
  - (a) No more than<< >>four<<<sup>2</sup> [[two]] >>pounds of nitrogen per 1,000-square-foot area per calendar year; and
  - (b) No more than one pound of nitrogen per 1,000-square-foot area per application of solid fertilizer; and
  - (c) No more than one-half pound of nitrogen per 1,000-square-foot area per application of liquid fertilizer; and
  - (d) Granular fertilizers containing nitrogen shall contain no less than 65 percent slow-release nitrogen per guaranteed analysis label.

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<sup>2</sup> The differences between the substitute and the original item are indicated as follows: Words double stricken through and/or [[double bracketed]] are deleted, words double underlined and/or >>double arrowed<< are added.

(4) Limitations on phosphorus. No fertilizer containing phosphorus shall be applied to turf or landscape plants, except where a phosphorus deficiency has been demonstrated in the soil underlying the respective turf and landscape plants by a soil analysis test performed by a State of Florida certified laboratory. Any person who obtains a soil analysis test showing a phosphorus deficiency and who wishes to apply phosphorus to turf or landscape plants shall provide a copy of the test results to the Department prior to the application of phosphorus. Phosphorus shall not be applied in excess of the amount needed to correct the deficiency as indicated by said test results. Where a deficiency has been verified, phosphorus fertilizer shall not be applied at application rates that exceed 0.25 lbs of phosphorus per 1,000 square feet per application and not to exceed 0.50 lbs. of phosphorus per 1,000 square feet per year.

(D) Application practices and handling of spills on impervious surfaces.

(1) Spreader deflector shields are required when fertilizing via rotary (broadcast) spreaders. Deflectors must be positioned such that fertilizer granules are deflected away from all impervious surfaces, fertilizer-free zones, and water bodies, including wetlands.

(2) Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces.

(3) Any fertilizer applied, spilled, or deposited, either intentionally or accidentally, on any impervious surface shall be immediately and completely removed to the greatest extent practicable.

(4) Fertilizer released on an impervious surface must be immediately contained and either legally applied, in a manner consistent with this chapter, to turf or any other legal site, or returned to the original or other appropriate container.

(5) No fertilizer shall be washed, swept, or blown off impervious surfaces into stormwater drains, ditches, conveyances, or waterbodies.

**Sec. 18C-5. - Management of grass clippings and vegetative matter.**

- (A) Grass clippings, vegetative material, vegetative debris, and any mowed material shall not be washed, swept, deposited, or blown off into stormwater drains, ditches, conveyances, water bodies, canals, ponds, streams, water courses, lakes, wetlands, sidewalks, or roadways.
- (B) Any material that is accidentally so deposited shall be immediately removed to the maximum extent practicable.

**Section 18C-6. – Training for applicators.**

- (A) By July 31, 2021, each commercial and institutional applicator shall successfully complete and abide by the six-hour training program in the “Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries” offered by the Florida Department of Environmental Protection through the University of Florida Extension “Florida-Friendly Landscapes” program, or an approved equivalent.
- (B) Private, non-commercial applicators are encouraged to follow the recommendations of the University of Florida IFAS Florida Yards and Neighborhoods program when applying fertilizers.

**Section 18C-7. - Licensing of commercial applicators.**

- (A) All commercial applicators shall successfully complete training and continuing education requirements in the “Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries” offered by the Florida Department of Environmental Protection through the University of Florida IF AS “Florida -Friendly Landscapes” program, or an approved equivalent program, prior to obtaining or renewing a Local Business Tax Certificate or equivalent for any category of occupation which may apply Fertilizer to turf or landscape plants. The provisions of this paragraph shall apply to Local Business Tax Certificates that are obtained or renewed after July 31, 2021.
- (B) By July 31, 2021, all commercial applicators shall have, and carry in their possession at all times when applying fertilizer,

evidence of certification by the Florida Department of Agriculture and Consumer Services as a commercial applicator in accordance with Rule 5E-14.117(18) of the Florida Administrative Code. In addition, commercial applicators shall have at least one employee present onsite during fertilizer application who has a “Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries” training certificate.

- (C) As of July 31, 2021, each business in any category of occupation that may apply fertilizer to turf or landscape plants, which includes, but is not limited to, residential lawns, golf courses, commercial properties, and multi-family and condominium properties, shall have at least one employee with a “Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries” training certificate prior to the business owner obtaining a Local Business Tax Certificate. The owner of each such business shall be responsible for providing proof of completion of the program to the Tax Collector’s Office at the time of obtaining a Local Business Tax Certificate.

**Sec. 18C-8. Requirements related to golf courses, athletic fields, specialized turf, and parks.**

- (A) *New and Renovated Golf Courses.* All new golf courses, all existing golf courses, where more than 50 percent of the total golf course turf has been renovated or redesigned after January 1, 2022; and all portions of golf course turf which are renovated or redesigned after January 1, 2022, shall meet all the following requirements. These requirements shall apply to both public and private golf courses.
- (1) Best management practices are encouraged to be incorporated, as provided in “Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses,” published by the Florida Department of Environmental Protection, as may be amended.
  - (2) Golf courses shall submit design plans to the Department that minimize areas that require golf course turf and maximize the use of (i) native trees, shrubs, or groundcover landscaping; (ii) Florida-friendly trees, shrubs, or groundcover landscaping, or (iii) wetlands or other stormwater retention areas.
  - (3) A certified turfgrass species, such as Bermuda, Paspalum, St. Augustine, or Zoysia, or other certified

turfgrass species, in consultation with the Director, that requires a comparably low amount of fertilization and water consumption, shall be used for all golf course turf areas.

- (4) Green infrastructure elements or low impact development (LID) design shall be incorporated into the design of the golf course's drainage system and in allowing ample, uncompacted areas for tree root growth.
- (5) Fertilizer shall not be applied within 10 feet of any of the following, which area shall be referred to as a "fertilizer-free zone":
  - (i) from the top of the bank of any pond, stream, watercourse, lake, surface waterbody, stormwater drain, or canal;
  - (ii) any wetland as defined in accordance with chapter 62-340 of the Florida Administrative Code;
  - (iii) from the top of a seawall; or
  - (iv) Biscayne Bay.

(B) *New and Renovated Athletic Fields.* All new athletic fields and all existing athletic fields, where more than 50 percent of the total athletic field has been renovated or redesigned after January 1, 2022, shall meet all the following requirements:

- (1) Best management practices shall be incorporated for landscaping through the use of native and Florida-friendly trees, shrubs and ground cover landscaping.
- (2) Green infrastructure elements or low impact development (LID) design shall be incorporated into the design of the athletic field's drainage system and in allowing ample, uncompacted areas for tree root growth.
- (3) Fertilizer shall not be applied within 10 feet of any of the following, which area shall be referred to as a "fertilizer-free zone":
  - (i) from the top of the bank of any pond, stream, watercourse, lake, surface waterbody, stormwater drain, or canal;
  - (ii) any wetland as defined in accordance with chapter 62-340 of the Florida Administrative Code;
  - (iii) from the top of a seawall; or
  - (iv) Biscayne Bay.



- (C) Renovated Parks. All existing parks, where more than 50 percent of the total park has been renovated or redesigned after January 1, 2022, shall meet all the following requirements:
- (1) Best management practices for landscaping shall be incorporated through the use of native and Florida-friendly trees, shrubs and ground cover landscaping.
  - (2) Green infrastructure elements or low impact development (LID) design shall be incorporated into the design of the park's drainage system and in allowing ample, uncompacted areas for tree root growth.
  - (3) Fertilizer shall not be applied within 10 feet of any of the following, which area shall be referred to as a "fertilizer-free zone":
    - (i) from the top of the bank of any pond, stream, watercourse, lake, surface waterbody, stormwater drain, or canal;
    - (ii) any wetland as defined in accordance with chapter 62-340 of the Florida Administrative Code;
    - (iii) from the top of a seawall; or
    - (iv) Biscayne Bay.
- (D) Fertilizer management plan for renovations. All renovations to any golf course, athletic field, or park shall require preparation of a management plan with fertilization strategies, chemical-mixes and distribution/utilization regimes to reduce nitrogen, and phosphorus-related nutrient load, and said management plan shall be provided to the Department upon request. Said management plans may be modified, with notice to the Department, and modified management plans shall be provided to the Department upon request.
- (E) Fertilizers applied to parks and athletic fields shall be formulated and applied in accordance with requirements and directions provided by rule 5E-1.003(3)(b), Florida Administrative Code, as may be amended.
- (F) Fertilizers applied to turf and landscape plants shall be formulated and applied in accordance with requirements and directions provided by rule 5E-1.003(4), Florida Administrative Code, Labeling Requirements For Urban Turf Fertilizers, as may be amended.

- (G) Fertilizers labeled for sports turf at golf courses, parks, and athletic fields shall:
- (1) Have directions for use not to exceed rates recommended in the document titled SL 191 “Recommendations for N, P, K, and Mg for Golf Course and Athletic Field Fertilization Based on Mehlich III Extractant,” dated March 2007, as may be amended; and
  - (2) Have directions for use in accordance with the recommendations in “BMPs for the Enhancement of Environmental Quality of Florida Golf Courses” published by the Florida Department of Environmental Protection, dated October 2012. This does not exempt applicators at these sites from the required basic Green Industry BMP training.
- (H) *Soil tests and records.* All public and private golf courses, public athletic fields, public parks with specialized turf, and public parks with high-impact areas shall administer a nutrient soil test at least once every six months and shall maintain records of monthly fertilizer usage. For the required nutrient soil tests, golf courses shall test at least three greens and three fairways, and if a golf course abuts or is intersected by a water body, at least one test shall be from the area abutting or intersected by the water body. Nutrient soil test results and monthly fertilizer-use for the preceding 12-month period shall be provided to the Director, upon request.
- (I) *Quarterly reports for golf courses.* Beginning on January 1, 2022, all public and private golf courses are required to submit quarterly reports to the Department, in a form approved by the Director, which shall address fertilizer usage, low-maintenance landscaping, compliance with the requirements of this chapter, fertilizer-related training, actions taken to voluntarily reduce fertilizer usage beyond the requirements of this chapter, and incidents such as algae blooms or fish kills.
- (J) All public and private golf courses are encouraged to follow the provisions of the Florida Department of Environmental Protection document, titled “BMPs for the Enhancement of Environmental Quality on Florida Golf Courses, January 2012,” as may be amended.

- (K) High impact areas in public parks and athletic fields are encouraged to follow the provisions of the “Florida Green Industries Best Management Practices for Protection of Water Resources in Florida, December 2008,” as may be amended.
- (L) Waivers. The Director may approve limited waivers of the requirements set forth in this section in accordance with all of the following:
- (1) The request is submitted in writing.
  - (2) The request details the project’s design and details and what unnecessary hardship or practical difficulty the applicant would incur from compliance with the requirements.
  - (3) The Director determines that the applicant made a good faith effort to achieve substantial compliance with the applicable requirements, that the applicant would incur an unnecessary hardship or practical difficulty from compliance with the requirements.

**Sec. 18C-9 - Enforcement.**

- (A) The Department Director may execute any and all powers provided in chapter 24, including but not limited to the authority to issue orders to cease and desist, and orders to restore the air, waters, ground and property, including animal, plant and aquatic life, of the County in accordance with the provisions of chapter 24.
- (B) Violations of this chapter may be punished by fines in accordance with chapter 8CC and may be addressed by any penalties or remedies provided in section 1-5, chapter 8CC, and chapter 24, as applicable.
- (C) Failure to comply with the provisions of this chapter shall constitute a violation. All matters enumerated and prohibited herein shall be independent of each other, and the violation of any one of the provisions of this chapter shall be a separate violation of this chapter.
- (D) Pursuant to section 8CC-3, each municipality shall have the authority to designate code inspectors to issue civil violation notices for violations of this chapter.
- (E) All funds available to or recovered by the County from enforcement and damage actions and claims pursuant to this

chapter shall be deposited into the Biscayne Bay Environmental Enhancement Trust Fund, and disbursements of said monies may only be made in accordance with section 24-40(4).

**Sec. 18C-10. - Conflicts with other ordinances or regulations.**

If this chapter conflicts with other ordinances or regulations, the more stringent limitation or requirement shall govern or prevail to the extent of the conflict.<<

**Section 3.** Section 8CC-10 of the Code of Miami-Dade County, Florida, is hereby amended to read as follows:

**Sec. 8CC-10. Schedule of civil penalties.**

The following table shows the sections of this Code, as they may be amended from time to time, which may be enforced pursuant to the provisions of this chapter; and the dollar amount of civil penalty for the violation of these sections as they may be amended.

\* \* \*

Code Section	Description of Violation	Civil Penalty
* * *		
>> <u>Ch. 18C</u>	<u>All chapter 18C violations by commercial applicator or private institutional applicator</u>	<u>500.00&lt;&lt;</u>
>> <u>Ch. 18C</u>	<u>All other chapter 18C violations</u>	<u>50.00&lt;&lt;</u>
* * *		

**Section 4.**     *Educational campaign required.* This Board hereby directs the County Mayor or County Mayor’s designee to conduct an educational campaign for residents, property owners, and any individuals and businesses that work with fertilizer in the County, to educate and inform them as to the policies and regulations contained within this ordinance, together with environmentally sound landscaping practices that may support the policies and regulations contained within this ordinance.

**Section 5.**     *Additional requirements for County-owned parks.* Although this ordinance exempts golf courses from certain limitations on the use of phosphorus, the County Mayor or County Mayor’s designee is nevertheless directed to not use fertilizer containing phosphorus at any County-owned golf courses during the annual “restricted period” between May 15 and October 31, in order to reduce the use of fertilizer on County-owned golf courses to a greater extent than what may be required of private parties and also to demonstrate that golf courses can reduce their phosphorus fertilization and still be well-maintained. >>The provisions of this section may be modified by a resolution of this Board.<<

In addition, in order to further reduce fertilizer needs in County-owned parks, the County Mayor or County Mayor’s designee is directed to (1) survey County-owned parks to determine where there may be unused, non-playable lawn areas, and (2) make recommendations as to where lawn in such areas could be feasibly replaced with mulch, shrubs, trees, or other landscaping or features, provided that the replacement is expected to require less fertilization than the respective lawn area. The County Mayor or County Mayor’s designee shall prepare a written report for this Board with the above-mentioned information and recommendations, together with estimated costs

and a proposed funding source, and the County Mayor or County Mayor's designee shall place the completed report on an agenda of this Board pursuant to Ordinance No. 14-65 within 180 days of the effective date of this ordinance.

**Section 6.** *County testing related to golf courses and water bodies.* The County Mayor or County Mayor's designee is directed to develop a water quality testing plan related to water bodies, including groundwater, that may abut or be located in the vicinity of golf courses, parks, and athletic fields. The County Mayor or County Mayor's designee shall prepare a written report for this Board with the above-mentioned water quality testing plan, together with estimated costs and a proposed funding source, and the County Mayor or County Mayor's designee shall place the completed report on an agenda of this Board pursuant to Ordinance No. 14-65 within 120 days of the effective date of this ordinance.

**Section 7.** The County Mayor or County Mayor's designee is directed to not enforce the restricted period until >>after October 31, 2021<< [~~July 31, 2021~~].

**Section 8.** If any section, subsection, sentence, clause or provision of this ordinance is held invalid, the remainder of this ordinance shall not be affected by such invalidity.

**Section 9.** It is the intention of the Board of County Commissioners, and it is hereby ordained that the provisions of this ordinance, including any sunset provision, shall become and be made a part of the Code of Miami-Dade County, Florida. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

**Section 10.** This ordinance shall become effective ten (10) days after the date of enactment unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board.

PASSED AND ADOPTED:

Approved by County Attorney as  
to form and legal sufficiency:


Prepared by:

Abbie Schwaderer-Raurell  
Dennis A. Kerbel

Co-Prime Sponsors: Commissioner Eileen Higgins  
Commissioner Rebeca Sosa  
Co-Sponsor: Commissioner Sally A. Heyman