

Memorandum



Date: June 3, 2008

Agenda Item No.
12(B)2

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

From: George M. Burgess
County Manager

A handwritten signature in black ink, appearing to read "G. Burgess", written over the printed name of George M. Burgess.

Subject: Annual Report 2007 on the Miami-Dade Water and Sewer Department's 20-Year Water Conservation Plan

In April 2006, the Board of County Commissioners (Board) adopted Resolution R-468-06 which approved the Miami-Dade Water Use Efficiency Five-Year Plan. One of the plan's objectives was for the Miami-Dade Water and Sewer Department (WASD) to develop more efficient water use practices and encourage County residents to save water. The five-year plan became the baseline document for the development of the 20-Year Water Conservation Plan, required by the South Florida Water Management District (District) to meet the requirements of the 20-Year Water Use Permit. The implementation of the 20-year plan will result in over 20 million gallons a day (MGD) by the year 2026. These savings are considered as new water and are included in the total water demand projections approved by the District.

The 20-year plan requires WASD to submit to the Board each year a report regarding the effectiveness of the plan's best management practices. As such, the Miami-Dade Water-Use Efficiency Program Annual Report 2007 (attached) contains the best management practices implemented in 2007 and their results. In addition, the report projects the goals for the best management practices for the plan's first five years, (2007 to 2011). The 2007 water saving goal was established at 963,000 gallons per day (GPD). This goal was exceeded by 193,446 GPD, for a total first year savings of 1,156,446 GPD.

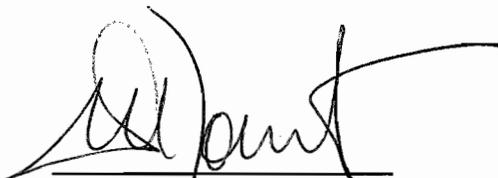
In 2007, mandatory water-use restrictions imposed by the District further intensified WASD's water conservation efforts. Partnerships with other County departments, such as the Government Information Center's 3-1-1 Answer Center, have facilitated the implementation of the plan's best management practices and WASD's ability to track their results. With one call to the 3-1-1 Answer Center a resident can request applications to participate in the retrofit rebate projects, get information about the showerhead exchange, and report mandatory water restrictions violations. WASD's affiliation with the Consumer Services Department's (CSD) Extension Center has lead to the implementation of the County's Landscape Irrigation Project. The CSD Extension Center manages the landscape irrigation projects while WASD conducts public outreach for the projects. The Community Action Agency has assumed the responsibility for installing toilets in the homes of senior citizens participating in the Senior Retrofit Project. WASD's Active Strategy Enterprise performance tracking system is linked to these departments' scorecards to track and report the gallons of water saved through these projects.

The following includes 2007 Best Management Practices and Results:

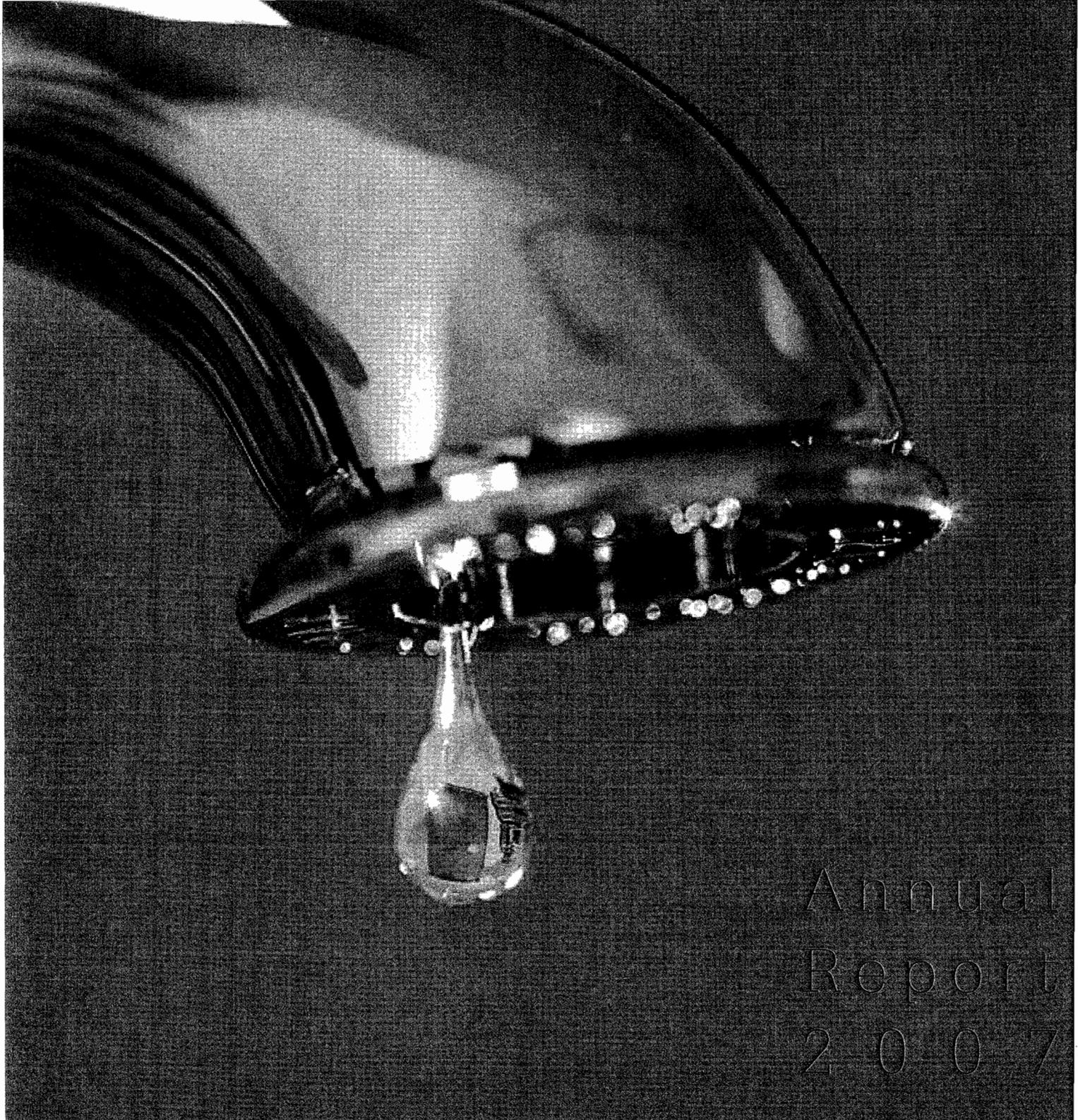
- *High Efficiency Toilet (HET) Full Retrofit Project* – this project offers bathroom retrofits to low-income households who meet certain federal criteria and to senior citizens who qualify for the additional homestead exemption on their property taxes. This project had a total of 774 participants in 2007 with a cumulative water savings of 49,536 GPD.
- *Water Efficient Landscape and Irrigation Evaluations Project* - this project offers free water audits and financial incentives to large landscape water users to upgrade their irrigation systems

- to be more water efficient. In 2007, 10 homeowner associations participated in this project with water savings exceeding 629,100 GPD.
- *High Efficiency Toilet Rebate Project* - this project offers up to \$100 for each high-efficiency toilet purchased and installed. In 2007, this project had a total of 750 participants with a cumulative water savings of 21,750 GPD.
- *Showerhead Exchange and Retrofit Kit Program* - this project consists of distributing high-efficiency showerhead kits, kitchen retrofits and other retrofit accessories such as leak detection dye tablets. In 2007, the projected number of showerhead kits to be distributed was 3,200. That number was exceeded as 8,117 showerhead kits were distributed representing a water savings of 381,499 GPD. The increase in demand for the showerhead kits can be attributed to an increase in public awareness to conserve water resulting from recent drought conditions.
- *Green Lodging and Restaurant Project* – The County in conjunction with the Florida Department of Environmental Protection launched this project to provide technical assistance and water conservation information to lodging establishments and restaurants in the area. Participation in this program encourages guests staying at the lodge to use the bed linens and towels more than once and waiters serving at restaurants to serve water to guests only upon request.
- *“WET in the City Program” or the “Water Education for Teachers” Program* is an urban environmental education program of the Council for Environmental Education. WASD is the local sponsor of this program. A total of 100 teachers participated in this program in 2007 reaching out to 6,134 students.

WASD’s water conservation efforts have been successful due to the mandatory water-use restrictions and its conservation program. Retail and municipal wholesale customers consumption rates reduced from 2006 to 2007. In 2007, water consumption dropped by 4,372,115,000 gallons for retail customers and by 1,982,675,000 for municipal wholesale customers.



Assistant County Manager



Annual
Report
2007

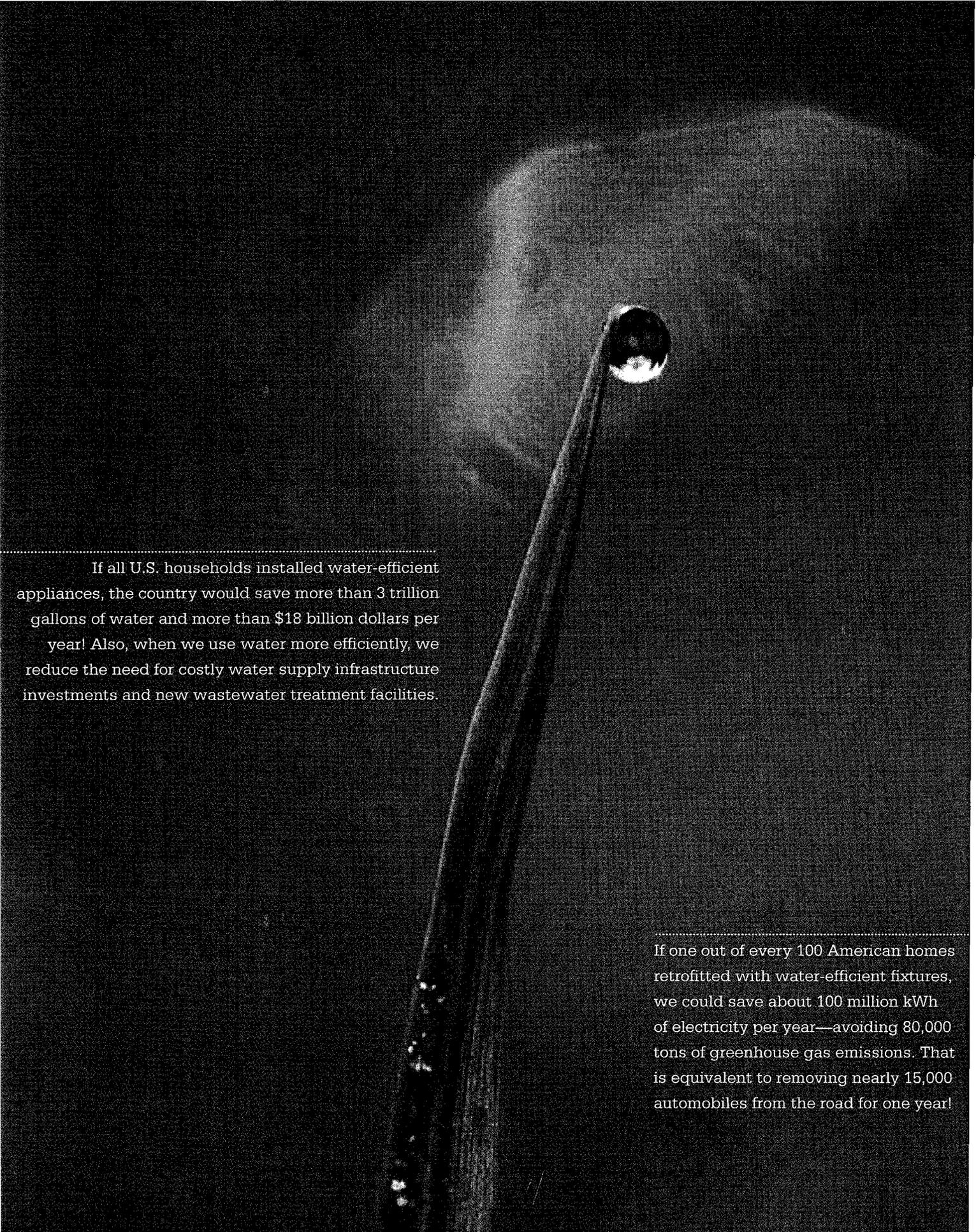
Miami-Dade Water-Use Efficiency Program

Making Every Drop Count and Accounting For Every Drop



Delivering Excellence Every Day

Making Every Drop Count and Accounting For Every Drop



.....

If all U.S. households installed water-efficient appliances, the country would save more than 3 trillion gallons of water and more than \$18 billion dollars per year! Also, when we use water more efficiently, we reduce the need for costly water supply infrastructure investments and new wastewater treatment facilities.

.....

If one out of every 100 American homes retrofitted with water-efficient fixtures, we could save about 100 million kWh of electricity per year—avoiding 80,000 tons of greenhouse gas emissions. That is equivalent to removing nearly 15,000 automobiles from the road for one year!

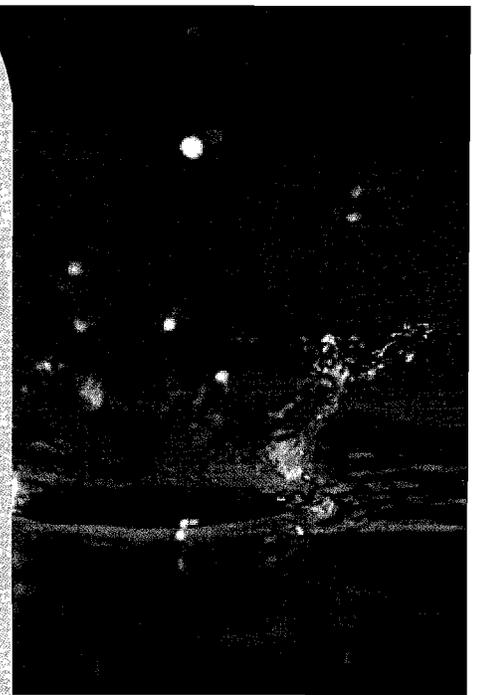
Plan Development

In April 2006, the Miami-Dade Board of County Commissioners adopted the Miami-Dade Water-Use Efficiency Plan (Plan) as part of a larger effort to improve management of traditional water supplies while encouraging the development of alternative water supplies and improving the efficiency of the County's current water-use. The Miami-Dade Water and Sewer Department (MDWASD) developed the Plan using the Florida Department of Environmental Protection Conserve Florida Guide (Guide), a web based application for goal based water conservation planning. MDWASD was the first utility in the State to use the Guide in the development of a goal-based conservation plan. MDWASD's wholesale customers are required to develop a conservation plan using the same application.

The Plan was approved by the South Florida Water Management District (SFWMD) as a condition of the 20-Year Water-Use Permit issued in November 2007. The quantifiable water saving data for each of the implemented Best Management Practices (BMP) provides cumulative savings of over 19.6 million gallons a day (MGD) by 2026. This is present day saved water added to the total water supply to address the demand for the projected population growth and it is the cheapest source of alternative water supply. The 2005 State Legislature created the Water Protection and Sustainability Program to help fund the development of alternative water supply projects at the local level. Miami-Dade County continues to advocate for the designation of goal-based water conservation as an alternative water supply source.

The BMPs selected for implementation were chosen after a screening process that estimated water savings and costs compared in a formal present day worth analysis and conclusions were drawn about which BMPs produce cost-effective water savings for Miami-Dade County. Benefits from water-use efficiency include:

- 1) Savings in operations and maintenance (O&M)
- 2) Savings from the deferral and/or cancellation of capital projects that would have been necessary in the absence of conservation
- 3) Energy savings from the avoided cost of not producing water

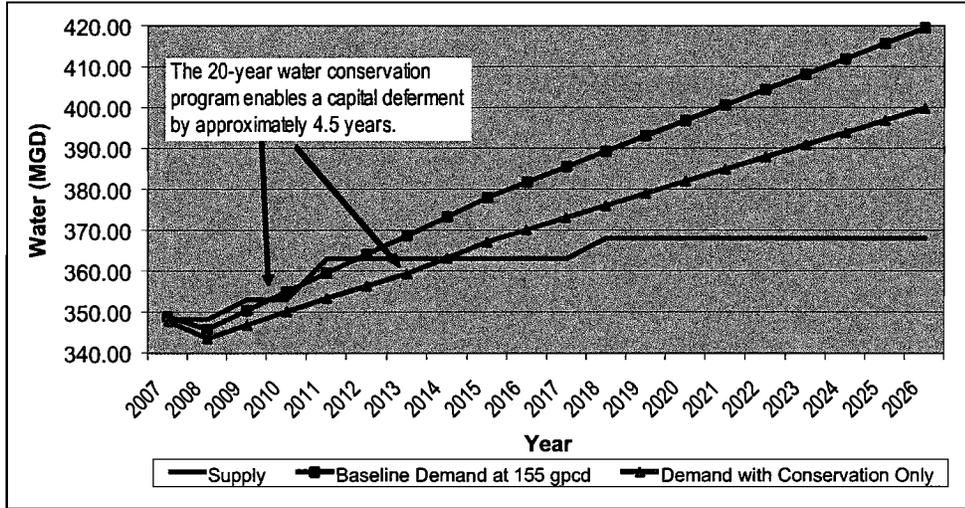


Summary



Water Demand Reduction Projection through Conservation

..... Effect of Conservation on Water Supply and Demand



Water-Use Efficiency Program (WUE)

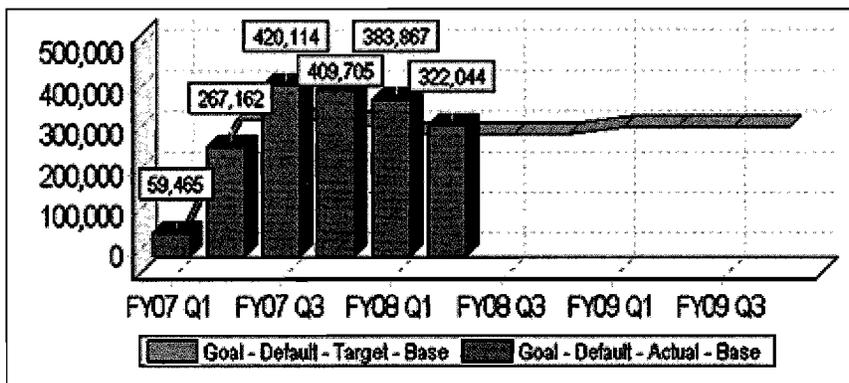
The utilization of the Conserve Florida Guide to develop and manage Miami-Dade's program allows for tracking management and effectiveness of the BMPs implementation. The web-base application is available to utilities within the State of Florida to assure uniformity in water conservation practices and to facilitate the development of goal based conservation planning.

The Plan includes residential, industrial/commercial/institutional and landscape irrigation as well as water-use audits for targeted county-owned buildings and other government facilities. Also included in the program are the Green Lodging projects for hotels and restaurants, and an in-school educational project "WET in the City"

which trains teachers through workshops and provides educational materials for the students. In addition to the specific requirements of the Plan, the WUE program is actively engaged in state and national water conservation efforts including mentor designation for EPA's WaterSense Program.

The quantifiable BMPs were implemented in April 2007. The program's first year's water saving goal had been established at 963,000 GPD, the goal was exceeded by 193,446 GPD for a total first year savings of 1,156,446 GPD. The savings are tracked through the Department's Active Strategy Enterprise (ASE) scorecard. The final gallons saved are calculated after the Community Action Agency and the Department of Consumer Services Ag Extension Center enter their information in their respective ASE scorecards, MDWASD's scorecard is linked to these two departments, (chart below shows savings to date)

..... Gallons of water saved per day (GPD) by Water-Use Efficiency Program



	FY 2006 - 2007				FY 2007 - 2008	Total
	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	
	10/01/2006 to 12/31/2006	1/1/2007 to 3/30/2007	4/1/2007 to 6/30/2007	7/1/2007 to 9/30/2007	10/1/2007 to 12/31/2007	
GPD ¹	59,465	68,432	194,114	160,705	383,867	866,583
Days	92	90	91	91	92	456
Gallons	5,470,780	6,158,880	17,664,374	14,624,155	35,315,764	79,233,953
MG	5.47	6.16	17.66	14.62	35.32	79
kWh saved ²	6,629	7,363	21,117	17,483	42,219	94,811
Diesel Gallons saved ²	55	62	179	148	357	801
NG therms saved ²	305	338	970	803	1,938	4,354
BTU saved ³	58,492,432	65,036,099	186,530,990	154,427,103	372,924,873	837,411,497
Energy Dollars saved ²	992	1,047	3,004	2,487	6,005	13,535

Water-Use Efficiency Impacts in Energy Savings

Energy consumption related to the production of potable water is summarized in the Monthly Energy Reports prepared by the Water Treatment Facilities Division of the MDWASD. The Monthly Energy Reports are divided according to treatment facilities such as Alexander Orr Water Treatment Plant, Hialeah-Preston Water Treatment Plants and the South Dade System. In addition, the report further divides the energy used by main water production process, such as raw water wells, water treatment plants and repump stations.

Monthly average consumption data for the three main fuels (Diesel, Natural gas and Electricity) by facility is extracted from the Monthly Energy Reports in order to calculate monthly energy consumption by fuel for the entire MDWASD system. A system-wide monthly average energy cost per gallon of finished water produced is then calculated, dollars/million gallons (\$/MG). Subsequently, system-wide annual averages are calculated by fuel type per gallon of finished water for calendar years 2006 and 2007 as well as annual average cost per gallon of finished water for calendar years 2006 and 2007.

Savings achieved by the MDWASD Water-Use Efficiency Program are summarized per quarter from January 2006 to December 2007, for a total of five quarters. Gallons of water saved by the Showerhead Exchange, HET Rebate Program, Senior Retrofit Program, ICI Audits and the Green Lodging are added to calculate the total gallons of water saved per quarter. Savings achieved by the Landscape Irrigation Audits during Fiscal Year 2006-2007 are excluded because there is no certainty that landscape irrigation uses potable water instead of well water.

Frequently, the energy content of fuels is measured in British Thermal Units (BTU). Although energy content may vary with the composition of the fuel an average of 100,000 BTU per therm of Natural Gas, 130,000 BTU per gallon of diesel and 3,412 BTU per kWh electricity is generally used. Using the energy content in BTU for each fuel used, an average BTU per gallon of finish water was calculated.

Millions of gallons of water saved per quarter are multiplied by the system wide annual averages by fuel type to calculate gallons of diesel, therms of Natural Gas and kWh of electricity saved per quarter. Millions of gallons of water saved per quarter are multiplied by the average BTU in order to calculate BTUs saved. Furthermore the total of dollars saved due to water production of potable water is calculated per quarter.

Water-Use Efficiency Plan

The Miami-Dade Water-Use Efficiency Plan is a combination of quantifiable BMPs and several conservation measures such as operational measures, policy measures and education and public outreach. Below is the program's existing portfolio and recommendations for future implementation (*).

Operational Measures	Policy Measures
Metering Program	Requirements of High Efficiency Plumbing Fixtures
System Audits and Leak Detection/Repair	Limitation of Lawn and Ornamental Irrigation Hours
Distribution System Pressure Control	Use of Florida Friendly Principles and Soil Moisture Sensor
Recycled Water for Filter Backwashing	Expedited Review and Approval of Building Permit Applications
Water Conservation Manager and Coordinator	Sustainable Development Building Measures for County Buildings
Wholesale Water Supplier Assistance Program	Long-range Water-Use Efficiency Plan
	Alternative Water Supply Plan
Education and Public Outreach	Requirement for Water Conservation Planning, Implementation and Reporting by Wholesale Customers
Lead by Example	Proposed Indoor/Outdoor Water-Use Efficiency Requirements for New Development Ordinance
Information Campaign for Employees	Proposed development of Conservation Rate Structure *
In-School Program	Proposed Retrofit Upon Sale Ordinance *
WET in the City	Proposed Mandatory Reuse Area (MRA) Ordinance *
Outreach and Public Education Targeted Outreach Campaign (Print and Radio) Advisory Committee	Proposed Permanent Two-Day Landscape Irrigation Ordinance * Proposed Surcharge Water-User Restriction Ordinance * Proposed strengthening of current tampering penalties Proposed consumption data analysis project
Quantifiable Best Management Practices	
High Efficiency Toilet Rebate	
High Efficiency Toilet Retrofit and Full Retrofit for Seniors	
Water-Efficient Landscape Irrigation Evaluations and Rebates and Soil Moisture Sensor Retrofit (HOAs)	
High-Efficiency Clothes Washer Rebates	
Showerhead Exchange/Retrofit Kit	
Industrial, Commercial and Institutional Water-Use Evaluation/Implementation	
County-owned Facilities and Schools (including leak detection and repair)	
Hotel/Restaurant Program - Miami Dade Green Lodging and Restaurant Project	

Miami-Dade County is committed to make "Every Drop Count" and "Account for Every Drop". Funding retrofit projects, educating residents to implement efficient water-use practices, and making operational improvements will allow for additional reduction in our water demand, preserve the resource and reduce future water and wastewater infrastructure costs.

Water-Use Efficiency Program Deliverables 2007-2011

PROJECT	2007	2008	2009	2010	2011
Implementation of Water-Use Efficiency Program	<ul style="list-style-type: none"> Achieve projected water savings for each of the program's Best Management Practices to comply with the 20-Year Water-Use Permit issued by the South Florida Water Management District. 				
Indoor Projects (Residential)	<ul style="list-style-type: none"> Implemented Senior Retrofit Project (750) (in partnership with the Community Action Agency) Implemented HET Rebate Project (750) Enhanced Showerhead Exchange Project 	<ul style="list-style-type: none"> Expand Senior Retrofit Project (1000) Continue HET Rebate Project (750) Implement Efficient Washer Rebate Project (150) 	<ul style="list-style-type: none"> Continue implementation of Senior Retrofit Project Continue implementation of HET Rebate Project Continue implementation of Efficient Washer Rebate 		
		Continue Showerhead Exchange Project			
Outdoor Projects	<ul style="list-style-type: none"> Implemented Landscape Irrigation Project (25 HOA) (In partnership with Consumer Services)	<ul style="list-style-type: none"> Coordinate Implementation of Landscape Irrigation Project with UF research for a total of 50 HOA evaluations with Soil Moisture 	Complete 25 HOA Evaluations		
			<ul style="list-style-type: none"> Implement Urban Conservation Unit (UCU) – first year goal of 250 single family homes and High-Bill customers evaluations 	<ul style="list-style-type: none"> Continue implementation of UCU Project (250 SF) 	
Commercial, Institutional and Industrial (ICI) Water-Use Audits	<ul style="list-style-type: none"> Implemented water-use audits for county-owned facilities (25) 	<ul style="list-style-type: none"> Evaluate audit recommendations for implementation Complete 25 county-owned facilities Establish guidelines for a Water-Use reduction project for cooling towers 	<ul style="list-style-type: none"> Establish guidelines for implementation of water-use audits project for Institutional facilities Implement Water-Use reduction project for cooling towers 	<ul style="list-style-type: none"> Second year implementation of water-use project for Institutional Facilities 	
				<ul style="list-style-type: none"> Establish guidelines for implementation of Water-Use audits for Commercial Facilities 	<ul style="list-style-type: none"> Implement water-use audits for Commercial Facilities
				<ul style="list-style-type: none"> Continue implementation of Water-Use reduction project for cooling towers 	
Green Lodging Hotel and Restaurant	<ul style="list-style-type: none"> Developed guidelines and materials for Hotel and Restaurant Projects Collaborated with DEP's Green Lodging initiative 	<ul style="list-style-type: none"> Complete implementation of Green Lodging in 12 hotels 			
		<ul style="list-style-type: none"> Complete implementation of Restaurant Project in 12 restaurants 	<ul style="list-style-type: none"> Complete implementation of Restaurant Project in 20 restaurants 		
Outreach	<ul style="list-style-type: none"> Developed Water-use Efficiency Program Outreach Plan Implemented WET in the City in-school project Developed Guidelines for Landscape Irrigation Evaluations Project 	<ul style="list-style-type: none"> Continue implementation WET in the City project – (100 teachers) Produce all outreach materials and update external website Develop and publish Water-Use Efficiency Standards Manual 	<ul style="list-style-type: none"> Enhance in-school outreach projects 		
			<ul style="list-style-type: none"> Evaluation and assessment of exiting outreach materials and activities Develop outreach plan guidelines for High Bill customers 	<ul style="list-style-type: none"> Implement changes in communication strategy resulting from previous year evaluation 	<ul style="list-style-type: none"> Perform evaluation and assessment of new strategy and continue to implement based on results
<ul style="list-style-type: none"> Implement outreach plan for Landscape Irrigation Project 					
Wholesale Customer Assistance Project	<ul style="list-style-type: none"> Assisted municipal wholesalers with the development of their Water-use Efficiency Plans (WUEP) 	<ul style="list-style-type: none"> Complete development of all wholesalers WUEP 	<ul style="list-style-type: none"> Complete selection of appropriate BMPs for each wholesale customer 	<ul style="list-style-type: none"> Assist wholesale customers in the implementation of their WUEP 	
Program Budget	\$903,000	\$943,000	\$943,000	\$943,000	\$943,000

Water-Use Efficiency Projects

As a component of the Miami-Dade Water-Use Efficiency Plan, these projects are designed to improve the efficient use of water by retrofitting older fixtures and encouraging residents to be water wise. These projects are available to all residents of Miami-Dade County who meet the project's established criteria. Two of these projects were recognized this year by the Florida Section of the American Water Works Association; The High Efficiency Toilet Full Retrofit and the High Efficiency Toilet Rebate Projects were recipients of the Water Conservation 2007 Awards for Excellence.

High Efficiency Toilet (HET) and Full Retrofit Project

This project is for senior citizens who qualify for the additional homestead exemption on their property taxes and residents who meet the federal criteria for low income households. Participants are identified through the Property Appraiser's office and the Community Action Agency (CAA) provides the installation services. The project had a total of 774 participants in its first year with cumulative water savings of 49,536 GPD.

High Efficiency Toilet (HET) Rebate Project

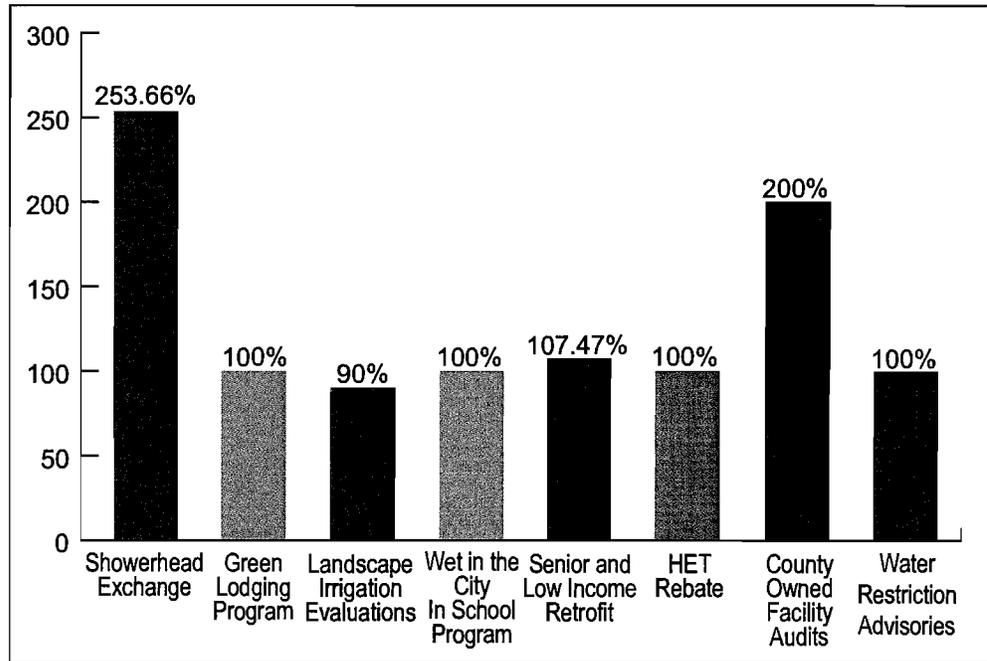
Residents can obtain a \$100 rebate for replacing water-wasting toilets with new HET's that use less than 1.3 gallons per flush. The original purchase receipt must be submitted with the application. The project had a total of 750 participants in its first year with cumulative water saving of 21,750 (GPD).

Water-Efficient Landscape and Irrigation Evaluations

This project is implemented in partnership with the Consumer Services Department and the University of Florida/Miami-Dade County Extension Center. It targets Home owner Associations with large landscaped irrigation areas providing free water audits and financial incentives to upgrade their irrigation systems to be more water efficient. It also provides training of landscape personnel in the principles of efficient irrigation and recommendations for increasing water-use efficiency. In 2007, 10 homeowner associations participated in this project with water savings exceeding 629,100 gallons per year (GPY).

Applications for all projects are obtained through the County's 3-1-1 Answer Center or at www.miamidade.gov/conservation





Showerhead Exchange and Retrofit Kit

Free high-efficiency showerheads are available to all Miami-Dade County residents. Project participants must bring in their old showerheads in order to receive the high-efficiency models and retrofit kit. Participation in this project will help save residents up to 50% on their indoor water usage. MDWASD had projected to distribute a total of 3200 showerheads in 2007. Due to the recent drought conditions and public awareness about water-use efficiency, the project has exceeded the goal. The total number of showerhead kits distributed in 2007-2008 was 8117 representing water savings of 381,499 (GPD).

Green Lodging and Restaurant Project

Miami-Dade is the first County partner with the Florida Department of Environmental Protection's (DEP) Green Lodging Program. Miami-Dade has launched a local initiative to encourage practices that reduce water consumption, protect air quality and reduce waste in the hotel and restaurant industry. Staff provides water conservation information to participating establishments and trains housekeeping staff and supplies printed materials that encourage guests to reuse the towels and linen. Restaurants receive a table display that lets customers know water will be served upon request and low flow pre-rinse spray valves are provided to participating restaurants.

In-School Projects

The Miami-Dade Water and Sewer Department is the local sponsor for "WET in the City," an urban environmental education program of the Council for Environmental Education (CEE) that focuses on protecting and conserving water resources. This project seeks to advance water education and environmental stewardship among urban youth. Participating teachers earn CEU credits and all classroom instructional materials are provided. A total of 100 teachers participated in last year's program with 6,134 students reached.



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Water Education for Teachers

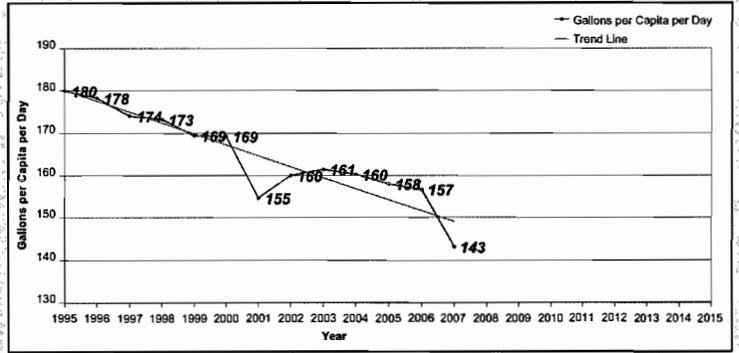


Water Demand Reduction

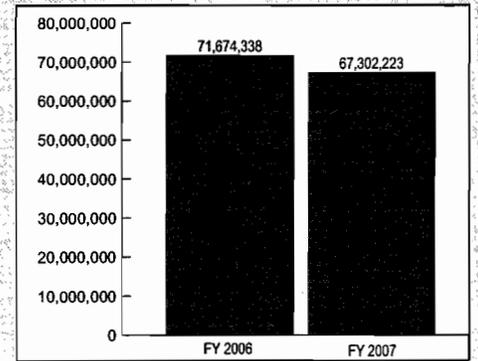
Miami-Dade has seen a continuous reduction in per capita use since 1995, a result of public awareness and the Environmental Protection Act of 1994 that made stricter requirements of flows for bathroom fixtures. The 2001 drought water-use restrictions contributed to the 22 gallons in per capita reduction by 2006. The impact of almost two years of drought conditions accompanied by mandatory water restrictions, the implementation of the water-use efficiency best management practices and the very aggressive public information campaign being carried out by the County have created the perfect scenario to produce the dramatic reduction in per capita water consumption realized by the beginning of 2008.

The result of conservation efforts is evident by the consumption data for both retail and municipal wholesale customers. The MDWASD retail system serves more than 416,000 retail accounts and 15 wholesale municipal systems. The charts below show the water used by both retail and wholesale customers in 2006 and 2007. The total water consumption for the retail system was reduced by 4,372,115,000 gallons and the wholesale by 1,982,675,000 gallons in 2007 for a total systemwide reduction in consumption of 6,354,790,000 gallons per year or 17,410,383 gallons per day.

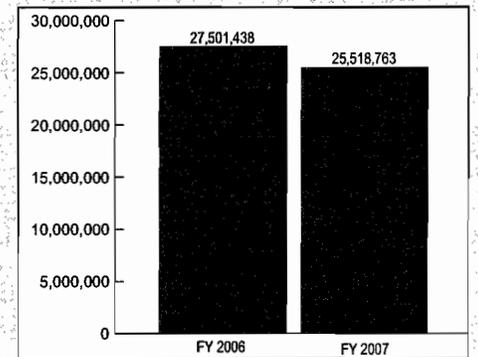
Systemwide Average Raw Water Per Capita Past 10 Years



Miami-Dade Retail Customers Total Consumption ..



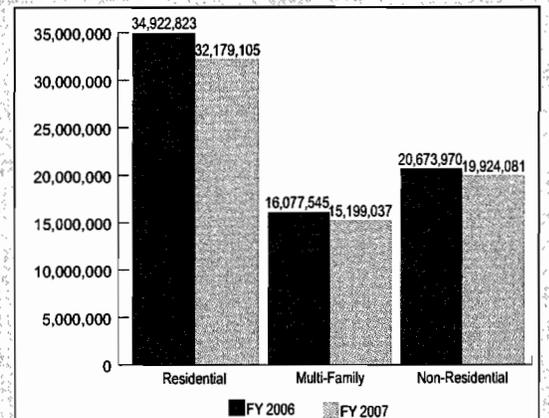
Miami-Dade Municipal Wholesale Customers Total Consumption ..



	FY 2006	FY 2007
RETAIL (1,000 gallons)		
Residential	34,922,823	32,179,105
Multi-Family	16,077,545	15,199,037
Non-Res	20,673,970	19,924,081
Total	71,674,338	67,302,223
WHOLESALE		
All Wholesale	27,501,438	25,518,763

Miami-Dade's Residential sector showed the biggest decrease in consumption in 2007, a full percentage point, with a nominal reduction in the Multi-Family and Non-Residential sectors.

Miami-Dade Retail Customer Consumption by Sectors ..



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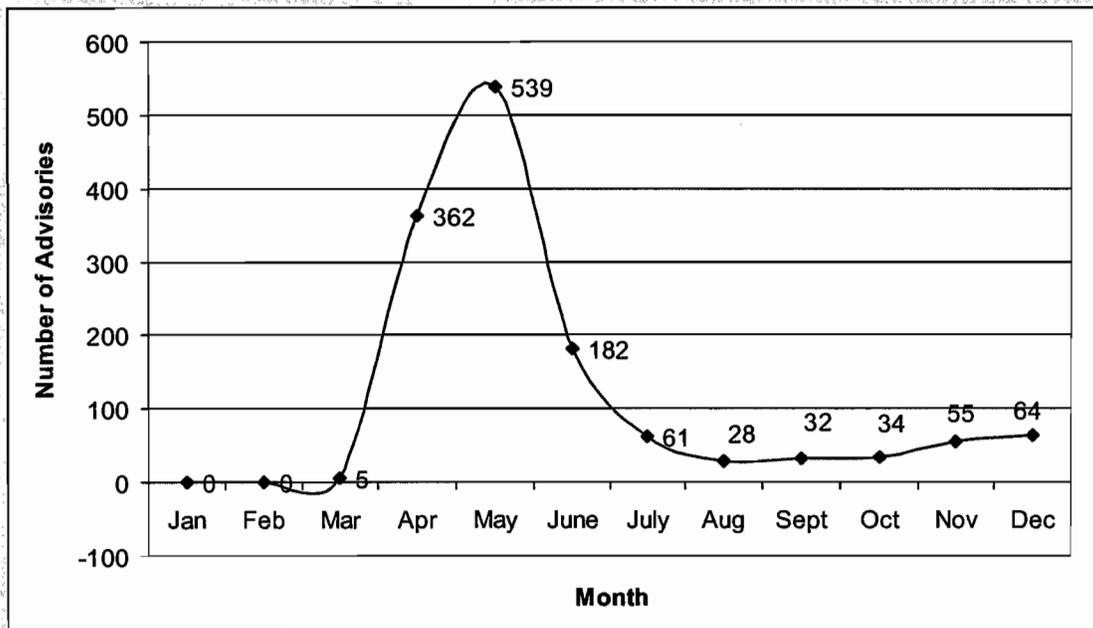
Mandatory Water Restrictions

The 2007 drought's severity provided a challenge as well as an opportunity to communicate to our residents the importance of responsible water-use. In partnership with the Government Information Center – 3-1-1 Call Center, the Water-Use Efficiency unit (WUE) provided information on the mandatory water restrictions and the Water-Use Efficiency program to 1,362 residents.

Miami-Dade residents can call 3-1-1 to report mandatory restriction violations. The 3-1-1 representative enters the information as a Customer Service Request (CSR) and the WUE staff downloads the information and mails an advisory notification accompanied by information on the water restrictions, and a WUE program's brochure. Violations are tracked through the CSR system and second violations are reported to the County's enforcement departments for follow up, or to the appropriate municipality.

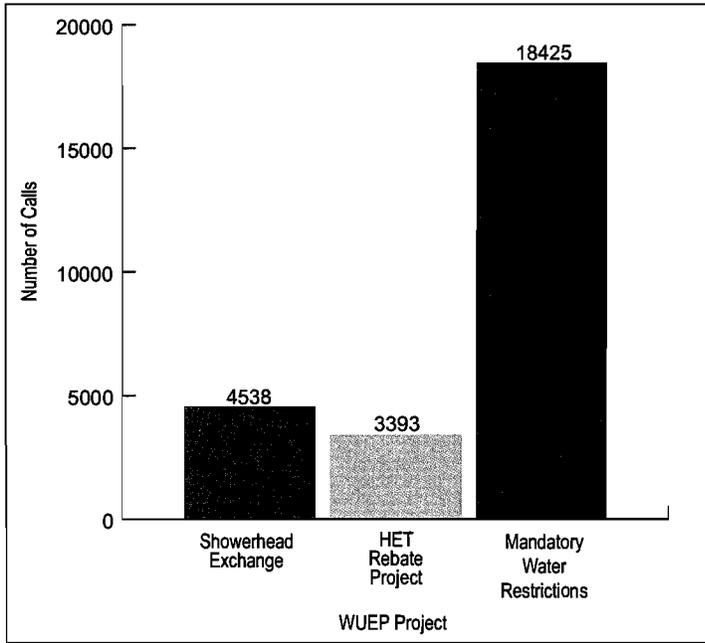
The graph below shows the number of notice of violation issued in 2007.

.. Mandatory Water Restriction Advisories issued from January 2007 to December 31, 2007

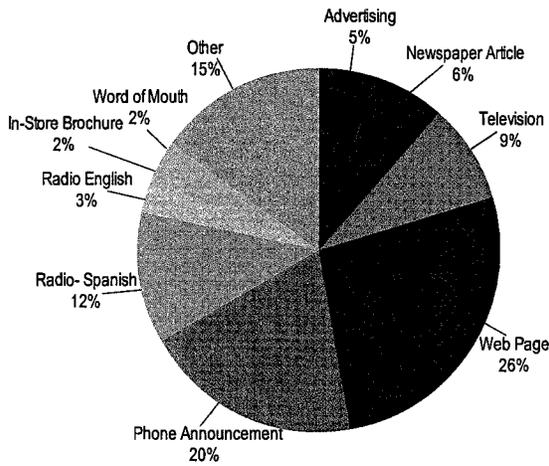


Public Outreach

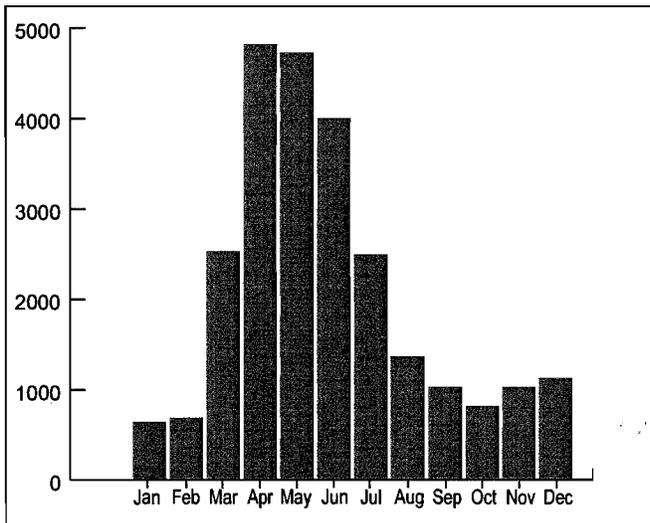
..... WUEP Related Calls to 3-1-1 Call Center (2007)



..... High Efficiency Toilet Rebate Program Outreach Evaluation from Jan. 2001 - Dec. 31, 2007



..... Water-Use Efficiency 2007 Web Page Visits



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Water Conservation Portal

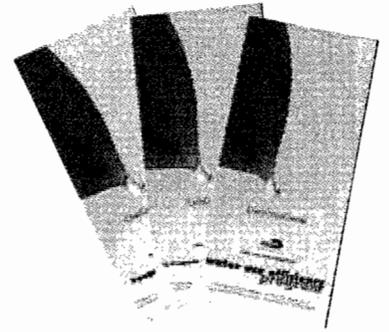
25,279
Total Visitors

Outreach Publications



Water-Use Efficiency Promotional Items

Water-Use Efficiency Program



Children's Activity Books



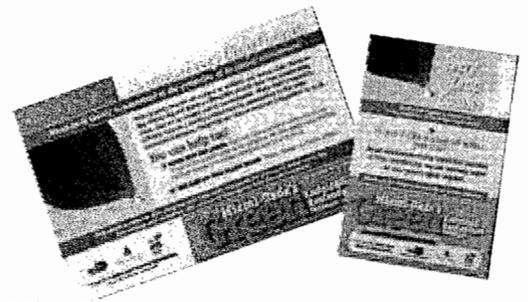
Water-Use Efficiency Rebate Programs



Saving Water at Home



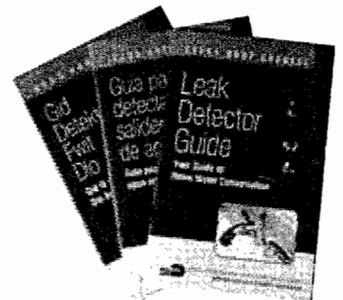
Lodging & Restaurant Program



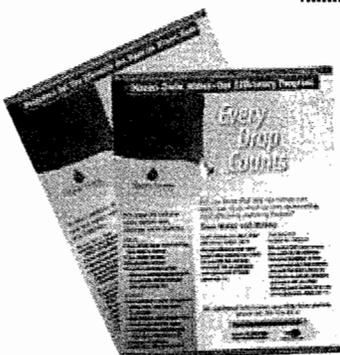
High Efficiency Toilet (HET) Rebate Program



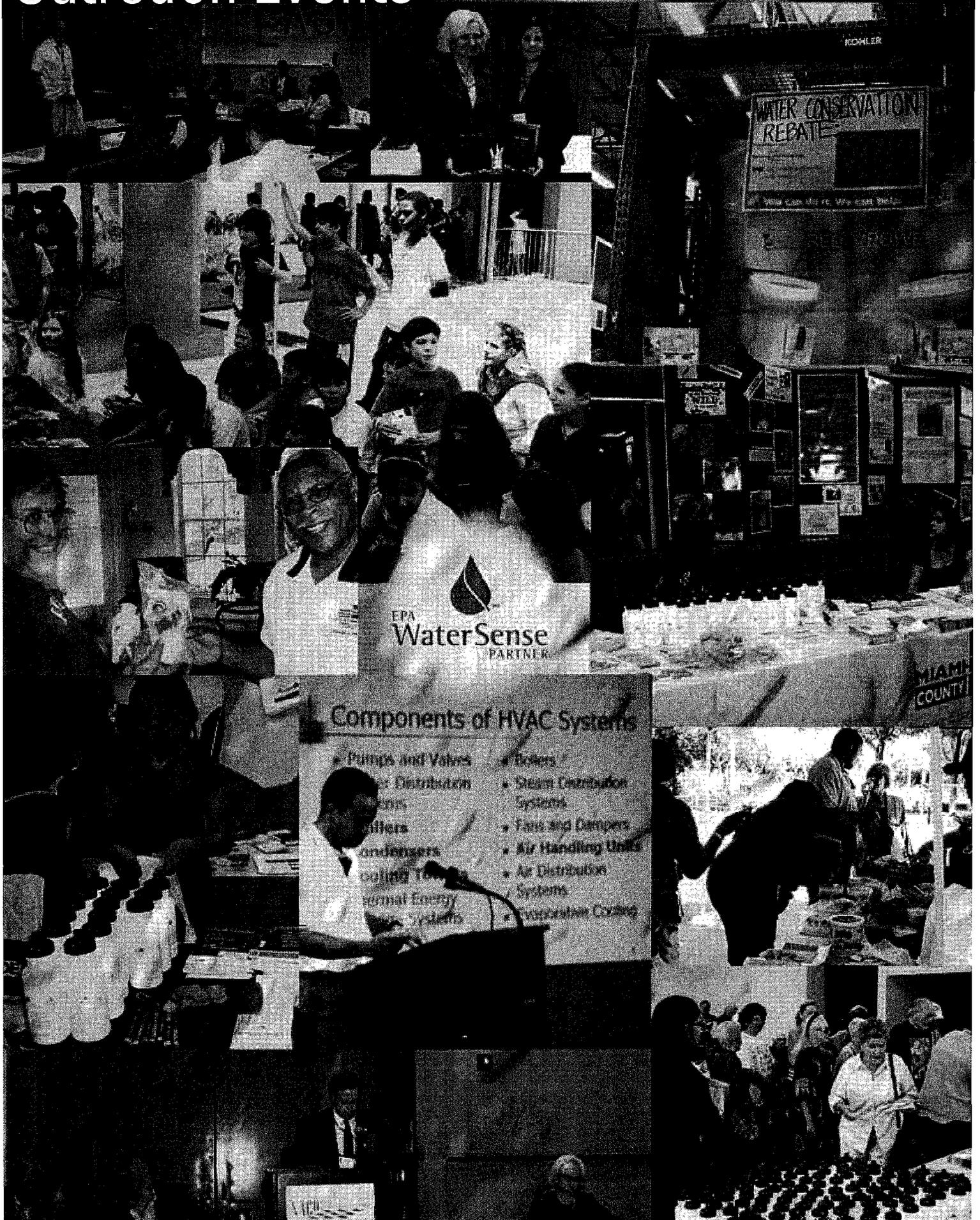
Leak Detector Guide



High Efficiency Toilet (HET) Rebate and Full Retrofit Programs



Outreach Events



EPA
WaterSense
PARTNER

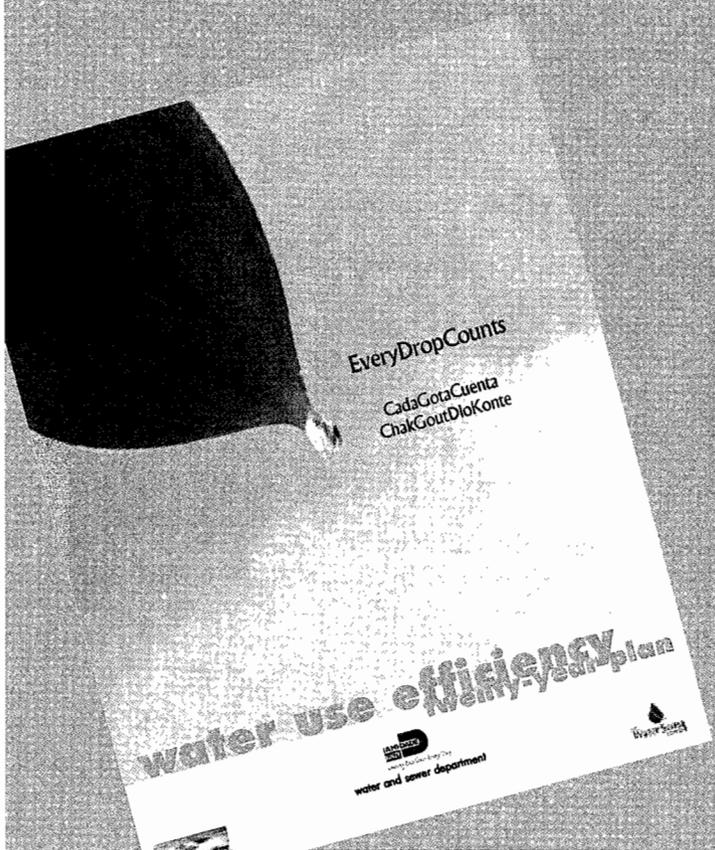
Components of HVAC Systems

- Pumps and Valves
- Air Distribution Systems
- Chillers
- Condensers
- Cooling Towers
- Thermal Energy Storage Systems
- Boilers
- Steam Distribution Systems
- Fans and Dampers
- Air Handling Units
- Air Distribution Systems
- Vaporative Cooling

WATER CONSERVATION
REBATE

MIAMI
COUNTY

Acknowledgements



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Bruno A. Barreiro, Chairman

Barbara J. Jordan, Vice Chairwoman

Barbara J. Jordan

District 1

Dorrin D. Rolle

District 2

Audrey M. Edmonson

District 3

Sally A. Heyman

District 4

Bruno A. Barreiro

District 5

Rebeca Sosa

District 6

Carlos A. Gimenez

District 7

Harvey Ruvin

Clerk of Courts

George M. Burgess

County Manager

Robert A. Cuevas Jr.

County Attorney

John W. Renfrow

Director, Water and Sewer Department

Katy Sorenson

District 8

Dennis C. Moss

District 9

Sen. Javier D. Souto

District 10

Joe A. Martinez

District 11

José "Pepe" Diaz

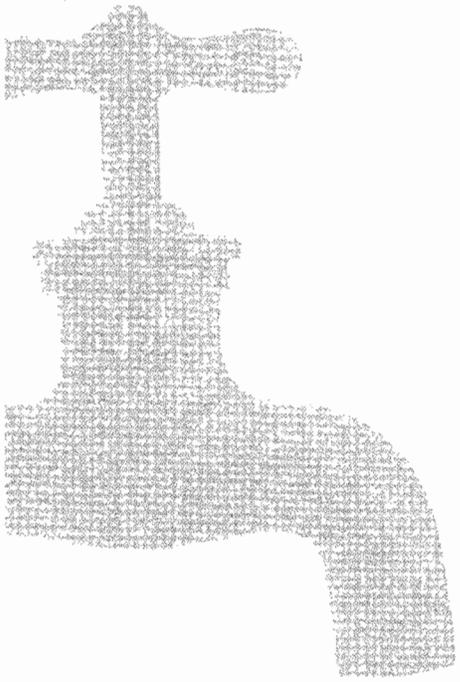
District 12

Natacha Seijas

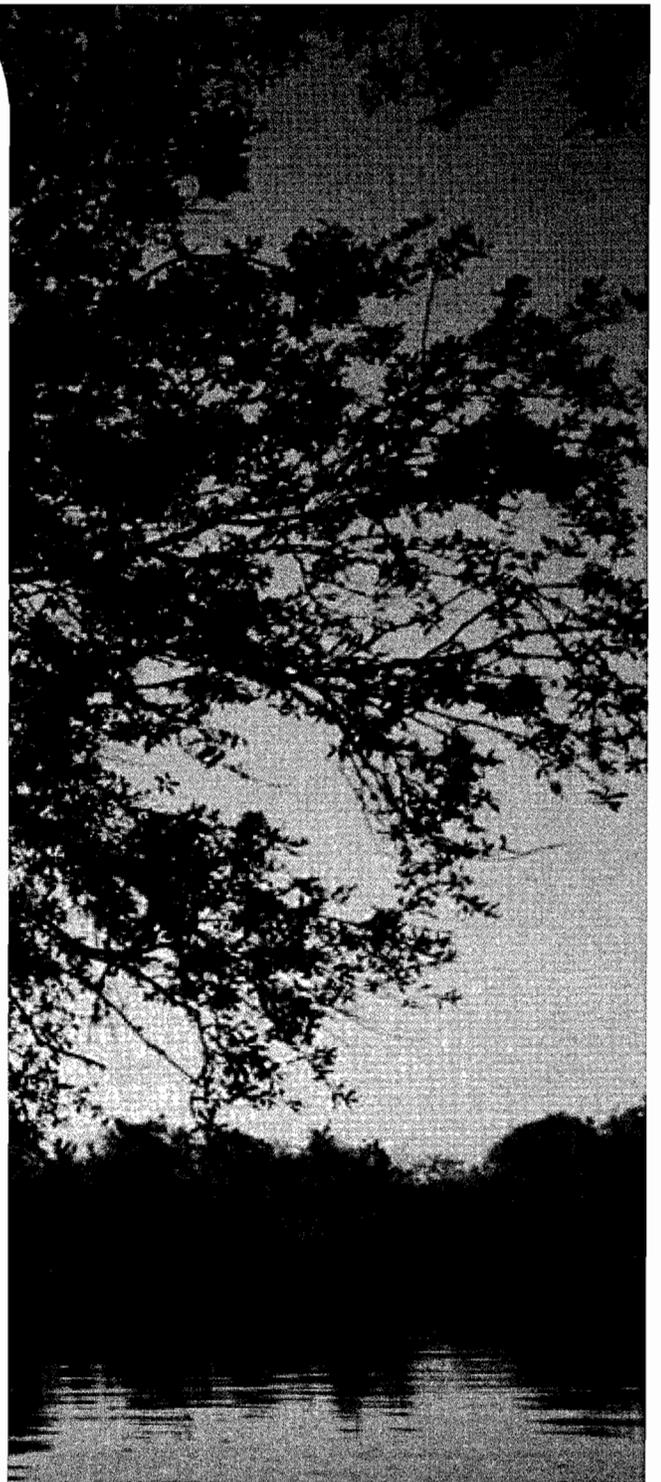
District 13

Miami-Dade County provides equal access and equal opportunity in employment and services and does not discriminate on the basis of disability.

"It is the policy of Miami-Dade County to comply with all of the requirements of the Americans with Disabilities Act."



miami-dade water and sewer department
www.miamidade.gov/conservation
miami-dade county information 3-1-1



If 1 percent of American homes replaced their older, inefficient toilets with WaterSense labeled models, the country would save more than 38 million kWh of electricity — enough to supply more than 43,000 households electricity for one month.