

Memorandum



Date: April 14, 2009

To: Honorable Chairman Dennis C. Moss
and Members, Board of County Commissioners

From: George M. Burgess
County Manager 

Subject: Substitute to Ordinance Creating Chapter 18B of the Code of Miami-Dade County, the Miami-Dade County Right-of-Way Landscape Ordinance .

BPS
Substitute to
Agenda Item No.
1(G)4

This Substitute item differs from the original item as follows:

- **It exempts from the ordinance zoned or dedicated rights-of-way adjacent to land being used for bonafide agricultural activities.**
- **Revises the mulching criteria in order to reflect Florida Friendly landscapes.**

Recommendation

It is recommended that the Board of County Commissioners (BCC) adopt the attached ordinance creating the Miami-Dade County Right-of-Way Landscape Ordinance. This ordinance is being created to supplement outdoor water conservation measures in accordance with the Miami-Dade Water Use Efficiency Plan adopted pursuant to Resolution No. R-468-06.

Scope

This ordinance is of countywide impact.

Fiscal Impact/Funding Source

The proposed ordinance creates no fiscal impact on Miami-Dade County.

Track Record/Monitor

Not applicable.

Background

On April 25, 2006 the Board adopted Resolution R-468-06 which approves the Miami-Dade Water Use Efficiency Plan (Plan) as a part of a larger effort to improve the management of traditional water supplies while improving the efficiency of the County's current water use. The Plan outlines the County's water efficiency measures and best management practices. The South Florida Water Management District (District) approved the Plan as a condition of the County's 20-Year Water Use Permit issued on November 15, 2007. During the first year of the Plan, WASD kicked-off its conservation efforts by implementing a series of efficiency projects. It is calculated that the total water use savings from these projects will yield a savings of 20 million gallons a day through 2026, including indoor and outdoor water use.

In addition to the implementation of the Plan, an Advisory Committee was established in 2007 at the request of the Government Operations and Environment Committee Chair with

the goal of developing countywide guidelines that address water conservation issues and alternative water supplies to assist the County in meeting the conditions of the 20-Year Water Use Permit.

The Advisory Committee is comprised of several county agencies including the departments of Building, Environmental Resources Management, Fire Rescue, Park & Recreation, Planning & Zoning, Public Works, and Water and Sewer; the Building Code Compliance Office and the General Services Administration. In addition to County staff, the Advisory Committee includes representation from stakeholder groups such as the American Society of Landscape Architects, South Florida Builders Association, Sierra Club, Latin Builders Association, Tropical Audubon Society, Association of Cuban Engineers, South Florida Regional Planning Council, Farm Bureau, South Florida Water Management District and the Greater Miami Chamber of Commerce.

On June 5, 2007, the Advisory Committee summarized its findings and presented them to the BCC. These findings included specific recommendations for indoor and outdoor water conservation measures such as the use of high efficiency plumbing fixtures and the use of Florida Friendly landscape principles and irrigation soil moisture sensors. With regards to landscape irrigation, the Advisory Committee's findings were consistent with the "Landscape Irrigation & Florida-Friendly Design Standards" issued by the Florida Department of Environmental Protection in December 2006.

On February 5, 2008 the BCC adopted Ordinance No. 08-14 establishing indoor water conservation measures. The adopted measures call for the installation of efficient water fixtures, appliances and other water saving measures and equipment in new developments. In order to meet the water conservation goals provided in the Plan, the County must also address outdoor water conservation measures.

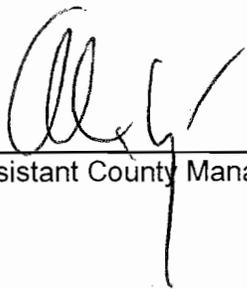
The proposed Right-of-Way Landscape Ordinance assists the County in meeting the outdoor water conservation goals specified in the Plan for the duration of the County's 20-Year Water Use Permit. In the development of the proposed ordinance the staff of the Department of Planning and Zoning has been working closely with the membership of the Advisory Committee to address outdoor water conservation issues and alternative water supplies for the development community as well as with the members of the Community Image Advisory Board and its Tree and Landscape Projects Sub-Committees. Consultation with other municipalities was also facilitated through these committees.

The proposed ordinance seeks to address outdoor water conservation measures in connection with rights-of-ways in both unincorporated Miami-Dade and in municipalities. It creates a Right-of-Way Landscape Ordinance (Chapter 18B) that mirrors the existing Landscape Ordinance contained in Chapter 18A of the Code, including the proposed concurrent amendments to the same. Presently rights-of-ways are not specifically regulated for water conservation measures. Interlocal agreements with the municipalities will be subsequently executed in order to implement the proposed ordinance.

Section 1 of this ordinance establishes Chapter 18B as the Miami-Dade County Right-of-Way Landscape Ordinance and provides applicability, definitions, purpose and intent of the same. It also provides the minimum standards for irrigation, plant material and mulch. More specifically this section:

- Establishes the irrigation sub-section in order to address the design, operation and maintenance of effective irrigation systems. Efforts are made to minimize free water flow conditions and to maximize the uniformity of the system by considering the emitters type, the head spacing, the sprinkler patterns and the water pressure. The section also requires the use of rain switches such as soil moisture sensors.
- Requires that fifty (50) percent of the plant material to be low maintenance and drought tolerant. Canopy trees are preferred where conditions are appropriate.
- Requires that eighty (80) percent of the trees and shrubs provided be listed in the Landscape Manual, the Street Tree Master Plan or the University of Florida's Low Maintenance Landscape Plants for South Florida list.
- Requires mulches to be applied and maintained in accordance with Florida Friendly Landscaping.

This ordinance is complementary to the Miami-Dade Landscape Ordinance and its proposed update.



Assistant County Manager



MEMORANDUM

(Revised)

TO: Honorable Chairman Dennis C. Moss
and Members, Board of County Commissioners

DATE: May 5, 2009

FROM: 
R. A. Cuevas, Jr.
County Attorney

SUBJECT: Agenda Item No.

Please note any items checked.

"4-Day Rule" ("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

Bid waiver requiring County Mayor's written recommendation

Ordinance creating a new board requires detailed County Manager's report for public hearing

Housekeeping item (no policy decision required)

No committee review

Approved _____ Mayor

Agenda Item No.

Veto _____

Override _____

ORDINANCE NO. _____

ORDINANCE CREATING CHAPTER 18B OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA ("CODE"), MIAMI-DADE COUNTY RIGHT-OF-WAY LANDSCAPE ORDINANCE, CREATING SECTIONS 18B-1 THROUGH 18B-4, PROVIDING SEVERABILITY, INCLUSION IN THE CODE AND AN EFFECTIVE DATE

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

Section 1. Chapter 18B of the Code of Miami-Dade County is hereby created as follows:

CHAPTER 18B MIAMI-DADE COUNTY RIGHT-OF-WAY LANDSCAPE ORDINANCE

Sec. 18B-1. Short title and applicability.

- (A) This chapter shall be known and may be cited as the "Miami-Dade County Right-of-Way Landscape Ordinance".
- (B) *Applicability.* This chapter shall be a minimum standard and shall apply to all public rights-of-way both in the incorporated and unincorporated areas except for zoned or dedicated rights-of-way adjacent to lands being used for bonafide agricultural activities as defined in Chapter 18A of this Code. Enforcement in the unincorporated area shall be by the County and in the incorporated areas by the municipalities; provided, any municipality may establish and enforce more stringent regulations as such municipality may deem necessary. In the event the provisions hereof are not enforced within any municipality, the County shall enforce same.

Sec. 18B-2. Purpose and intent.

It is the intent of this chapter to establish minimum landscape standards for public rights-of-way in incorporated and unincorporated Miami-Dade County that enhance, improve and maintain the quality of the landscape, and to:

- (A) Promote Florida Friendly principles through the use of drought-tolerant landscape species, grouping of plant material by water requirements, the use of irrigation systems that conserve the use of potable and nonpotable water supplies and restrictions on the amount of lawn areas.
- (B) Use landscape material, specifically street trees, to visually define the hierarchy of roadways, and to provide shade and a visual edge along roadways.
- (C) Prevent the destruction of the community's existing tree canopy and promote its expansion.
- (D) Provide for the preservation of existing natural forest communities and specimen sized trees in conformance with Section 24-49, as may be amended from time to time; re-establish native habitat where appropriate, and encourage the appropriate use of native plant material in the landscape.
- (E) Promote the use of trees and shrubs for energy conservation by encouraging cooling through the provision of shade and the channeling of breezes, thereby helping to offset global warming and local heat island effects through the added absorption of carbon dioxide and reduction of heat islands.
- (F) Contribute to the processes of air movement, air purification, oxygen regeneration, ground water recharge, and retention of stormwater runoff, as well as aiding in the abatement of noise, glare, heat, air pollution and dust generated by major roadways and intense use areas.
- (G) Reduce the negative impacts of exotic pest plant species and prohibit the use of noxious exotic plants which invade native plant communities.
- (H) Promote the use of trees to protect and buffer the effects of high winds on structures.
- (I) Promote the concept of planting the right tree or plant in the right place to avoid problems such as clogged sewers, cracked sidewalk and power services interruptions.

Sec. 18B-3. Definitions.

The definitions contained in Chapters 18A, Code of Miami-Dade County, Florida, shall apply to this chapter.

Sec. 18B-4. Minimum standards.

(A) *Irrigation.*

- (1) All newly-planted and relocated plant material shall be watered by temporary or permanent irrigation systems until such time as they are established and subsequently on as needed basis to prevent stress and die off in compliance with existing water use restrictions.
- (2) Irrigation systems shall be prohibited within native plant communities and natural forest communities, except for temporary systems needed to establish newly planted material. Temporary irrigation systems shall be disconnected immediately after establishment of plant communities.
- (3) Irrigation systems shall be designed, operated and maintained to:
 - (a) Meet the needs of the plants in the landscape.
 - (b) Conserve water by allowing differential operation schedules based on hydrozone.
 - (c) Consider soil, slope and other site characteristics in order to minimize water waste, including overspray or overflow on to impervious surfaces and other non-vegetated areas, and off-site runoff.
 - (d) Minimize free flow conditions in case of damage or other mechanical failure.
 - (e) Use low trajectory spray heads, and/or low volume water distributing or application devices.
 - (f) Maximize uniformity, considering factors such as:
 - (1) Emitters types,
 - (2) Head spacing,
 - (3) Sprinkler pattern, and
 - (4) Water pressure at the emitter.
 - (g) Use the lowest quality water feasible (graywater shall be used where approved systems are available).
 - (h) Rain switches or other devices, such as soil moisture sensors, shall be used with automatic controls.

- (i) Operate only during hours and on days permitted under Chapter 32 of this Code.
 - (j) Where feasible, drip irrigation or micro-sprinklers shall be used.
- (4) During dry periods, irrigation application rates of between one (1) and one and one-half (1 1/2) inches per week are recommended for turf areas.

(B) *Plant Material and Mulch.*

- (1) At least fifty (50) percent of the plant material shall be low maintenance and drought tolerant. Canopy trees are preferred where conditions are appropriate.
- (2) Eighty (80) percent of the plant material shall be listed in the Miami-Dade Landscape Manual, the Miami-Dade Street Tree Master Plan and/or the University of Florida's Low-Maintenance Landscape Plants for South Florida list.
- (3) Right-of-way landscaping shall include the use of native plant species in order to re-establish an aesthetic regional quality and take advantage of the unique diversity and adaptability of native species to the environmental conditions of South Florida.
- (4) Where feasible, the re-establishment of native habitats shall be incorporated into the landscaping.
- (5) Existing specimen trees, native vegetation (including canopy, understory, and ground cover) and Natural Forest Communities shall be preserved to the maximum extent possible and all requirements of Section 24-49 of the Code of Miami-Dade County.
- (6) In order to conserve water, reduce maintenance, and promote plant health, plant species shall be selected and installed based on their water needs, growth rate and size, and resource inputs. Plants with similar water needs shall be grouped in hydrozones. Adequate growth area (including rooting space), based on natural mature shape and size shall be provided for all plant materials.
- (7) Trees and shrubs shall be planted in the energy conservation zone where feasible, in order to reduce energy consumption by shading buildings and other structures and shall be used to reduce heat island effects by shading paved surfaces.

- (8) Street trees shall be used to shade roadways and provide visual order. Where feasible, selected species shall be used to establish a road hierarchy by defining different road types.
- (9) Prohibited trees shall be removed.
- (10) Special attention shall be given to the use of appropriate species located under, or adjacent to overhead power lines, and near native plant communities and near underground utility lines. Adequate growth area shall be provided for all plant materials.
- (11) Landscaping shall be designed in such a way as to provide safe and unobstructed views at intersections of roadways, driveways, recreational paths and sidewalks in accordance with Section 33-11 of the Code of Miami-Dade County and in compliance with federal and state standards.
- (12) Historic landscapes and landscape features designated by local, State or federal governments shall be preserved.
- (13) Mulches shall be applied and maintained in accordance with the most recent edition of the Florida Yards & Neighborhoods Handbook titled "A Guide to Florida Friendly Landscaping" by the University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS) and available online at <http://www.floridayards.org/landscape/FYN-Handbook.pdf>.
- (14) Cypress mulch shall not be used because its harvest degrades cypress wetlands.

Section 2. 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 3. 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 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 4. 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:

JAC

Prepared by:

CHC

Craig H. Collier