# Florida Department of Environmental Protection

# MODEL ORDINANCE FOR FLORIDA-FRIENDLY FERTILIZER USE ON URBAN LANDSCAPES

# [alternate title: MODEL ORDINANCE FOR FLORIDA-FRIENDLY USE OF FERTILIZER ON URBAN LANDSCAPES] 2010

[Note: Title revision for clarity. There is no defined Florida-Friendly fertilizer product, as timing, chemistry, grade, amount, site-specific conditions and application practices all affect "Florida-friendliness".]

#### **INTRODUCTION**

This attached Model Fertilizer Use Ordinance is another tool to reduce sources of nutrients coming from urban landscapes to reduce the impact of nutrients on Florida's surface and ground waters. Limiting the amount of fertilizer applied to the landscape will reduce the risk of nutrient enrichment of surface and ground waters, but effective nutrient management requires more comprehensive control measures. Such a comprehensive approach is needed that may include, but is not limited to, land planning and low-impact development, site plan design, landscape design, irrigation system design and maintenance, fertilizer application, landscape maintenance, and waste disposal. To assist local governments in improving their existing land development regulations, several "model" ordinances have been developed. These include:

- "Low Impact Design" ordinances which seek to reduce the impact of urbanization on our natural resources by stressing "source controls" that either minimize the generation of stormwater or minimize the pollutants that can get into stormwater. For example, promoting development designs that minimizes clearing of natural vegetation and the compaction of urban soils. A Model Springs Protection Code was developed by DCA, DEP, and other stakeholders that includes specific Land Development Regulation recommendations that promote Low Impact Design. This Model Code is available as Chapter 5 in *Protecting Florida's Springs: An Implementation Guidebook*. It is available at <a href="http://www.dca.state.fl.us/fdcp/DCP/springs/index.cfm">http://www.dca.state.fl.us/fdcp/DCP/springs/index.cfm</a>.
- "Landscape Ordinances" because design, construction, and maintenance are major determinants in the amount of fertilizer and irrigation that is needed to maintain healthy urban landscapes and minimize adverse impacts on water resources. A model Landscape Ordinance entitled "Guidelines for Model Ordinance Language for Protection of Water Quality and Quantity Using Florida-friendly Lawns and Landscapes" was developed by a group of agencies, industries, and interest groups over a two year period and published in 2003. It was fundamentally an adaptation of earlier water conservation ordinances revised to include water quality protections for compliance with Total Maximum Daily Load (TMDL) or stormwater NPDES permit requirements. The language focused on continuing education of lawn care and landscape professionals, proper planning and supervision during development and construction, and the use of best management practices, including the Florida-Friendly Landscape Program. This model ordinance has been renamed "Florida-Friendly Landscape Program.

Friendly Landscaping<sup>TM</sup> Model Guidelines for Ordinance Language for Protection of Water Quality and Quantity," updated in 2008 and 2010 and may be downloaded from:

http://www.dep.state.fl.us/water/nonpoint/pubs.htm.

• Finally, the 2004 Florida Legislature directed Florida's water management districts to work with interested parties to develop landscape irrigation and Florida-Friendly design standards for new construction (section 373.228, F.S.). Local governments are to use the standards and guidelines when developing landscape irrigation and Florida-Friendly ordinances. The Committee on Landscape Irrigation and Florida-Friendly Design Standards convened and developed the standards. They are published in a booklet called *Landscape Irrigation and Florida-friendly Design Standards* (December 2006). The 2009 Legislature has directed that it be revised in 2011. The current version of this document can be downloaded from: <a href="http://www.dep.state.fl.us/water/waterpolicy/land\_irr.htm">http://www.dep.state.fl.us/water/waterpolicy/land\_irr.htm</a>

# MODEL ORDINANCE FOR FLORIDA-FRIENDLY USE OF FERTILIZER ON URBAN LANDSCAPES (AUGUST 2010)

#### 1. FINDINGS

As a result of impairment to (MUNICIPALITY / COUNTY)'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/county), the governing body of (municipality / county) has determined that the use of fertilizers on lands within (municipality / county) creates a risk to contributing to adverse effects on surface and/or ground water. Accordingly, the governing board of (municipality/county) finds that management measures [Guidance: optional "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, 2008," 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 / COUNTY)'s natural and constructed stormwater conveyances, rivers, creeks, canals, springs, lakes, estuaries and other water bodies. [Guidance: as appropriate] Collectively, these water bodies are an asset critical to the environmental, recreational, cultural and economic well-being of (MUNICIPALITY / COUNTY) 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 phosphorus 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 (MUNICIPALITY / COUNTY) Administrator, or an administrative official of (MUNICIPALITY / COUNTY) government designated by the City/County 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 (MUNICIPALITY / COUNTY).

"Board or Governing Board" means the Board of City/County Commissioners of (MUNICIPALITY / COUNTY), Florida.

"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 (MUNICIPALITY / COUNTY) whose duty it is to enforce codes and ordinances enacted by (MUNICIPALITY / COUNTY).

"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.

"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.

"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 water courses which is planted and managed in order to minimize the need for fertilization, watering, mowing, etc.

"Person" means any natural person, business, corporation, limited liability company, partnership, limited partnership, association, club, organization, 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 (CITY/COUNTY), issued by the National Weather Service, or if heavy rain is likely.

"(MUNICIPALITY / 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, 2008," as revised, and approved by the (MUNICIPALITY / COUNTY) Administrator.

"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 saturated if standing water is present or the pressure of a person standing on the soil causes the release of free water. [Guidance: Some have questioned the enforceability of practical field definitions which should be considered before adoption.]

"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.

"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. For the purposes of this section, agriculture has the same meaning as in s. 570.02.

## 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 / COUNTY), 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.

[Guidance: In 403.9336, the Legislature further finds that local conditions, including variations in the types and quality of water bodies, site-specific soils and geology, and urban or rural densities and

World Meteorological Organization definition of heavy rain: Rainfall greater than or equal to 50 mm (2 inches) in a 24 hour period. <a href="http://severe.worldweather.org/rain/">http://severe.worldweather.org/rain/</a>, and forecast keyword "likely", <a href="http://www.wrh.noaa.gov/sew/MediaGuide/TermsOutlooks">http://www.wrh.noaa.gov/sew/MediaGuide/TermsOutlooks</a> Watches Warnings.pdf.

characteristics, may necessitate the implementation of additional or more stringent fertilizer management practices at the local government level. Local government may adopt additional or more stringent provisions to the model ordinance as provided in 403.9337(2). However, the local government should consider the disadvantages of confusing jurisdictional differences and should clearly demonstrate they meet the required criteria:

- (2) Each county and municipal government located within the watershed of a water body or water segment that is listed as impaired by nutrients pursuant to s. 403.067, shall, at a minimum, adopt the department's Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes. A local government may adopt additional or more stringent standards than the model ordinance if the following criteria are met:
  - (a) The local government has demonstrated, as part of a comprehensive program to address nonpoint sources of nutrient pollution which is science based, and economically and technically feasible, that additional or more stringent standards than the model ordinance are necessary in order to adequately address urban fertilizer contributions to nonpoint source nutrient loading to a water body.
  - O (b) The local government documents that it has considered all relevant scientific information, including input from the department, the institute, the Department of Agriculture and Consumer Services, and the University of Florida Institute of Food and Agricultural Sciences, if provided, on the need for additional or more stringent provisions to address fertilizer use as a contributor to water quality degradation. All documentation must become part of the public record before adoption of the additional or more stringent criteria.]

[Guidance: Florida Statues 125.568(3), 166.048(3), 373.185(3), 720.3075(4), and others provide that a local ordinance, deed restriction or covenant may not prohibit or be enforced so as to prohibit any property owner from implementing Florida-friendly landscaping on his or her land or create any requirement or limitation in conflict with any provision of part II of this chapter {373} or a water shortage order, other order, consumptive use permit, or rule adopted or issued pursuant to Chapter 373 part II.]

[Guidance: Florida Statues 482.156 and 482.1562. Neither the Limited Commercial Landscape Maintenance Certification Program nor the Limited Certification for Urban Landscape Commercial Fertilizer Application allows landscape maintenance workers to make any kind of pesticide applications (including weed control and/or weed and feed products) to any turf areas.]

[Guidance: Florida Statues 482.242, and 487.051 (2), F.S. Regulation of pest control businesses and applicators, and of pesticide use, is preempted to the Florida Department of Agriculture and Consumer Services (FDACS and suspected pesticide misuse should be reported to FDACS.

# 5. TIMING OF FERTILIZER APPLICATION

No applicator shall apply fertilizers containing nitrogen and/or phosphorus to turf and/or landscape plants during the Prohibited Application Period, or to saturated soils.

[Guidance: One of the most controversial issues associated with recent fertilizer ordinances enacted by local governments is the definition of the Prohibited Application Period. Some ordinances have prohibited the application of fertilizer, even slow release formulations, during the summer rainy season, typically June 1 to September 30. The reasoning is that rain occurs frequently, saturating the soil, leading to more runoff. Saturated soils are prone to runoff or leaching with little or no additional water, and pose a higher than normal risk until soil moisture capacity is restored. Fertilizer management is largely about keeping the

nitrogen and/or phosphorus in the root zone where it can be used by plants. Periods of heavy rainfall contribute to leaching, which is washing nutrients out of the root zone, and to runoff, especially in areas with compacted or bare soils and significant slope. Vegetative ground cover is important to minimizing erosion, filtering particulates, and incorporating or promoting the biological transformation of potential pollutants. Many variables influence the relationship between fertilizer rates, vegetation health and nutrient enrichment of surface and ground waters. Accordingly, sound science and carefully reasoned judgment are recommended in determining how to define the Prohibited Application Period.]

# 6. FERTILIZER FREE ZONES

Fertilizer shall not be applied within ten (10) feet of any pond, stream, watercourse, lake, canal, or wetland as defined by the Florida Department of Environmental Protection (Chapter 62-340, Florida Administrative Code) or from the top of a seawall, unless a deflector shield, drop spreader, or liquid applicator with a visible and sharply defined edge, is used, in which case a minimum of 3 feet shall be maintained. If more stringent (MUNICIPALITY / 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 need to allow the plants to become well established. Caution shall be used to prevent direct deposition of nutrients into the water. [Guidance: This zone is a setback to prevent the applicator from inadvertently depositing fertilizer in the water while performing the application. It is not designed as a treatment buffer, and is to be adhered to as a fundamental environmental safety aspect of the applicator's job, regardless of the owner's desires. Some communities have existing residential setbacks of as little as 10 feet from water or seawall. Low maintenance zones, vegetated filter strips, and riparian buffers are strongly encouraged, but such activities are rightly a part of land use planning and may constitute taking if involuntarily applied to built-out properties. Local governments are encouraged to implement these low-impact development practices where feasible.]

## 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 (MUNICIPALITY / 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. [Guidance: Care must be taken to ensure erosion of the surface soil does not occur. Excessive erosion may be a greater pollution hazard than occasional proper applications of fertilizer.]

#### 8. FERTILIZER CONTENT AND APPLICATION RATES

[Guidance: RULE 5E-1.003(2)(d), F.A.C contains the following provisions for golf courses, parks and athletic fields. As such, no additional specific requirements are included for these types of urban turf. The appropriate Best Management Practices listed below must be followed on such sites for nutrient management activities:

(d) 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. Copies may be obtained from the Soil and Water Science Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611 or the following website: <a href="http://edis.ifas.ufl.edu/SS404">http://edis.ifas.ufl.edu/SS404</a>.
- 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 January 2007. Copies may be downloaded from <a href="http://www.dep.state.fl.us/water/nonpoint/pubs.htm">http://www.dep.state.fl.us/water/nonpoint/pubs.htm</a>.

Note that this does not exempt applicators at these sites from the required basic Green Industry BMP training. Information on this is located at <a href="http://fyn.ifas.ufl.edu/professionals/BMP">http://fyn.ifas.ufl.edu/professionals/BMP</a> overview.htm. If other provisions of the ordinance are not appropriate for these sites, such exceptions should be noted.]

- (a) Fertilizers applied to turf and/or landscape plants within (MUNICIPALITY / COUNTY) shall be formulated and applied in accordance with requirements and directions provided by Rule 5E-1.003(2), Florida Administrative Code, *Labeling Requirements For Urban Turf Fertilizers*.
- (b) Fertilizer containing nitrogen or phosphorus 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.
- (c) Nitrogen or phosphorus 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. [Guidance: Soil and tissue tests for phosphorus are normally done by UF/IFAS or another accredited laboratory. IFAS recommendations are available from the County Extension service or <a href="http://solutionsforyourlife.ufl.edu/lawn\_and\_garden/">http://solutionsforyourlife.ufl.edu/lawn\_and\_garden/</a>]

#### 9. 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.

## 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.

# 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;
- (b) other properties not subject to or covered under the Florida Right to Farm Act 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. [Guidance: Limited waivers for special cases such as botanical gardens, etc. should not be considered as less stringent for the purposes of the model as a minimum requirement.]

## 12. TRAINING

- (a) All commercial and institutional applicators of fertilizer within the (un)incorporated area of (MUNICIPALITY / COUNTY), 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 encouraged to follow the recommendations of the University of Florida IFAS *Florida Yards and Neighborhoods* program when applying fertilizers.

[Guidance: A local government may establish a certification/education program for the institutional or private application of fertilizers indicating the completion of an education program for special local requirements not covered in the above programs. It is up to the local government to set a continuing education or renewal provision for these applicators. Persons with statewide FDACS commercial fertilizer certification cannot be required to submit to additional local testing after obtaining the FDACS certificate..]

# 13. LICENSING OF COMMERCIAL APPLICATORS

(a) Prior to 1 January 2014, all commercial applicators of fertilizer within the (un)incorporated area of (MUNICIPALITY / COUNTY), 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 (MUNICIPALITY / COUNTY) Local Business Tax Certificate 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 (MUNICIPALITY / COUNTY) Tax Collector's office within 180 days of the effective date of this ordinance. [Guidance: The ordinance is prospective only. Occasions may exist for a finite time where pre-existing contract terms mandate practices not in accordance with the BMPs. Such terms should be voided at contract expiration.]

- (b) After 31 December, 2013, all commercial applicators of fertilizer within the (un)incorporated area of (MUNICIPALITY / COUNTY), 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. 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 (Municipality/County) Tax Collector's Office. [Guidance: This is an example of an administrative enforcement mechanism. It may be modified to use other local mechanisms as appropriate].

## 14. ENFORCEMENT

[Guidance: Local governments should consider making penalties consistent with their other fines and penalties.]

Funds generated by penalties imposed under this section shall be used by (Municipality/County) 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.