MEMORANDUM

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Agenda Item No. 3(A)

TO: Honorable Chairman Bruno A. Barreiro
and Members, Board of County Commissioners

DATE: January 15, 2008

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

SUBJECT: Ordinance relating to water use efficiency standards

The accompanying ordinance was prepared and placed on the agenda at the request of Commissioner Natacha Seijas.

R. A. Cuevas, Jr.
County Attorney

RAC/bw

Memorandum

MIAMI-DADE COUNTY

Date:

To: Honorable Chairman Bruno A. Barreiro
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Ordinance relating to water use efficiency standards

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The ordinance relating to water use efficiency standards will not have a fiscal impact to Miami-Dade County. The development of the Water Use Efficiency Manual, reviews of Development of Regional Impact (DRI) projects and the public information and outreach activities required in the ordinance will be performed using existing resources.

There will not be an impact to the public except for High Efficiency Appliances, which currently have a higher initial cost. In addition, there will be a fiscal impact to a developer if a DRI project is required to install an alternative water supply, however; the impact will depend on the size and scope of the project.

Susanne M. Torriente
Assistant County Manager

fis00908

MEMORANDUM
(Revised)

TO: Honorable Chairman Bruno A. Barreiro and Members, Board of County Commissioners

DATE: November 6, 2007

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

SUBJECT: Agenda Item No. 4(M)

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 Manager'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

Veto _____

Override _____

Agenda Item No. 4(M)

11-6-07

ORDINANCE NO. _____

ORDINANCE RELATING TO WATER USE EFFICIENCY STANDARDS; CREATING SECTION 8-31 OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA; ADOPTING LOCAL TECHNICAL AMENDMENTS TO FLORIDA BUILDING CODE FOR NEW RESIDENTIAL AND COMMERCIAL DEVELOPMENTS; REVISING AND PROVIDING FOR MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES, FIXTURE FITTINGS AND APPLIANCES; CREATING SECTIONS 32-84, 32-85 AND 32-86 OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA; PROVIDING FOR PUBLICATION OF WATER USE EFFICIENCY STANDARDS MANUAL FOR NEW RESIDENTIAL AND COMMERCIAL DEVELOPMENTS; PROVIDING FOR EVALUATION OF ALTERNATIVE WATER SUPPLY PROJECTS FOR NEW DEVELOPMENTS OF REGIONAL IMPACT; PROVIDING FOR WATER USE EFFICIENCY AND CONSERVATION EDUCATION AND OUTREACH; AMENDING SECTION 8A-381 OF THE CODE OF MIAMI-DADE COUNTY, FLORIDA TO REQUIRE SUBMETERS IN MULTI-FAMILY RESIDENTIAL DEVELOPMENTS; PROVIDING SEVERABILITY, INCLUSION IN THE CODE AND AN EFFECTIVE DATE

WHEREAS, Miami-Dade County's main source of drinking water is the Biscayne Aquifer which also serves two national parks, the Everglades and Biscayne National Park, agricultural interests, industrial and other users; and

WHEREAS, the Miami-Dade Water and Sewer Department ("Department") supplies potable water to over 400,000 retail customers and provides wholesale water service to 15 municipalities; and

WHEREAS, approximately 348 million gallons per day is withdrawn from the Biscayne Aquifer by the Department for public water supply; and

WHEREAS, Miami-Dade County is located within the Lower East Coast planning area of the South Florida Water Management District ("District"); and

WHEREAS, the District has adopted a new Regional Water Availability Rule that includes the Lower East Coast as a geographic area with restrictions on the utilization of specific water supply sources; and

WHEREAS, the Department has applied to the District for a 20-year Consumptive Use Permit; and

WHEREAS, the County is required to develop alternative water sources to meet increased demands over the next 20 years; and

WHEREAS, the County is making significant financial investments in capital improvement projects to provide adequate water supply for projected water demands by the use of alternative water supplies such as reclaimed water and brackish water from the Floridan Aquifer; and

WHEREAS, this Board finds that the efficient use and conservation of water reflect responsible use of a limited and precious resource that is essential to life, and will prevent and reduce wasteful, uneconomical, impractical, or unreasonable use of water resources; and

WHEREAS, in 2006, this Board approved the Miami-Dade County Water Use Efficiency Five-Year Plan ("Water Use Efficiency Plan") which is goal-based, accountable and measures water conservation efforts; and

WHEREAS, in 2007, the District approved the Water Use Efficiency Plan for 20 years to coincide with the County's proposed 20-year Consumptive Use Permit; and

WHEREAS, a stakeholder Advisory Committee appointed by the Director of the Water and Sewer Department provided this Board with recommendations to achieve maximum water use savings for all new development in Miami-Dade County; and

WHEREAS, in accordance with R-884-06, Miami-Dade County is a partner with the Environmental Protection Agency WaterSense Program for the promotion and implementation of water use saving technologies through its Water-Use Efficiency Plan; and

WHEREAS, Miami-Dade County is an active participant in the Florida Department of Environmental Protection Conserve Florida Water Program for the development of statewide guidelines for water use efficiency; and

WHEREAS, this Board finds that significant amounts of water can be saved through the installation of efficient water fixtures, appliances and other water saving measures and equipment; and

WHEREAS, such water use efficiency measures in new developments will help ensure that the County meets its water conservation goals provided in the Water Use Efficiency Plan for the duration of the County's 20-year water use permit; and

WHEREAS, the Florida Building Code, as amended by local technical amendments pursuant to Section 553.73(4)(b), Florida Statutes, is the uniform building code for Miami-Dade County; and

WHEREAS, based on the local conditions of water resources and the projected demand for water in Miami-Dade County, this Board finds that there is a local need to strengthen the requirements of the Florida Building Code for Miami-Dade County to meet the water conservation

goals provided in the Water Use Efficiency Plan and to ensure the availability of potable water to meet the County's projected demand for water and protect the public's health, safety and welfare; and

WHEREAS, the proposed local technical amendments to the Florida Building Code addresses the County's needs,

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

Section 1. Section 8-31 of the Code of Miami-Dade County is hereby created to read as follows: [1]

>>**Sec. 8-31. Local Technical Amendments to Florida Building Code**

(A) The County hereby adopts the following local technical amendments to Chapter 6 (Plumbing) of the Florida Building Code.

604.4 Maximum flow and water consumption.

The maximum water consumption flow rates and quantities for all plumbing fixtures, fixture fittings and appliances shall be in accordance with Table 604.4. Effective July 1, 2008, permits for new residential and commercial structures shall require high efficiency plumbing fixtures, fixture fittings and appliances as provided in Table 604.4. Such high efficiency plumbing fixtures, fixture fittings and appliances shall comply with the specifications of U.S. Environmental Protection Agency (EPA) WaterSense Program or the Uniform North American Requirements (UNAR) Guidelines and Specifications.

Exceptions:

1. Blowout design water closets [3.5 gallons (13L) per flushing cycle].
2. Vegetable sprays.

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

3. Clinical sinks [4.5 gallons (17 L) per flushing cycle].
4. Service sinks.
5. Emergency showers.

TABLE 604.4

MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES>>,<< [[~~AND~~]] FIXTURE FITTINGS >>AND APPLIANCES<<

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE [[~~OR QUANTIFY~~]] [b]
Lavatory, private	[[~~2.2~~]] >>1.0<< gpm at 60 psi
Lavatory, public, (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head [a]	[[~~2.5~~]] >> 1.5<< gpm at 80 psi
Sink faucet	[[~~2.2~~]] >> 1.0<< gpm at 60 psi
Urinal	>>Waterless or 0.5<< gallon per flushing cycle
Water closet	[[~~1.6~~]] >>1.28<< gallons per flushing cycle
>>Dishwasher (residential)<< >>Dishwasher (commercial)<< >>Under the counter machines<<	>>6.5 gallons per cycle or less (Energy Star/Water Sense Certified) [c]<< >>less than 1.2 gallons per rack for fill and dump machines and less than 0.9 gallons per rack for all other types of machines<< >>1.0 gallon or less per rack for high-temperature machines and 1.7 gallons per rack for low-temperature machines<<
>>Washing machine<<	>>Water factor of 8 or lower (Energy Star/Water Sense Certified) [c]<<

[[~~For S1: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m 1 pound per square inch = 6.895 kPa.~~]]

a. A hand-held shower spray is a shower head.
b. Consumption tolerances shall be determined from referenced standards.
>>c. Water factor in gallons per cycle per cubic foot<<

(B) The County hereby adopts the local technical amendments to Chapter 29 (Residential) of the Florida Building Code.

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P2903.2 Maximum flow and water consumption.,

The maximum water consumption flow rates and quantities for all plumbing fixtures, fixture fittings and appliances shall be in accordance with Table P2903.2a. Effective July 1, 2008, permits for new residential structures shall require high efficiency plumbing fixtures, fixture fittings and appliances as provided in Table P2903.2a. Such high efficiency plumbing fixtures, fixture fittings and appliances shall comply with the specifications of U.S. Environmental Protection Agency (EPA) WaterSense Program or the Uniform North American Requirements (UNAR) Guidelines and Specifications.<<

TABLE P2903.2a
MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES>>,<< [[~~AND~~]] FIXTURE FITTINGS AND >>APPLIANCES<<

PLUMBING FIXTURE OR FIXTURE FITTING	PLUMBING FIXTURE OR FIXTURE FITTING >>MAXIMUM FLOW RATE [b]<<
Lavatory faucet	[[~~2.2~~]] >>1.0<< gpm at 60 psi
Shower head [a]	[[~~2.5~~]]>>1.5<<gpm at 80 psi
Sink faucet	[[~~2.2~~]]>>1.0<< gpm at 60 psi
Water closet	[[~~1.6~~]]>>1.28<< gallons per flushing cycle
>>Dishwasher (residential)<<	>>6.5 gallons per cycle or less (Energy Star/Water Sense Certified) [c]<<
>>Washing Machine<<	>>Water factor of 8 or lower (Energy Star/Water Sense Certified) [c]<<

For SI: 1 gallon per minute = 3.785 L/m
1 pound per square inch = 6.895 kPa.
a. A handheld shower spray is a showerhead.
b. Consumption tolerances shall be determined from referenced standards.
>>c. Water factor in gallons per cycle per cubic foot<<

Section 2. Section 32-84 of the Code of Miami-Dade County, Florida is hereby created to read as follows:

>>**Sec. 32-84. Water use efficiency standards manual**

The Miami-Dade Water and Sewer Department ("MDWASD"), in consultation with the Planning Department and such other applicable county departments and agencies, shall publish a water use efficiency standards manual to achieve maximum water savings in new residential and commercial developments in the incorporated and unincorporated areas of Miami-Dade County. The manual shall be initially published on July 1, 2008 and shall be updated annually on July 1 following approval by the County Commission. Each applicant for water service to a new residential or commercial development in incorporated and unincorporated areas of Miami-Dade County shall include in its application every water use efficiency standard that will be incorporated into the new development. MDWASD shall review the application for compliance with the manual. In evaluating the application for compliance, MDWASD will consider the availability of products required to implement the water use efficiency standards. The developer's agreement for water service shall include the water use efficiency standards approved by MDWASD. <<

Section 3. Section 32-85 of the Code of Miami-Dade County is hereby created to read as follows:

>>**Sec. 32-85. Alternative water supply for developments of regional impact.**

Applications for new Developments of Regional Impact ("DRI") with a projected water demand of one million gallons per day or greater shall be evaluated by MDWASD to determine the feasibility of an alternative water supply project. Such projects may include the installation of a reveres osmosis plant, wastewater reclamation facility and reuse distribution system.<<

Section 4. Section 32-86 of the Code of Miami-Dade County is hereby created to read as follows:

>>**Sec. 32-86. Water use efficiency and conservation education and outreach**.

The Miami-Dade County Water Use Efficiency Manager shall provide public information, education and outreach on all water use efficiency standards and water conservationprograms.<<

Section 5. Section 8A-381 of the County of Miami-Dade County, Florida is hereby amended to read as follows:

Sec. 8A-381. Intent and application.

* * *

(c) The provisions of this article shall apply to multiple unit properties utilizing water services. >>Effective July 1, 2008, all new multi-family residential developments shall be required to have a submeter for each individual dwelling unit.<<

Section 6. 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 7. It is the intention of the Board of County Commissioners, and it is hereby ordained that the provisions of this ordinance, including any Sunset provision, shall become and be made a part of the Code of Miami-Dade County, Florida. The sections of this ordinance may be renumbered or relettered to accomplish such intention and the word "ordinance" may be changed to "section", "article" or other appropriate word.

Section 8. This ordinance shall become effective on July 1, 2008 unless vetoed by the Mayor within ten (10) days of enactment, and if vetoed, shall become effective only upon an override by this Board.

PASSED AND ADOPTED:

Approved by County Attorney as to form and legal sufficiency.

Prepared by: HNG

Henry N. Gillman

Sponsored by Commissioner Natacha Seijas