

DEFENDING, PROTECTING, AND PRESERVING MIAMI AND THE SURROUNDING WATERS THROUGH CITIZENS INVOLVEMENT AND COMMUNITY ACTION. MIAMI WATERKEEPER WORKS TO ENSURE SWIMMABLE, DRINKABLE, FISHABLE WATER FOR ALL.

June 14, 2019

Re: Implementing and Enforcing a Fertilizer Ordinance

# Fertilizer Ordinances: Good for the Environment & Economy

South Florida's waterways are exquisitely sensitive to nutrients, and some have even been designated as "impaired" for nutrient pollution. Fertilizer ordinances that limit the time, extent, and type of fertilizer allowed to be applied within a municipality's borders offer a way to reduce the discharge of nutrients like nitrogen and phosphorus to water bodies where they may significantly degrade the water and lead to, among other things, algae blooms. In addition to their ecological damage, harmful algae blooms can have a devastating effect on Florida's coastal economy, leading to health care costs from hospital and doctor visits, losses in tourism revenue, and clean-up activities. Research compiled by the Florida Department of Health shows harmful algae blooms can cause millions of dollars in economic damages to affected Florida coastal communities. Enforcing fertilizer ordinances may be difficult in certain circumstances, particularly concerning private citizens on private property.

Miami Waterkeeper's model fertilizer ordinance proposes some key measures including, but not limited to:

- 1) A Summer black-out period for fertilizer application;
- 2) Limitations on the amount of fertilizer that can applied outside the black-out period;
- 3) A mandatory set back zone for fertilizer applications on waterfront properties;
- 4) Commercial applicator education and registration provisions; and
- 5) Penalties for non-compliance.

### **Existing Municipal Fertilizer Ordinances in the State of Florida**

Many counties and municipalities throughout the state have passed similar ordinances including: Alachua County, Bonita Springs, unincorporated Brevard County, Cape Canaveral, Cocoa Beach, Indialantic, Indian Harbour Beach, Malabar, Melbourne Beach, Palm Bay, and Satellite Beach. A map of these municipalities is included below.











This map illustrates municipalities, including counties and cities, throughout the state with existing ordinances controlling fertilizer application.

### **Fertilizer Ordinance Enforcement**

Fertilizer ordinances are enforced just as other provisions of municipal code would be. The Fourth Amendment to the United States Constitution prohibits the government from engaging in "unreasonable" searches and seizures; in *Michigan v. Tyler*, 536 U.S. 499 (1978) the United States Supreme Court held that a warrant was required (absent limited urgent circumstances) from any governmental official and whatever their motive for entering onto the property. Fla. Stat. §933.21 allows for the application of inspection warrants to identify things like code violations on properties, though it exempts owner-occupied family residences from its provisions; for those properties, a search warrant is required under the more restrictive requirements of Fla. Stat. §933.07.

Therefore, focusing enforcement on commercial fertilizer applicators and properties in many cases would be a more efficient use of municipal resources, especially for those municipalities where most residents use commercial landscaping companies. Based on the actions of other municipalities, particularly Bonita Springs, FL, we can recommend the following enforcement or implementation mechanisms:

- (1) Require landscaping companies that apply fertilizer as part of their services register with the municipality and renew that registration annually. Registration should be contingent on all managers and employees involved with fertilizer application taking the Florida-Friendly Landscaping<sup>TM</sup> training offered by the University of Florida/Institute of Food and Agricultural Science Sciences (UF/IFAS), or an approved equivalent, as required by the ordinance. The UF/IFAS GI-BMP training is available online for free at: https://ffl.ifas.ufl.edu/professionals/BMP\_overview.htm. Registrants would receive a decal with listed expiration date to display on their work vehicle or carry with them on the job.
- (2) Require all merchants within municipal boundaries who sell fertilizer to place placards conspicuously near fertilizer products setting forth the limitations in the ordinance (e.g. no use of fertilizers containing nitrogen of phosphorus from June 1-Sept. 30). The attached placard was developed by Bonita Springs and can be adapted for use by other municipalities based on the ordinance specifics.
- (3) Conduct periodic site audits for commercial applicators to ensure the company and its applicators are licensed and that ordinance requirements are being followed, i.e. at least one applicator on site has gone through UF/IFAS GI-BMP training and they are not violating the ordinance in terms of temporal limitations or fertilizer quantity or type.
- (4) Offer educational opportunities for residents that not only describe the fertilizer ordinance restrictions, but also explain its importance in addressing water quality issues in the municipality and offer a confidential channel for residents to report suspected ordinance violations.
- (5) Ensure that municipal code enforcement officers are trained to recognize possible unlawful fertilizer use, as well as possible environmental indicators of such use (localized algae blooms, fish kills, etc.).

#### **Conclusion**

Miami Waterkeeper's model fertilizer ordinance is intended to be a tool for municipalities. Non-point source pollution like fertilizer runoff is difficult to trace and correlate to degraded water quality conditions. This ordinance is proposed as a first step in protecting nearshore water quality degradation, and should be just one tool in your municipality's environmental management toolkit. However, it is an important first step that dozens of other municipalities have implemented in an effort to address some of the lowest hanging fruit regarding nutrient loads to nearshore waters and their negative ecological and economic impacts.

Should you have any questions about this ordinance or Miami Waterkeeper's efforts to address land-based sources of pollution generally, please do not hesitate to contact us.

Thank you for your attention to this matter and for your dedication to swimmable, drinkable, fishable water for all of South Florida.

Sincerely,

Kelly Cox, Esq. General Counsel Miami Waterkeeper (305) 905-0856

Kelly@miamiwaterkeeper.org www.miamiwaterkeeper.org

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

AN ORDINANCE OF THE MAYOR AND COMMISSION OF NORTH BAY VILLAGE, FLORIDA, MODIFYING THE VILLAGE CODE OF ORDINANCES BY CREATING CHAPTER "USE OF FLORIDA-FRIENDLY FERTILIZERS," PERMITTING FOR CERTAIN TYPES OF, AND THE MANNERS BY WHICH, FERTILIZERS CAN BE USED IN THE COMMUNITY; PROVIDING FOR LICENSING, TRAINING, ENFORCEMENT, AND PENALTIES; PROVIDING FOR **PROVIDING FOR** CONFLICTS: SEVERABILITY: PROVIDING FOR INCLUSION IN THE CODE; PROVIDING FOR IMPLEMENTATION; AND PROVIDING FOR AN **EFFECTIVE DATE** 

**WHEREAS**, North Bay Village (the "Village") geographic location places it within an environmentally sensitive area that is susceptible to deterioration based on residential and commercial property maintenance practices; and

WHEREAS, it is recognized that the use of prevalent fertilizers has led and will continue to lead to an impairment to the Village's surface waters caused by excessive nutrients or an increase in the levels of nitrogen in the surface and/or ground water within the aquifers or springs within the boundaries of the Village; and

WHEREAS, the Mayor and Commission have 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; and

WHEREAS, accordingly, the Mayor and Commission finds that additional management measures that are specified in this Ordinance, and 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", are required to protect the waters in, under and around the Village; and

**WHEREAS**, the Village Commission finds that this Ordinance is necessary for the preservation and improvement of the environment, public health, safety and welfare of the Village's residents and visitors and future generations.

# NOW, THEREFORE, IT IS HEREBY ORDAINED BY MAYOR AND COMMISSION OF NORTH BAY VILLAGE, FLORIDA, AS FOLLOWS:

**Section 1. Recitals Adopted.** The foregoing recitals are confirmed, adopted, and incorporated herein and made a part hereof by this reference.

**Section 2. Village Code Amended.** The Code of Ordinance of North Bay Village is hereby amended as follows:

<u>Chapter 102 - Florida-Friendly Use of Fertilizer on Urban Landscapes</u>

§ 102.01 – 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 North Bay Village'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 Village'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.

# § 102.02 – 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 Village Manager, or an administrative official of the Village designated by the Manager 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 Village.

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.

<u>Code Enforcement Officer, Official, or Inspector means any designated employee</u> or agent of the county whose duty it is to enforce codes and ordinances enacted by North Bay Village.

<u>Commercial Fertilizer Applicator</u>, 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. <u>County means the unincorporated areas of Miami-Dade County, Florida.</u>

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.

<u>Guaranteed Analysis means the percentage of plant nutrients or measures of</u> 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.

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

<u>Low Maintenance Zone</u> 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.

<u>Miami-Dade County Approved Best Management Practices Training Program</u> 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

<u>Management Practices for Protection of Water Resources by the Green Industries, 2015," as revised, and approved by the county Administrator.</u>

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.

<u>Prohibited Application Period</u> 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.

<u>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.</u>

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.

<u>Surface Waters</u> 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.

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

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

§ 102.04 – 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 North Bay Village, 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.

# § 102.05 – 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.

## § 102.06 – 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.

### § 102.07 – 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.

# § 102.08 – 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 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) Fertilizer should be applied to turf and/or landscape at the lowest rate necessary. Nitrogen shall not be applied at an application rate greater than 0.7 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:

-1. <del>-1.</del>	
Grass species	Maximum N application rate (lbs/1,000 sq
	ft/Year)
<u>Bahiagrass</u>	<u>4</u>
<u>Bermudagrass</u>	<u>7</u>
Centipedegrass	<u>3</u>
St. Augustinegrass	<u>6</u>
<u>Zoysia</u>	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) 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

<u>Courses</u>", 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.

## § 102.09 – 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.

#### § 102.10 – 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.

### § 102.11 – 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.

# § 102.12 – Training

- (A) All commercial and institutional applicators of fertilizer within North Bay Village'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.

## § 102.13 – Licensing Of Commercial Applicators

- (A) Prior to 1 January 2020, all commercial applicators of fertilizer within North Bay Village's 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 Village 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 North Bay Village Hall within 180 days of the effective date of this ordinance.
- (B) After 31 December 2020, all commercial applicators of fertilizer within the North Bay Village'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 multifamily 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 Village

#### § 102.14 – Enforcement

Funds generated by penalties imposed under this section shall be used by North Bay Village 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.

#### § 102.15 – Penalties

<u>Violation of any provision of this article shall be subject to the following penalties:</u>

- (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 Commission may take any other appropriate legal action, including but not limited to emergency injunctive action, to enforce the provisions of this article.

\* \* \*

<u>Section 3.</u> <u>Conflict.</u> All Sections or parts of Sections of the Code of Ordinances, all ordinances or parts of ordinances, and all Resolutions, or parts of Resolutions, in conflict with this Ordinance are repealed to the extent of such conflict.

Section 4. Severability. That the provisions of this Ordinance are declared to be severable and if any section, sentence, clause or phrase of this Ordinance shall for any reason be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but they shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

<u>Section 5.</u> <u>Inclusion in Code.</u> The provisions of this Ordinance shall become and be made a part of the City Code, that the sections of this Ordinance may be renumbered or relettered to accomplish such intentions, and that the word Ordinance shall be changed to Section or other appropriate word

<u>Section 6.</u> Implementation. The Village Manager, Village Attorney, and Village Clerk are hereby authorized to take such further action as may be needed to implement the purpose and provisions of this Ordinance

<u>Section 7.</u> <u>Effective Date.</u> That this Ordinance shall become effective immediately upon adoption on second reading.

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The foregoing Ordinance was offered	by Commissioner,
who moved its adoption on first reading. Thi and upon being put to a vot	-
Mayor Brent Latham Vice Mayor Marvin Wilmoth Commissioner Jose R. Alvarez Commissioner Andreana Jackson Commissioner Julianna Strout	
PASSED on first reading on this _ of _	, 2019.
PASSED AND ENACTED on second r	reading on this _ day of, 2019
ATTEST:	Brent Latham, Mayor
Elora Riera, Village Clerk	
APPROVED AS TO LEGAL SUFFICIENCY:	
Weiss Serota Helfman Cole & Bierman, PL Village Attorney	