

Florida-Friendly Use of Fertilizer on Urban Landscapes

1. FINDINGS

As a result of impairment to [municipality's] surface waters caused by excessive nutrients, or, as a result of increasing levels of nitrogen in the surface and/or ground water within the aquifers or springs within the boundaries of [municipality], the governing body of [municipality] has determined that the use of fertilizers on lands within the county creates a risk to contributing to adverse effects on surface and/or ground water. Accordingly, the [governing board] of the [municipality] finds that additional management measures than are otherwise contained in the most recent edition of the "*Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries, 2015*" may be required by this ordinance.

2. PURPOSE AND INTENT

This Ordinance regulates the proper use of fertilizers by any applicator; requires proper training of Commercial and Institutional Fertilizer Applicators; establishes training and licensing requirements; establishes a Prohibited Application Period; specifies allowable fertilizer application rates and methods, fertilizer-free zones, low maintenance zones, and exemptions. The Ordinance requires the use of Best Management Practices, which provide specific management guidelines to minimize negative secondary and cumulative environmental effects associated with the misuse of fertilizers. These secondary and cumulative effects have been observed in and on [municipality's] natural and constructed stormwater conveyances, rivers, creeks, canals, springs, lakes, estuaries and other water bodies. Collectively, these water bodies are an asset critical to the environmental, recreational, cultural and economic well-being of the [municipality's] residents and the health of the public. Overgrowth of algae and vegetation hinder the effectiveness of flood attenuation provided by natural and constructed stormwater conveyances. Regulation of nutrients, including both phosphorous and nitrogen contained in fertilizer, will help improve and maintain water and habitat quality.

3. DEFINITIONS

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

Administrator means the municipal administrator, or an administrative official of the municipal government designated by the municipal administrator to administer and enforce the provisions of this article.

Application or *Apply* means the actual physical deposit of fertilizer to turf or landscape plants.

Applicator means any Person who applies fertilizer on turf and/or landscape plants in the municipality.

Board or Governing Board means [municipality's] council or commission.

Best Management Practices means turf and landscape practices, or combination of practices based on research, field-testing, and expert review, determined to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality, conserving water supplies and protecting natural resources.

Code Enforcement Officer, Official, or Inspector means any designated employee or agent of the county whose duty it is to enforce codes and ordinances enacted by [municipality].

Commercial Fertilizer Applicator, except as provided in 482.1562(9) F.S., means any person who applies fertilizer for payment or other consideration to property not owned by the person or firm applying the fertilizer or the employer of the applicator.

County means the unincorporated areas of Miami-Dade County, Florida.

Fertilize, Fertilizing, or Fertilization means the act of applying fertilizer to turf, specialized turf, or landscape plants.

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.

Guaranteed Analysis means the percentage of plant nutrients or measures of neutralizing capability claimed to be present in a fertilizer.

Institutional Applicator means any person, other than a private, non-commercial or a Commercial Applicator (unless such definitions also apply under the circumstances), that applies fertilizer for the purpose of maintaining turf and/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 and/or common ownership.

Impervious Surface means a surface that has been compacted or covered with a layer of material so that it is highly resistant or prevents infiltration by stormwater. It includes roofed areas and surfaces such as compacted sand, limerock, or clay, as well as conventionally surfaced streets, sidewalks, parking lots, and other similar surfaces.

Landscape Plant means any native or exotic tree, shrub, or groundcover (excluding turf).

Low Maintenance Zone means an area a minimum of ten (10) feet wide adjacent to surface waters which is planted and managed in order to minimize the need for fertilization, watering, mowing, etc.

Miami-Dade County Approved Best Management Practices Training Program means a training program approved per 403.9338 F.S., or any more stringent requirements set forth in this Article

that includes the most current version of the Florida Department of Environmental Protection's "Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries, 2015," as revised, and approved by the county Administrator.

Pasture means land used for livestock grazing that is managed to provide feed value.

Person means any natural person, business, corporation, limited liability company, partnership, limited partnership, association, club, organizations, and/or any group of people acting as an organized entity.

Prohibited Application Period means the time period during which a Flood Watch or Warning, or a Tropical Storm Watch or Warning, or a Hurricane Watch or Warning is in effect for any portion of the county, issued by the National Weather Service, or if heavy rain is likely.

Restricted Application Period means June 1 to September 30.

Saturated Soil means a soil in which the voids are filled with water. Saturation does not require flow. For the purposes of this ordinance, soils shall be considered saturation if standing water is present or the pressure of a person standing on the soil causes the release of free water.

Slow Release, Controlled Release, Timed Release, Slowly Available, or Water Insoluble Nitrogen means nitrogen in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant longer than a reference rapid or quick release product.

Sports Turf means grass used for athletic fields, golf course practice and play areas, and other similar activities.

Surface Waters as defined by the Florida Department of Environmental Protection (Fla. Admin. Code 62-340) means waters on the surface of the earth, contained in bunds created naturally or artificially, including the Atlantic Ocean, bays, bayous, sounds, estuaries, lagoons, lakes, ponds, impoundments, rivers, streams, springs, creeks, branches, sloughs, tributaries, canals, and ditches.

Turf, Sod, or Lawn means a piece of grass-covered soil held together by the roots of the grass.

Urban Landscape means pervious areas on residential, commercial, industrial, institutional, highway rights-of-way, or other nonagricultural lands that are planted with turf or horticultural plants.

Vegetable Garden means an area dedicated to the cultivation of edible plants.

4. APPLICABILITY

This Ordinance shall be applicable to and shall regulate any and all applicators of fertilizer and areas of application of fertilizer within the area of [municipality], unless such applicator is specifically exempted by the terms of this Ordinance from the regulatory provisions of this Ordinance. This Ordinance shall be prospective only and shall not impair any existing contracts.

5. TIMING OF FERTILIZER APPLICATION

(a) No applicator shall apply fertilizers containing nitrogen and/or phosphorous to turf and/or landscape plants during the Prohibited Application Period, or to saturated soils. In addition, fertilizer containing nitrogen or phosphorous shall not be applied to turf or landscape plants during the Restricted Application Period, which is defined as June 1 to September 30.

(b) Fertilizer shall only be applied to actively growing turf.

(c) Fertilizer containing nitrogen or phosphorous shall not be applied before seeding or sodding a site, and shall not be applied for the first 30 days after seeding or sodding, except when hydro-seeding for temporary or permanent erosion control in an emergency situation (wildfire, etc.), or in accordance with the Stormwater Pollution Prevention Plan for that site.

6. FERTILIZER FREE ZONES

Fertilizer shall not be applied within fifteen (15) feet of any pond, stream, watercourse, lake, canal, or wetland as defined by the Florida Department of Environmental Protection (Fla. Admin. Code 62-340) or from the top of a seawall. If more stringent County Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. Newly planted turf and/or landscape plants may be fertilized in this Zone only for a sixty (60) day period beginning 30 days after planting if needed to allow the plants to become well established. Caution shall be used to prevent direct deposition of nutrients into the water.

7. LOW MAINTENANCE ZONES

A voluntary ten (10) foot low maintenance zone is strongly recommended, but not mandated, from any pond, stream, water course, lake, wetland, or from the top of a seawall. A swale/berm system is recommended for installation at the landward edge of this low maintenance zone to capture and filter runoff. If more stringent County Code regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. No mowed or cut vegetative material may be deposited or left remaining in this zone or deposited in the water. Care should be taken to prevent the over-spray of aquatic weed products in this zone.

8. FERTILIZER CONTENT AND APPLICATION RATES

(a) Fertilizers applied to turf and/or landscape plants within the county shall be applied in accordance with directions provided by Rule 5E-1.003(2), Florida Administrative Code, Labeling Requirements for Urban Turf Fertilizers.

(b) Nitrogen and/or phosphorous fertilizer shall not be applied to turf or landscape plants except as provided in (a) above for turf, or in UF/IFAS recommendations for landscape plants, vegetable

gardens, and fruit trees and shrubs, unless a soil or tissue deficiency has been verified by an approved test.

(c) Nitrogen shall not be applied at an application rate greater than 0.5 lbs of readily available nitrogen per one thousand (1,000) square feet at any one time based on the soluble fraction of formulated fertilizer, with no more than one (1) pound total nitrogen per one thousand (1,000) square feet applied at any one time, and not to exceed the nitrogen recommendations set forth below on an annual basis:

Grass species	Maximum N application ¹ rate (lbs/1,000 sq ft/Year)
Bahiagrass	4
Bermudagrass	5
Centipedegrass	3
St. Augustinegrass	4
Zoysia	4.5

(d) No phosphorous fertilizer shall be applied to existing turf and/or landscape plants within the county at application rates which exceed 0.25 pounds phosphorous per one thousand (1,000) square feet per application nor exceed 0.50 pounds phosphorous per one thousand (1,000) square feet per year.

(e) The nitrogen content of fertilizer applied to turf or landscape plans within the county shall contain at least 50% slow release, controlled release, timed release, slowly available, or water insoluble nitrogen per guaranteed analysis label. Caution shall be used to prevent direct deposition of nutrients in the water.

(f) Fertilizer should be applied to turf and/or landscape at the lowest rate necessary.

9. SPORTS TURF AT GOLF COURSES, PARKS, AND ATHLETIC FIELDS

(a) 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 SL191 “*Recommendations for N, P, K and Mg for Golf Course and Athletic Field Fertilization Based on Mehlich I Extractant*”, dated March 2007, which is hereby adopted and incorporated by reference into this rule.

2. Have directions for use in accordance with the recommendations in “*BMP’s for the Enhancement of Environmental Quality on Florida Golf Courses*”, published by the Florida Department of Environmental Protection, dated October 2012. Note that this does not exempt applicators at these sites from the required basic Green Industry BMP training.

¹ According to Fla. Admin. Code 5E-1.003, the maximum rate of N per 1,000 square feet per year for Bermudagrass for southern Florida is 7 lbs. For St. Augustinegrass it is 6 lbs.

10. APPLICATION PRACTICES

- (a) 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.
- (b) Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces.
- (c) 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.
- (d) Fertilizer released on an impervious surface must be immediately contained and either legally applied to turf or any other legal site or returned to the original or other appropriate container.
- (e) In no case shall fertilizer be washed, swept, or blown off impervious surfaces into stormwater drains, ditches, conveyances or water bodies.

11. MANAGEMENT OF GRASS CLIPPINGS AND VEGETATIVE MATTER

In no case shall grass clippings, vegetative material, and/or vegetative debris be washed, swept, or blown off into stormwater drains, ditches, conveyances, water bodies, wetlands, or sidewalks or roadways. Any material that is accidentally so deposited shall be immediately removed to the maximum extent practicable.

12. EXEMPTIONS

The provisions set forth above in this Ordinance shall not apply to:

- (a) Bona fide farm operations as defined in the Florida Right to Farm Act, Section 823.14 Florida Statutes provided that fertilizers are applied in accordance with the appropriate Best Management Practices Manual adopted by the state Department of Agriculture and Consumer Services, office of agricultural water policy for the crop in question;
- (b) Other properties not subject to or covered under the Florida Right to Farm Act that have pastures for grazing livestock provided that fertilizers are applied in accordance with the appropriate Best Management Practices Manual adopted by the state Department of Agriculture and Consumer Services, office of agricultural water policy for the crop in question;
- (c) Any lands used for bona fide scientific research including, but not limited to, research on the effect of fertilizer use on urban stormwater, water quality, agronomics, or horticulture.

(d) Vegetable gardens, owned by individual property owners or a community, provided that fertilizer application rates do not exceed UF/IFAS recommendations according to SP103 Florida Vegetable Gardening Guide, December 2008, as updated.

13. TRAINING

(a) All commercial and institutional applicators of fertilizer within the [municipality's] jurisdiction, shall abide by and successfully complete 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 required to follow the recommendations of the University Florida IFAS *Florida Yards and Neighborhoods* program when applying fertilizers.

14. LICENSING OF COMMERCIAL APPLICATORS

(a) Within three hundred sixty-five (365) days of the adoption of this ordinance, or within ninety (90) days of initial employment, whichever occurs later,, all commercial applicators of fertilizer within the [municipal] jurisdiction shall abide by and 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 IFAS "Florida-Friendly Landscapes" program, or an approved equivalent program, prior to obtaining a [municipal] Business Tax Certificate or equivalent for any category of occupation which may apply any fertilizer to turf and/or landscape plants. Commercial Fertilizer Applicators shall provide proof of completion of the program to the [municipal office] within three hundred sixty-five (365) days of the effective date of this ordinance.

(b) Within three hundred sixty-five (365) days of the adoption of this ordinance, or within ninety (90) days, whichever occurs later, all commercial applicators of fertilizer within the [municipality's] jurisdiction 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 Fertilizer Applicator per 5E-14.117(18) F.A.C.

(c) All businesses applying fertilizer to turf and/or landscape plants (including but not limited to residential lawns, golf courses, commercial properties, and multi-family and condominium properties) must ensure that at least one employee has 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 or equivalent. Owners for any category of occupation which may apply any fertilizer to Turf and/or Landscape Plants shall provide proof of completion of the program to the [municipal office].

15. SEVERABILITY

If any section, sentence, phrase, word, or portion of this Ordinance is determined to be invalid, unlawful, or unconstitutional, said determination shall not be held to invalidate or impair the validity, force, or effect, of any other section, sentence, phrase, word, or portion of this Ordinance not otherwise determined to be invalid, unlawful, or unconstitutional.

16. ENFORCEMENT

Funds generated by penalties imposed under this section shall be used by [municipality] for the administration and enforcement of section 403.9337, Florida Statutes, and the corresponding sections of this ordinance, and to further water conservation and nonpoint pollution prevention activities.

17. PENALTIES

Violation of any provision of this article shall be subject to the following penalties:

- (a) *First violation.* Written notification and education.
- (b) *Second violation.* Fifty dollars (\$50.00).
- (c) *Third violation.* One hundred dollars (\$100.00).
- (d) *Fourth and subsequent violation(s).* Five hundred dollars (\$500.00) increasing 10-fold with each violation.

Each day in violation of this article within a three hundred sixty-five (365) days period, beginning the date of the first violation, shall constitute a separate offense. The board may take any other appropriate legal action, including but not limited to emergency injunctive action, to enforce the provisions of this article.