

# **MIAMI-DADE COUNTY, FLORIDA**

## **Water and Sewer System Bonds**

### **SECURITY FOR THE BONDS**

#### **Pledged Revenues**

The payment of principal of, premium, if any, and interest on the Water and Sewer System Bonds (the "Bonds") is secured by a pledge of and irrevocable lien on the Pledged Revenues which consists of Net Operating Revenues (Operating Revenues minus Operating Expenses as each is defined in the Master Ordinance) of the County's Water and Wastewater System (the "System") and investment income on moneys on deposit in the funds established pursuant to the Master Ordinance other than the Rebate Fund (the "Pledged Funds").

#### **Limited Obligation**

**The Bonds are special and limited obligations of the County payable from and secured by the Pledged Revenues, and the faith and credit of the County are not pledged to the payment of the principal of, redemption premium, if any, or interest on the Bonds. The issuance of the Bonds does not directly or indirectly or contingently obligate the County to levy any ad valorem taxes whatsoever or to make any appropriation for their payment except from the Pledged Revenues. Neither the faith and credit nor taxing power of the County, the State of Florida or any political subdivision of each is pledged to the payment of the Bonds.**

### **THE MIAMI-DADE WATER AND SEWER DEPARTMENT**

#### **History**

On October 3, 1972, the electorate of the County approved the formation of a new County-wide Water and Sewer Agency by expanding the then existing Department of Water and Sewer of the City of Miami (the "City"). Subsequently, the Board established the Miami Dade Water and Sewer Authority (the "Authority") which began operating on April 1, 1973. On March 13, 1975, the City, the County and the Authority agreed to the transfer of all water and sewer properties, facilities and funds of the Department of Water and Sewer of the City to the Authority with the condition that certain property donated by the City would be returned to the City in the future if such property was not needed for water or sewer utility purposes.

On October 4, 1983, the Board enacted Ordinance No. 83-92, which abolished the Authority effective November 1, 1983 and established the Miami-Dade Water and Sewer Authority Department as a department within Miami-Dade County government. On October 19, 1993, the Miami-Dade Water and Sewer Authority Department changed its name to the Miami-Dade Water and Sewer Department.

### **WATER AND SEWER SYSTEM**

#### **General**

The System is divided into the Water System and Wastewater System. The Miami-Dade Water and Sewer Department administers each on a unified basis for purposes of billing but separates the two for rates, capital improvements and accounting.

## **Service Area**

The System currently provides water and wastewater treatment to substantially all of the County either directly to retail customers or indirectly through wholesale contracts between the Miami-Dade Water and Sewer Department and various municipalities. The County is the largest county in the Southeastern United States with a land area of 2,209 square miles. In 2003, the population of the County was estimated at 2,343,000.

The Miami-Dade Water and Sewer Department supplies treated water on a wholesale basis to 15 municipally owned water utilities in the County and to 408,172 retail customers. The only municipalities which operate water treatment facilities for customers located within their municipal boundaries are the Cities of Homestead, Florida City, North Miami and North Miami Beach. The Miami-Dade Water and Sewer Department also provides wastewater transmission treatment and disposal service to 13 municipally owned wastewater utilities and 315,180 retail customers. The City of Homestead is the only municipality in the County which owns and operates its own wastewater treatment plant.

## **Water System**

The principal components of the Water System include 8 wellfields, 3 major water treatment plants, 5 smaller water treatment plants, 2 lime recalcining plants, and an extensive transmission and distribution system composed of storage reservoirs, pump stations and a network of transmission and distribution mains.

## **Wastewater System**

The Miami-Dade Water and Sewer Department's Wastewater System consists of collection sewers, manholes, lift stations, force mains, interceptors, pump stations and 3 regional wastewater treatment plants: the North District Wastewater Treatment Plant at Interama (the "North District Plant"), the Central District Wastewater Treatment Plant at Virginia Key (the "Central District Plant") and the South District Wastewater Treatment Plant at Blackpoint (the "South District Plant").

## **Rates**

In April 2002, the Board amended the Miami-Dade Water and Sewer Department's Schedule of Rates, Fees and Charges effective October 1, 2002 for providing services to its customers. The revisions to the retail rate structure and the numerical rates were projected to be revenue neutral for the Fiscal Year 2003, while making fundamental changes in the methods used to calculate customer's bills. This new structure created a consistent, simplified rate structure among retail customer classes and eliminated the seasonal surcharge. In addition, it provided some modest rate relief to most single and multi-family low to average user customers. High volume users and non-residential customers incurred a slight increase.

### ***Retail Rates***

Water Service. Under the new rate pay structure, water charges included a meter-based charge that recovers a portion of the Department's fixed costs associated with the retail water service from all customer classes. All retail water customers regardless of their water consumption pay the meter-based charge. The charge is calculated based on the water meter size and number of meters serving the account. A consumption inclining block structure was reduced from 5 to 4 block steps. The consumption charge for multi-families was based on the average consumption per dwelling unit. The new structure maintained the current conservation incentives derived from the inclining block rate structure and eliminated the seasonal rate differential.

**Wastewater Service.** All customers who utilize the Department's Wastewater System must pay a monthly or quarterly charge for wastewater service. The Department's rates for wastewater are based on a monthly or quarterly fee with an additional charge per usage based on cubic feet or gallons. As is the case with the Water Service in Fiscal Year 2003, the consumption inclining block structure was reduced for steps 2 and 3 to make them more revenue neutral.

### ***Wholesale Rates***

As a result of the Cost of Service Study, a wholesale rate structure was developed; however, the new rate structure was not recommended for implementation until the near future. The proposed wholesale rate structure includes a commodity charge to recover costs of average flows and a demand charge to recover costs related to "peak flow" demands made on the utility by its wholesale customers. The Department needed additional time to install the necessary metering devices to bill the wholesale customers, and to expand measures wholesale customers can implement to reduce the impact of this wholesale structure. It is anticipated that the new methodology for billing wholesale customers will be implemented in Fiscal Year 2005 - 2006. Also, the cost pursuant to the new rates would be the same or lower for those wholesale customers with well-maintained systems if they do not place additional demands on the Department's system during peak periods. Those wholesale customers whose systems have significant groundwater infiltration will experience higher costs and peak period demands will become more expensive as well.

### **Rate Increase**

As part of the Public Hearing Budget process in September 2003, the Board approved a rate increase effective October 1, 2003. The retail water and wastewater rates increased an average of 6.5% for the average 7,500 gallons per month. The wholesale water rates experienced an average rate increase of 8.6% to 10.5%; meanwhile wholesale wastewater customers experienced an average rate increase of 2.4%.

**WATER TREATMENT PLANTS  
ALLOCATIONS, RATED CAPACITIES, AND FLOWS**

| <u>Component</u>                   | <u>Hialeah/Preston</u>   | <u>Orr</u>               | <u>Southern Miami-Dade<br/>Water Supply System<sup>(1)</sup></u> |
|------------------------------------|--------------------------|--------------------------|--|
| District allocation <sup>(2)</sup> |                          |                          |  |
| Average                            | 199.2 mgd                | 203.1 mgd                | 11.0 mgd   |
| Peak                               | 235.0 mgd                | 241.7 mgd                | 13.4 mgd   |
| Plant Rated Capacity               | 225.0 mgd <sup>(3)</sup> | 248.0 mgd <sup>(4)</sup> | 12.0 mgd   |
| Actual Flows <sup>(5)</sup>        |                          |                          |  |
| Average Daily                      | 164.8 mgd                | 171.7 mgd                | 6.8 mgd  |
| Peak Day                           | 177.6 mgd                | 198.5 mgd                | 7.8 mgd  |

SOURCE: Miami-Dade Water and Sewer Department

<sup>(1)</sup> Represents five smaller water treatment plants.

<sup>(2)</sup> South Florida Water Management District allocation.

<sup>(3)</sup> Hialeah Plant rated capacity is 60 mgd and Preston Plant is 165 mgd for a total of 225 mgd.

<sup>(4)</sup> Treatment facility rated capacity is 248 mgd but water allocation and permitted treatment capacity is currently limited to 217 mgd., until completion of the ASR wells.

<sup>(5)</sup> Raw water flows for the 12 months ending September 2003.

The following table is a summary of the treatment parameters and the actual flows of each of the wastewater treatment plants. The North and Central District Plants have available capacity and the South District Plant receives more wastewater flow than its permitted capacity, such that the total regional system's actual flow is below permitted flow.

**WASTEWATER TREATMENT PLANTS  
Permit Parameters, Capacities and Flows**

|   | <u>North_<br/>District</u> | <u>Central<br/>District</u> | <u>South<br/>District</u> | <u>Total</u> |
|---|----------------------------|-----------------------------|---------------------------|--------------|
| <b><u>Installed Treatment Capacity</u></b>                  | 120.0                      | 143.0                       | 112.5                     | 375.5        |
| <b><u>Permit Parameters</u></b>                             |                            |                             |                           |              |
| Annual Average Daily Flow, mgd                              | 112.5                      | 143.0                       | 97.0                      | 352.5        |
| CBOD5, mg.L <sup>(1)</sup>                                  | 30                         | 30                          | 20                        |              |
| Suspended Solids mg.L <sup>(1)</sup>                        | 30                         | 30                          | 20                        |              |
| <b><u>Actual 12-Month Average Ending September 2003</u></b> |                            |                             |                           |              |
| Annual Average Daily Flow, mgd                              | 80.6                       | 109.2                       | 94.1                      | 283.9        |
| Effluent CBOD5, mg.L <sup>(2)</sup>                         | 6                          | 5                           | 5                         |              |
| Effluent Suspended Solids, mg.L <sup>(2)</sup>              | 13                         | 8                           | 10                        |              |

SOURCE: Miami-Dade Water and Sewer Department.

<sup>(1)</sup> mg.L equals milligrams per liter.

<sup>(2)</sup> These levels are below those allowed by permit.

The South District Plant at Blackpoint capacity was expanded to 112.5 mgd, as part of the Miami-Dade Water and Sewer Department's capital improvement program. The Miami-Dade Water and Sewer Department has expanded the North District Plant at Interama to a capacity of 120 mgd. There are no current plans to expand the capacity of the Central District Plant.

The number of retail customers for the past five years are as follows:

**ACTIVE RETAIL CUSTOMERS  
FOR FISCAL YEAR ENDED SEPTEMBER 30,**

|  | <u><b>1999</b></u> | <u><b>2000</b></u> | <u><b>2001</b></u> | <u><b>2002</b></u> | <u><b>2003</b></u> |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Water  | 369,924            | 372,973            | 388,169            | 398,073            | 408,170            |
| Wastewater   | 280,594            | 283,656            | 294,000            | 306,061            | 315,180            |
| Percent Ratio Wastewater<br>Customers to Water Customers | 75.9%              | 76.1%              | 75.7%              | 76.9%              | 77.2%              |

SOURCE: Miami-Dade Water and Sewer Department.

The current wholesale customers are:

**WATER**

Bal Harbour  
Bay Harbor Islands  
Medley  
Miami Springs  
North Bay Village  
Opa-locka  
West Miami  
Hialeah  
Indian Creek Village  
Miami Beach  
Surfside  
North Miami Beach  
North Miami  
Virginia Gardens  
Hialeah Gardens

**WASTEWATER**

Hialeah Gardens  
North Miami  
Medley  
West Miami  
Hialeah  
Florida City  
Miami Beach  
Miami Springs  
Coral Gables  
Opa-locka  
North Miami Beach  
Homestead  
Homestead Reserve Air Force Base

SOURCE: Miami-Dade Water and Sewer Department.

The ten largest customers for the water and wastewater systems, respectively, for Fiscal Year ended September 30, 2003 are:

### WATER SYSTEM

| <u>Name</u>                           | <u>Dollar<br/>Amount<br/>(000)</u> | <u>Percent of<br/>System Gross<br/>Revenues</u> |
|---------------------------------------|------------------------------------|---|
| City of Miami Beach                   | \$6,002                            | 3.9%  |
| City of Hialeah                       | 5,605                              | 3.6   |
| City of North Miami Beach             | 3,423                              | 2.2   |
| Miami-Dade County Aviation Department | 1,605                              | 1.1   |
| City of North Miami                   | 1,182                              | 0.8   |
| City of Opa-locka                     | 735                                | 0.5   |
| Florida Power & Light Company         | 690                                | 0.4   |
| City of Miami Springs                 | 601                                | 0.4   |
| City of Hialeah Gardens               | 476                                | 0.3   |
| Bal Harbour                           | 441                                | 0.3   |

### WASTEWATER SYSTEM

| <u>Name</u>                           | <u>Dollar<br/>Amount<br/>(000)</u> | <u>Percent of<br/>System Gross<br/>Revenues</u> |
|---------------------------------------|------------------------------------|---|
| City of Hialeah                       | \$15,477                           | 7.5%  |
| City of Miami Beach                   | 14,834                             | 7.2   |
| City of North Miami                   | 6,684                              | 3.2   |
| City of Coral Gables                  | 4,535                              | 2.2   |
| City of Miami Springs                 | 1,672                              | 0.8   |
| City of North Miami Beach             | 1,634                              | 0.8   |
| Miami-Dade County Aviation Department | 1,402                              | 0.7   |
| City of Medley                        | 1,239                              | 0.6   |
| City of Opa-locka                     | 1,177                              | 0.6   |
| City of Homestead                     | 633                                | 0.3   |

SOURCE: Miami-Dade Water and Sewer Department.

**Schedule of Rates**  
**RETAIL CUSTOMERS**  
(Effective: October 1, 2003)

**WATER**

**Monthly Charge**

| <b>Meter Size<br/>Charge<br/>(in inches)</b> | <b><u>Actual FY 2003</u></b> | <b><u>Actual FY 2004</u></b> |
|--|------------------------------|------------------------------|
| 5/8"   | \$3.00                       | \$3.20                       |
| 1"   | 6.75                         | 7.15                         |
| 1.5"   | 10.50                        | 11.15                        |
| 2"   | 22.50                        | 23.85                        |
| 3"   | 48.00                        | 50.90                        |
| 4"   | 75.00                        | 79.50                        |
| 6"   | 120.00                       | 127.20                       |
| 8"   | 210.00                       | 222.60                       |
| 10"  | 450.00                       | 477.00                       |
| 12"  | 850.00                       | 901.00                       |
| 14"  | 1,600.00                     | 1,696.00                     |
| 16"  | 3,000.00                     | 3,180.00                     |

| <b><u>Monthly Charge<br/>(flow rate all users)</u></b> | <b><u>Actual FY 2003</u></b> | <b><u>Actual FY 2004</u></b> |
|--|------------------------------|------------------------------|
| <i>Usage per 100 cubic feet (ccf):</i>                 |                              |                              |
| 0 to 5 ccf   | \$0.3750                     | \$0.38                       |
| 6 to 10 ccf  | 1.1250                       | 1.20                         |
| 11 to 17 ccf   | 1.5375                       | 1.65                         |
| 18 ccf and over  | 2.1000                       | 2.29                         |
| <i>Usage per 1,000 gallons:</i>                        |                              |                              |
| 0 to 3,750 gallons                                     | \$0.50                       | \$0.50                       |
| 3,751 to 7,500 gallons                                 | 1.50                         | 1.60                         |
| 7,501 to 12,750 gallons                                | 2.05                         | 2.20                         |
| 12,751 gallons and over                                | 2.80                         | 3.05                         |

Note: 100 cubic feet (cu. ft) equals 750 gallons.

**Schedule of Rates**  
**RETAIL CUSTOMERS**  
(Effective: October 1, 2003)

**WATER**

**Quarterly Charge**

| <b>Meter Size<br/>Charge<br/>(in inches)</b> | <b><u>Actual FY 2003</u></b> | <b><u>Actual FY 2004</u></b> |
|--|------------------------------|------------------------------|
| 5/8"   | \$9.00                       | \$9.60                       |
| 1"   | 2,025.00                     | 21.45                        |
| 1.5"   | 31.50                        | 33.45                        |
| 2"   | 67.50                        | 71.55                        |
| 3"   | 144.00                       | 152.70                       |
| 4"   | 225.00                       | 238.50                       |
| 6"   | 360.00                       | 381.60                       |
| 8"   | 630.00                       | 667.80                       |
| 10"  | 1,350.00                     | 1,431.00                     |
| 12"  | 2,550.00                     | 2,703.00                     |
| 14"  | 4,800.00                     | 5,088.00                     |
| 16"  | 9,000.00                     | 9,540.00                     |

**Quarterly Charge  
(flow rate all users)**

**Actual FY 2003**

**Actual FY 2004**

*Usage per 100 cubic feet (ccf):*

|                 |          |        |
|-----------------|----------|--------|
| 0 to 5 ccf      | \$0.3750 | \$0.38 |
| 6 to 10 ccf     | 1.1250   | 1.20   |
| 11 to 17 ccf    | 1.5375   | 1.65   |
| 18 ccf and over | 2.1000   | 2.29   |

*Usage per 1,000 gallons:*

|                          |        |        |
|--------------------------|--------|--------|
| 0 to 11,250 gallons      | \$0.50 | \$0.50 |
| 11,251 to 22,500 gallons | 1.50   | 1.60   |
| 22,501 to 38,250 gallons | 2.05   | 2.20   |
| 38,251 gallons and over  | 2.80   | 3.05   |

Note: 100 cubic feet (cu. ft) equals 750 gallons.



**Schedule of Rates**  
**RETAIL CUSTOMERS**  
(Effective: October 1, 2003)

**WASTEWATER**

| <b>Monthly Charge</b><br><b>(flow rate all users)</b>   | <b><u>Actual FY 2003</u></b> | <b><u>Actual FY 2004</u></b> |
|---|------------------------------|------------------------------|
| Base Facility Charge                                    | \$3.00                       | \$3.25                       |
| <i>Usage per 100 cubic feet (ccf):</i>                  |                              |                              |
| 0 to 5 ccf  | \$1.2750                     | \$1.39                       |
| 6 to 17 ccf   | 2.0625                       | 2.18                         |
| 18 ccf and over   | 2.5500                       | 2.70                         |
| <i>Usage per 1,000 gallons:</i>                         |                              |                              |
| 0 to 3,750 gallons                                      | \$1.70                       | \$1.85                       |
| 3,751 to 12,750 gallons                                 | 2.75                         | 2.90                         |
| 12,751 gallons and over                                 | 3.40                         | 3.60                         |
| <br>  |                              |                              |
| <b>Quarterly Charge</b><br><b>(flow rate all users)</b> | <b><u>Actual FY 2003</u></b> | <b><u>Actual FY 2004</u></b> |
| Base Facility Charge                                    | \$9.00                       | \$9.75                       |
| <i>Usage per 100 cubic feet (ccf):</i>                  |                              |                              |
| 0 to 15 ccf   | \$1.2750                     | \$1.39                       |
| 16 to 51 ccf  | 2.0625                       | 2.18                         |
| 52 ccf and over   | 2.5500                       | 2.70                         |
| <i>Usage per 1,000 gallons:</i>                         |                              |                              |
| 0 to 11,250 gallons                                     | \$1.70                       | \$1.85                       |
| 11,251 to 38,250 gallons                                | 2.75                         | 2.90                         |
| 38,251 gallons and over                                 | 3.40                         | 3.60                         |

Note: 100 cubic feet (cu. ft) equals 750 gallons.

**Schedule of Rates**  
**WHOLESALE CUSTOMERS**

**WATER**

|  | <b><u>Actual FY 2003</u></b> | <b><u>Actual FY 2004</u></b> |
|--|------------------------------|------------------------------|
| Hialeah and Miami Springs<br>(flow rate per 1,000 gallons)     | \$0.6631                     | \$0.72                       |
| All Other Wholesale Customers<br>(flow rate per 1,000 gallons) | \$0.7693                     | \$0.85                       |

**WASTEWATER**

|  |          |        |
|--|----------|--------|
| Monthly Base Fee<br>(no wastewater disposed)   | \$4.2400 | \$4.66 |
| Rates for Wet Season<br>(May 1 to October 31 Annually)<br>(flow rate per 1,000 gallons)    | \$1.8444 | \$1.90 |
| Rates for Dry Season<br>(November 1 to April 30 Annually)<br>(flow rate per 1,000 gallons) | \$1.4755 | \$1.50 |

---

Note: 100 cubic feet (cu. ft) equals 750 gallons.

## Rate Comparison

The combined water and sewer bills of the Miami-Dade Water and Sewer Department are generally lower than those of comparable water and sewer utilities in other parts of the United States as shown in the following table:

**COMPARISON OF COMBINED WATER AND SEWER CHARGES**  
**(7,500 Gallons of Residential Water Use)**  
**(Rates effective October 1, 2003)**

| <u>City/County</u>                                | <u>Monthly Charge</u> |
|---|-----------------------|
| San Diego, California                             | \$70.12               |
| Boston, Massachusetts                             | 66.87                 |
| San Francisco, California                         | 58.32                 |
| Broward County, Florida                           | 51.61                 |
| Atlanta, Georgia                                  | 56.25                 |
| Philadelphia, Pennsylvania                        | 47.96                 |
| Jacksonville, Florida                             | 46.65                 |
| Honolulu, Hawaii                                  | 46.57                 |
| St. Petersburg, Florida                           | 44.50                 |
| Los Angeles, California                           | 48.46                 |
| Houston, Texas                                    | 41.01                 |
| New Orleans, Louisiana                            | 45.89                 |
| Tampa, Florida                                    | 39.00                 |
| Dallas, Texas                                     | 38.53                 |
| Orlando, Florida                                  | 35.55                 |
| Charlotte, North Carolina                         | 37.00                 |
| Indianapolis, Indiana                             | 32.86                 |
| <b>Miami-Dade County, Florida</b>                 | <b>32.14</b>          |
| <b>Miami-Dade County, Florida (3,750 Gallons)</b> | <b>15.27</b>          |

---

SOURCE: Miami-Dade Water and Sewer Department

## Historic Coverage of Debt Service and Operating Results

The following table summarizes historic debt service coverage based on historical Pledged Revenues.

### **HISTORICAL DEBT SERVICE COVERAGE** **(in thousands)** **(Fiscal Year ended September 30)**

|  | <u>1999</u>  | <u>2000</u>  | <u>2001</u>  | <u>2002</u>  | <u>2003</u>  |
|--|--------------|--------------|--------------|--------------|--------------|
| Net Operating Revenues<br>Available for Debt Service | \$179,821    | \$229,990    | \$203,394    | \$199,212    | \$211,575    |
| Senior Debt Service<br>Requirements                  | 102,501      | 114,976      | 115,632      | 115,654      | 115,629      |
| Senior Debt Service Coverage                         | <u>1.75x</u> | <u>2.00x</u> | <u>1.76x</u> | <u>1.72x</u> | <u>1.83x</u> |

SOURCE: Miami-Dade Water and Sewer Department

**\$1,775,130,000**  
**Miami-Dade County, Florida**  
**Water and Sewer System Revenue Bonds, Series 1994, 1995, 1997 and 1999;**  
**and Revenue Refunding Bonds, Series 1993**  
**Combined Debt Service Schedule**

| Fiscal Year          | Effective   |                        |                        |                        | Outstanding     | Percent         |
|----------------------|-------------|------------------------|------------------------|------------------------|-----------------|-----------------|
| Ending               | Interest    |                        |                        | Total                  | Principal       | Outstanding     |
| <u>September 30,</u> | <u>Rate</u> | <u>Principal</u>       | <u>Interest</u>        | <u>Debt Service</u>    | <u>Balance</u>  | <u>of Total</u> |
| 2004                 | 5.30%       | \$31,275,000           | \$84,311,573           | \$115,586,573          | \$1,590,610,000 | 89.61%          |
| 2005                 | 5.31%       | 32,720,000             | 82,811,952             | 115,531,952            | 1,559,335,000   | 87.84%          |
| 2006                 | 5.32%       | 34,270,000             | 81,157,074             | 115,427,074            | 1,526,615,000   | 86.00%          |
| 2007                 | 5.31%       | 36,035,000             | 79,307,250             | 115,342,250            | 1,492,345,000   | 84.07%          |
| 2008                 | 5.31%       | 37,965,000             | 77,311,531             | 115,276,531            | 1,456,310,000   | 82.04%          |
| 2009                 | 5.30%       | 40,030,000             | 75,240,209             | 115,270,209            | 1,418,345,000   | 79.90%          |
| 2010                 | 5.30%       | 42,100,000             | 73,114,632             | 115,214,632            | 1,378,315,000   | 77.65%          |
| 2011                 | 5.30%       | 44,285,000             | 70,870,654             | 115,155,654            | 1,336,215,000   | 75.27%          |
| 2012                 | 5.30%       | 46,585,000             | 68,506,957             | 115,091,957            | 1,291,930,000   | 72.78%          |
| 2013                 | 5.30%       | 49,015,000             | 66,032,051             | 115,047,051            | 1,245,345,000   | 70.16%          |
| 2014                 | 5.30%       | 51,540,000             | 63,416,858             | 114,956,858            | 1,196,330,000   | 67.39%          |
| 2015                 | 5.29%       | 54,275,000             | 60,523,284             | 114,798,284            | 1,144,790,000   | 64.49%          |
| 2016                 | 5.27%       | 57,290,000             | 57,426,559             | 114,716,559            | 1,090,515,000   | 61.43%          |
| 2017                 | 5.24%       | 60,475,000             | 54,151,294             | 114,626,294            | 1,033,225,000   | 58.21%          |
| 2018                 | 5.21%       | 63,840,000             | 50,706,340             | 114,546,340            | 972,750,000     | 54.80%          |
| 2019                 | 5.18%       | 67,365,000             | 47,079,608             | 114,444,608            | 908,910,000     | 51.20%          |
| 2020                 | 5.14%       | 71,090,000             | 43,243,856             | 114,333,856            | 841,545,000     | 47.41%          |
| 2021                 | 5.09%       | 75,040,000             | 39,182,327             | 114,222,327            | 770,455,000     | 43.40%          |
| 2022                 | 5.02%       | 79,210,000             | 34,896,348             | 114,106,348            | 695,415,000     | 39.18%          |
| 2023                 | 4.93%       | 83,615,000             | 30,371,973             | 113,986,973            | 616,205,000     | 34.71%          |
| 2024                 | 4.83%       | 88,185,000             | 25,724,838             | 113,909,838            | 532,590,000     | 30.00%          |
| 2025                 | 4.68%       | 92,980,000             | 20,794,519             | 113,774,519            | 444,405,000     | 25.04%          |
| 2026                 | 4.44%       | 98,045,000             | 15,595,769             | 113,640,769            | 351,425,000     | 19.80%          |
| 2027                 | 4.03%       | 103,380,000            | 10,213,725             | 113,593,725            | 253,380,000     | 14.27%          |
| 2028                 | 4.21%       | 47,580,000             | 6,310,500              | 53,890,500             | 150,000,000     | 8.45%           |
| 2029                 | 3.78%       | 49,960,000             | 3,872,000              | 53,832,000             | 102,420,000     | 5.77%           |
| 2030                 | 2.50%       | <u>52,460,000</u>      | <u>1,311,500</u>       | <u>53,771,500</u>      | 52,460,000      | 2.96%           |
| Totals               |             | <u>\$1,590,610,000</u> | <u>\$1,323,485,181</u> | <u>\$2,914,095,181</u> | <u>\$0</u>      |                 |



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**

**\$409,415,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Refunding Bonds**  
**Series 1993**

**Dated:** December 1, 1993

**Final Maturity:** 2013

**Purpose:**

The Series 1993 Bonds were issued pursuant to Ordinance No. 93-134 and R-1485-93 to provide funds which together with other funds of the Department, be sufficient to refund, redeem and pay on a current or advance basis, as applicable, certain general obligation and revenue bonds issued to finance improvements to the Water & Sewer System ("System") and to pay certain loan obligations of the State of Florida, all outstanding in the aggregate principal amount of \$389,015,000 and to fund a Reserve Account.

**Security:**

The Series 1993 Bonds are limited obligations of the County payable solely from and secured by Net Operating Revenues of the System and any funds and accounts established on behalf of the Bondholders and investment earnings on those funds and accounts.

**Form:**

The Series 1993 Bonds were issued as fully registered bonds in denominations of \$5,000 or any integral multiples of \$5,000. The Series 1993 Bonds are in book-entry only form initially registered to The Depository Trust Company, New York, New York. Interest is payable semi-annually on April 1 and October 1 of each year, commencing April 1, 1994.

**Agents:**

|                         |   |
|-------------------------|---|
| Successor Registrar:    | Deutsche Bank Trust Company Americas, New York, New York  |
| Successor Paying Agent: | Deutsche Bank Trust Company Americas, New York, New York  |
| Escrow Agent:           | Bankers Trust Company, New York, New York   |
| Bond Counsel:           | Squire, Sanders & Dempsey, L.L.P., Miami, Florida<br>Valdes-Fauli, Cobb, Bischoff & Kriss, P.A., Miami, Florida |
| Insurance Provider:     | Financial Guaranty Insurance Company  |

**Ratings:**

|                    |     |
|--------------------|-----|
| Moody's:           | Aaa |
| Standard & Poor's: | AAA |
| Fitch:             | AAA |

**Call Provisions:**

**Optional Redemption:**

The Series 1993 Bonds maturing after October 1, 2003 are subject to redemption prior to maturity, at the option of the County, in whole at any time or in part on any dates at a redemption price, together with accrued interest to the redemption dates as follows.

| Redemption Dates                           | Redemption Price |
|--|------------------|
| October 1, 2003 through September 30, 2004 | 102%             |
| October 1, 2004 through September 30, 2005 | 101              |
| October 1, 2005 and thereafter             | 100              |

**Mandatory Redemption:**

The Series 1993 Bonds maturing on October 1, 2013 are subject to mandatory redemption by lot at the direction of the County prior to maturity on October 1, in each of the years and in the principal amounts set forth below, plus accrued interest to the redemption date.

| <b>Redemption Dates</b> | <b>Principal Amount</b> |
|-------------------------|-------------------------|
| 2010                    | \$28,050,000            |
| 2011                    | 29,450,000              |
| 2012                    | 30,925,000              |
| 2013 (Final Maturity)   | 26,075,000              |

***Projects Funded with Proceeds:***

NOT APPLICABLE

***Refunded Bonds:***

Water and Sewer System Revenue Bonds, Series A  
 Waterworks System General Obligation Bonds, Series A  
 Waterworks System General Obligation Bonds, Series B  
 Waterworks System Refunding Bonds, Series 1987  
 Water System Revenue Refunding Bonds, Series 1992  
 Custody Receipts Evidencing Ownership of Miami-Dade Water and Sewer Obligations,  
 Series H  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series T  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series V  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series W  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series X

***Refunded Bonds Call Date:***

Water and Sewer System Revenue Bonds, Series A were called February 15, 1994.  
 Waterworks System General Obligation Bonds, Series A were called January 2, 1998.  
 Waterworks System General Obligation Bonds, Series B were called February 15, 1994.  
 Waterworks System Refunding Bonds, Series 1987 were called January 1, 1997.  
 Water System Revenue Refunding Bonds, Series 1992 were called June 1, 2002.  
 Custody Receipts Evidencing Ownership of Miami-Dade Water and Sewer Obligations,  
 Series H were called June 1, 1999.  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series T were called July 1, 1996.  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series V were called July 1, 1998.  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series W were called July 1, 1998.  
 State of Florida Full Faith and Credit Pollution Control Bonds, Series X were called July 1, 2001.



**\$409,415,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Refunding Bonds**  
**Series 1993**  
**Debt Service Schedule**

| <b>Fiscal Year<br/>Ending<br/>Sept. 30,</b> | <b>Type</b> | <b>CUSIP Number</b> | <b>Interest<br/>Rate</b> | <b>Principal</b>     | <b>Interest</b>     | <b>Total Debt<br/>Service</b> |
|---|-------------|---------------------|--------------------------|----------------------|---------------------|-------------------------------|
| 2004  | Serial      | 233620CB7           | 4.60%                    | \$20,125,000         | \$13,186,295        | \$33,311,295                  |
| 2005  | Serial      | 233620CC5           | 4.70                     | 21,050,000           | 12,228,745          | 33,278,745                    |
| 2006  | Serial      | 233620CD3           | 4.80                     | 22,040,000           | 11,205,110          | 33,245,110                    |
| 2007  | Serial      | 233620CE1           | 4.90                     | 23,100,000           | 10,110,200          | 33,210,200                    |
| 2008  | Serial      | 233620CF8           | 5.00                     | 24,230,000           | 8,938,500           | 33,168,500                    |
| 2009  | Serial      | 233620CG6           | 5.00                     | 25,440,000           | 7,696,750           | 33,136,750                    |
| 2010  | Serial      | 233620CH4           | 5.00                     | 26,715,000           | 6,392,875           | 33,107,875                    |
| 2011  | Term        | 233620CJ0           | 5.00                     | 28,050,000           | 5,023,750           | 33,073,750                    |
| 2012  | Term        | 233620CJ0           | 5.00                     | 29,450,000           | 3,586,250           | 33,036,250                    |
| 2013  | Term        | 233620CJ0           | 5.00                     | 30,925,000           | 2,076,875           | 33,001,875                    |
| 2014  | Term        | 233620CJ0           | 5.00                     | <u>26,075,000</u>    | <u>651,875</u>      | <u>26,726,875</u>             |
| Totals                                      |             |                     |                          | <u>\$277,200,000</u> | <u>\$81,097,225</u> | <u>\$358,297,225</u>          |



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**

**\$431,700,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1994**

***Dated:*** February 4, 1994

***Final Maturity:*** 2022

***Purpose:***

The Series 1994 Bonds were issued pursuant to Ordinance No. 93-134 and Resolution No. R-74-94 to provide funds, together with other funds of the Department, to pay the cost of capital improvements to the Water & Sewer System (the "System") and to fund a Reserve Account.

***Security:***

The Series 1994 Bonds are limited obligations of the County payable solely from and secured by Net Operating Revenues of the System and any funds and accounts established on behalf of the Bondholders and investment earnings on those funds and accounts.

***Form:***

The Series 1994 Bonds were issued as variable rate bonds that bear interest at a Weekly Interest Rate determined by the Remarketing Agent as fully registered bonds in denominations of \$100,000 each or any integral multiples of \$5,000 in excess of \$100,000. The Series 1994 Bonds are in book-entry only form and are registered initially to The Depository Trust Company, New York, New York. Interest is payable semi-annually on the first Wednesday in April and October of each year, commencing April 6, 1994.

***Agents:***

|                               |  |
|-------------------------------|--|
| Registrar:                    | JPMorgan Chase Bank, New York, New York  |
| Paying Agent:                 | JPMorgan Chase Bank, New York, New York  |
| Tender Agent:                 | JPMorgan Chase Bank, New York, New York  |
| Liquidity Provider:           | Commerzbank AG, New York, New York (thru 11/6/02)  |
| Successor Liquidity Provider: | Lloyds TSB Bank, PLB, New York, New York (effective November 6, 2002)  |
| Remarketing Agent:            | Citigroup Global Markets, Inc. (formerly Smith Barney Shearson Inc., New York, New York) and Howard Gary & Company, Miami, Florida |
| Bond Counsel:                 | Barnes McGhee, Poston & Segue, Miami, Florida<br>Mitrani, Rynor & Gallegos, P.A., Miami, Florida                                   |
| Insurance Provider:           | Financial Guaranty Insurance Company   |

***Ratings:***

|                    |            |
|--------------------|------------|
| Moody's:           | Aaa/VMIG-1 |
| Standard & Poor's: | AAA/A-1+   |

***Call Provisions:***

**Optional Tender**

During any Weekly Interest Rate Period all or any portion of a Series 1994 Bond then bearing interest at a Weekly Interest Rate will be purchased or deemed purchase on the date in the Redemption Notice at a purchase price equal to the principal amount, plus any accrued interest to the date of purchase, upon delivery on any business day by the Direct Participant to the Tender Agent at its principal office, and to the Paying Agent, the Qualified Swap Provider, the Remarketing Agent and the liquidity Purchaser of an irrevocable written notice, executed by the Direct Participant. Such written notice shall state the principal amount of such Series 1994 Bond, the portion thereof to be purchased and the date on which the same is to be purchased, which date must be a business day at least seven days after the date of delivery of such notice to the Tender

Agent. Upon confirmation from DTC to the Tender Agent that such Direct Participant has an ownership at least equal to the purchase price, the purchase price will be paid and the Series 1994 Bond will be redeemed.

**Optional Redemption:**

The Series 1994 Bonds, which bear a Weekly Interest Rate, are subject to redemption prior to maturity upon the exercise by the County of its option to prepay all or a portion of the Series 1994 Bonds and consent of the Insurer, during any Weekly Interest Rate Period, on any business day, in whole or in part, at the redemption price of 100% of the unpaid principal amount of the Series 1994 Bonds to be redeemed plus accrued interest to the date of redemption.

**Mandatory Tender**

The Series 1994 Bonds will be redeemed if the County, after notification to the Tender Agent and consent of the Insurer, elects, at any time, to cause the interest rate on the Series 1994 Bonds to be converted to an Alternative Interest Rate; if at any time the Paying Agent gives notice that any Series 1994 Bonds, then subject to purchase under the Standby Agreement will on the date specified in such notice cease to be subject to purchase and the Standby Agreement renewed or replaced or that there will be in effect more than one Alternated Liquidity Facility; or if an "event of default" occurs that under the Standby Agreement would terminate the Standby Agreement.

**Mandatory Redemption:**

The Series 1994 Bonds are subject to mandatory sinking fund redemption in part on the first Wednesday of October in each year by lot in the principal amounts set forth below, plus accrued interest to the date fixed for redemption.

| <u>Year</u> | <u>Principal Amount</u> | <u>Year</u> | <u>Principal Amount</u> | <u>Year</u> | <u>Principal Amount</u> |
|-------------|-------------------------|-------------|-------------------------|-------------|-------------------------|
| 1995        | \$6,660,000             | 2005        | \$ 820,000              | 2015        | \$37,525,000            |
| 1996        | 2,355,000               | 2006        | 865,000                 | 2016        | 39,640,000              |
| 1997        | 340,000                 | 2007        | 915,000                 | 2017        | 41,875,000              |
| 1998        | 560,000                 | 2008        | 970,000                 | 2018        | 44,230,000              |
| 1999        | 590,000                 | 2009        | 1,020,000               | 2019        | 46,720,000              |
| 2000        | 625,000                 | 2010        | 1,080,000               | 2020        | 49,350,000              |
| 2001        | 660,000                 | 2011        | 1,140,000               | 2021        | 52,130,000              |
| 2002        | 695,000                 | 2012        | 1,205,000               | 2022        | 55,070,000              |
| 2003        | 735,000                 | 2013        | 7,680,000               |             |                         |
| 2004        | 780,000                 | 2014        | 35,525,000              |             |                         |

***Projects Funded with Proceeds:***

The Series 1994 Projects consist of the design, construction and construction expenses associated with the capital improvements related to the expansion of the wastewater treatment and collection facilities, the expansion and improvements to the water treatment plants and facilities including pumping stations, water main rehabilitation, the Biscayne pipeline and other similar projects.

***Refunded Bonds:*** NOT APPLICABLE

***Refunded Bonds Call Date:*** NOT APPLICABLE

**\$431,700,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1994**  
**Debt Service Schedule**

| <b>Fiscal Year<br/>Ending<br/>Sept. 30,</b> | <b>Type</b> | <b>CUSIP Number</b> | <b>Interest<br/>Rate</b> | <b>Principal</b>     | <b>Interest</b>      | <b>Total Debt<br/>Service</b> |
|---|-------------|---------------------|--------------------------|----------------------|----------------------|-------------------------------|
| 2004  | SF          | 233620CT8           | Variable                 | \$735,000            | \$23,563,206         | \$24,298,206                  |
| 2005  | SF          | 233620CT8           | Variable                 | 780,000              | 23,516,595           | 24,296,595                    |
| 2006  | SF          | 233620CT8           | Variable                 | 820,000              | 23,471,547           | 24,291,547                    |
| 2007  | SF          | 233620CT8           | Variable                 | 865,000              | 23,424,103           | 24,289,103                    |
| 2008  | SF          | 233620CT8           | Variable                 | 915,000              | 23,377,895           | 24,292,895                    |
| 2009  | SF          | 233620CT8           | Variable                 | 970,000              | 23,320,898           | 24,290,898                    |
| 2010  | SF          | 233620CT8           | Variable                 | 1,020,000            | 23,264,870           | 24,284,870                    |
| 2011  | SF          | 233620CT8           | Variable                 | 1,080,000            | 23,205,735           | 24,285,735                    |
| 2012  | SF          | 233620CT8           | Variable                 | 1,140,000            | 23,147,101           | 24,287,101                    |
| 2013  | SF          | 233620CT8           | Variable                 | 1,205,000            | 23,077,194           | 24,282,194                    |
| 2014  | SF          | 233620CT8           | Variable                 | 7,680,000            | 22,818,629           | 30,498,629                    |
| 2015  | SF          | 233620CT8           | Variable                 | 35,525,000           | 21,566,206           | 57,091,206                    |
| 2016  | SF          | 233620CT8           | Variable                 | 37,525,000           | 19,512,375           | 57,037,375                    |
| 2017  | SF          | 233620CT8           | Variable                 | 39,640,000           | 17,336,466           | 56,976,466                    |
| 2018  | SF          | 233620CT8           | Variable                 | 41,875,000           | 15,041,172           | 56,916,172                    |
| 2019  | SF          | 233620CT8           | Variable                 | 44,230,000           | 12,616,640           | 56,846,640                    |
| 2020  | SF          | 233620CT8           | Variable                 | 46,720,000           | 10,057,157           | 56,777,157                    |
| 2021  | SF          | 233620CT8           | Variable                 | 49,350,000           | 7,350,553            | 56,700,553                    |
| 2022  | SF          | 233620CT8           | Variable                 | 52,130,000           | 4,493,088            | 56,623,088                    |
| 2023  | SF          | 233620CT8           | Variable                 | <u>55,070,000</u>    | <u>1,474,556</u>     | <u>56,544,556</u>             |
| Totals                                      |             |                     |                          | <u>\$419,275,000</u> | <u>\$365,635,986</u> | <u>\$784,910,986</u>          |

\* SF is Sinking Fund

For Debt Service calculation, the interest rate is the SWAP rate entered into with Smith Barney Shearson Inc. at the commencement of the issuance.



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**

**\$346,820,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1995**

***Dated:*** October 1, 1995

***Final Maturity:*** 2025

***Purpose:***

The Series 1995 Bonds were issued pursuant to Ordinance Nos. 93-134 and 95-155; and Resolution No. R-1192-95 to provide funds, together with other funds of the Department, to pay the cost of capital improvements to the Water & Sewer System (the "System") and to fund a Reserve Account.

***Security:***

The Series 1995 Bonds are limited obligations of the County payable solely from and secured by Net Operating Revenues of the System and any funds and accounts established on behalf of the Bondholders and investment earnings on those funds and accounts.

***Form:***

The Series 1995 Bonds were issued as fully registered bonds in denominations of \$5,000 or any integral multiples of \$5,000. The Series 1995 Bonds are in book-entry only form and are registered initially to The Depository Trust Company, New York, New York. Interest is payable semi-annually on April 1 and October 1 of each year, commencing April 1, 1996.

***Agents:***

|                     |   |
|---------------------|---|
| Registrar:          | JPMorgan Chase Bank, New York, New York                                     |
| Paying Agent:       | JPMorgan Chase Bank, New York, New York                                     |
| Bond Counsel:       | Greenberg, Traurig, Hoffman, Lipoff, Rosen & Quentell, P.A., Miami, Florida |
|                     | The Law Office of Steve E. Bullock, Esquire, Miami, Florida                 |
| Insurance Provider: | Financial Guaranty Insurance Company  |

***Ratings:***

|                    |     |
|--------------------|-----|
| Moody's:           | Aaa |
| Standard & Poor's: | AAA |
| Fitch:             | AAA |

***Call Provisions:***

**Optional Redemption:**

The Series 1995 Bonds maturing after October 1, 2011 are subject to redemption, at the option of the County, prior to maturity in whole at any time or in part on any dates at a redemption price, plus accrued interest to the redemption dates as follows.

| <b>Redemption Dates</b>                    | <b>Redemption Price</b> |
|--|-------------------------|
| October 1, 2005 through September 30, 2006 | 102%                    |
| October 1, 2006 through September 30, 2007 | 101                     |
| October 1, 2007 and thereafter             | 100                     |

**Mandatory Redemption:**

The Series 1995 Term Bonds maturing on October 1, 2015, October 1, 2018, October 1, 2022 and October 1, 2025, are subject to scheduled mandatory redemption by lot in authorized denominations, prior to maturity in part at a redemption price equal to the principal amount thereof to be redeemed, plus accrued interest to the date fixed for redemption on the dates and in the principal amounts set forth below.

| <b>Redemption Dates<br/>(October 1)</b> | <b>Redemption Price</b> |
|---|-------------------------|
| 2012                                    | \$ 5,460,000            |
| 2013                                    | 5,760,000               |
| 2014                                    | 6,075,000               |
| 2015 (Final Maturity-2015 Term )        | 6,410,000               |
| 2016                                    | 6,760,000               |
| 2017                                    | 7,130,000               |
| 2018 (Final Maturity -2018 Term)        | 7,530,000               |
| 2019                                    | 7,940,000               |
| 2020                                    | 8,400,000               |
| 2021                                    | 8,885,000               |
| 2022 (Final Maturity-2022 Term)         | 9,390,000               |
| 2023                                    | 68,025,000              |
| 2024                                    | 71,765,000              |
| 2025 (Final Maturity-2025 Term)         | 75,710,000              |

***Projects Funded with Proceeds:***

The Series 1995 Projects consist of the design, construction and construction management expenses associated with the capital improvements related to the expansion of the wastewater treatment and collection facilities, the expansion and improvements to the water treatment plants and facilities including pumping stations, water main rehabilitation, and other similar projects.

***Refunded Bonds:*** NOT APPLICABLE

***Refunded Bonds Call Date:*** NOT APPLICABLE



**\$346,820,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1995**  
**Debt Service Schedule**

| <b>Fiscal Year</b> |             |                     |                 |                      |                      |  |                      |
|--------------------|-------------|---------------------|-----------------|----------------------|----------------------|--|----------------------|
| <b>Ending</b>      |             |                     | <b>Interest</b> |                      |                      |  | <b>Total Debt</b>    |
| <b>Sept. 30,</b>   | <b>Type</b> | <b>CUSIP Number</b> | <b>Rate</b>     | <b>Principal</b>     | <b>Interest</b>      |  | <b>Service</b>       |
| 2004               | Serial      | 233620DB6           | 4.60%           | \$3,305,000          | \$18,402,137         |  | \$21,707,137         |
| 2005               | Serial      | 233620DC4           | 4.70            | 3,455,000            | 18,244,930           |  | 21,699,930           |
| 2006               | Serial      | 233620DD2           | 4.80            | 3,625,000            | 18,076,738           |  | 21,701,738           |
| 2007               | Serial      | 233620DE0           | 6.25            | 3,795,000            | 17,871,144           |  | 21,666,144           |
| 2008               | Serial      | 233620DF7           | 6.25            | 4,030,000            | 17,626,613           |  | 21,656,613           |
| 2009               | Serial      | 233620DG5           | 6.25            | 4,285,000            | 17,366,769           |  | 21,651,769           |
| 2010               | Serial      | 233620DH3           | 6.25            | 4,555,000            | 17,090,519           |  | 21,645,519           |
| 2011               | Serial      | 233620DJ9           | 6.25            | 4,835,000            | 16,797,082           |  | 21,632,082           |
| 2012               | Serial      | 233620DK6           | 6.25            | 5,140,000            | 16,485,363           |  | 21,625,363           |
| 2013               | Term 1      | 233620DM2           | 5.50            | 5,460,000            | 16,174,588           |  | 21,634,588           |
| 2014               | Term 1      | 233620DM2           | 5.50            | 5,760,000            | 15,866,038           |  | 21,626,038           |
| 2015               | Term 1      | 233620DM2           | 5.50            | 6,075,000            | 15,540,575           |  | 21,615,575           |
| 2016               | Term 1      | 233620DM2           | 5.50            | 6,410,000            | 15,197,237           |  | 21,607,237           |
| 2017               | Term 2      | 233620CU5           | 5.50            | 6,760,000            | 14,835,062           |  | 21,595,062           |
| 2018               | Term 2      | 233620CU5           | 5.50            | 7,130,000            | 14,453,087           |  | 21,583,087           |
| 2019               | Term 2      | 233620CU5           | 5.50            | 7,530,000            | 14,049,937           |  | 21,579,937           |
| 2020               | Term 3      | 233620CV3           | 5.75            | 7,940,000            | 13,614,587           |  | 21,554,587           |
| 2021               | Term 3      | 233620CV3           | 5.75            | 8,400,000            | 13,144,812           |  | 21,544,812           |
| 2022               | Term 3      | 233620CV3           | 5.75            | 8,885,000            | 12,647,867           |  | 21,532,867           |
| 2023               | Term 3      | 233620CV3           | 5.75            | 9,390,000            | 12,122,463           |  | 21,512,463           |
| 2024               | Term 4      | 233620DL4           | 5.50            | 68,025,000           | 9,981,813            |  | 78,006,813           |
| 2025               | Term 4      | 233620DL4           | 5.50            | 71,765,000           | 6,137,588            |  | 77,902,588           |
| 2026               | Term 4      | 233620DL4           | 5.50            | 75,710,000           | 2,082,025            |  | 77,792,025           |
| Totals             |             |                     |                 | <u>\$332,265,000</u> | <u>\$333,808,974</u> |  | <u>\$666,073,974</u> |



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**

**\$437,195,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1997**

***Dated:*** January 1, 1997

***Final Maturity:*** 2026

***Purpose:***

The Series 1997 Bonds were issued pursuant to Ordinance Nos. 93-134 and 96-188 and Resolution No. R-1457-96 to provide funds to finance the costs of capital improvements to the Water & Sewer System ("System") and make a deposit to the Reserve Account.

***Security:***

The Series 1997 Bonds are limited obligations of the County payable solely from and secured by Net Operating Revenues of the System and any funds and accounts established on behalf of the Bondholders and investment earnings on those funds and accounts.

***Form:***

The Series 1997 Bonds were issued as fully registered bonds in denominations of \$5,000 or any integral multiples of \$5,000. The Series 1997 Bonds are in book-entry only form and registered initially to The Depository Trust Company, New York, New York. Interest is payable semi-annually on April 1 and October 1 of each year, commencing April 1, 1997.

***Agents:***

|                     |   |
|---------------------|---|
| Registrar:          | JPMorgan Chase Bank, New York, New York   |
| Paying Agent:       | JPMorgan Chase Bank, New York, New York   |
| Bond Counsel:       | McKenzie, McGhee, and Harper, Miami, Florida<br>Villalobos Law Firm, Miami, Florida |
| Insurance Provider: | Financial Guaranty Insurance Company  |

***Ratings:***

|                    |     |
|--------------------|-----|
| Moody's:           | Aaa |
| Standard & Poor's: | AAA |
| Fitch:             | AAA |

***Call Provisions:***

***Optional Redemption:***

The Series 1997 Bonds maturing after October 1, 2007 to and including October 1, 2016 are subject to optional redemption, at the option of the County, prior to maturity in whole at any time or in part on any date at a redemption price, plus accrued interest to the redemption date as follows:

| <b>Redemption Dates</b>                    | <b>Redemption Price</b> |
|--|-------------------------|
| October 1, 2007 through September 30, 2008 | 102%                    |
| October 1, 2008 through September 30, 2009 | 101                     |
| October 1, 2009 and thereafter             | 100                     |

The Series 1997 Bonds maturing after October 1, 2021 are subject to optional redemption, at the option of the County, prior to maturity in whole at any time or in part on any date at a redemption price, plus accrued interest to the redemption date as follows:

| <b>Redemption Dates</b>                    | <b>Redemption Price</b> |
|--|-------------------------|
| October 1, 2007 through September 30, 2008 | 101 %                   |
| October 1, 2008 through September 30, 2009 | 100½                    |
| October 1, 2009 and thereafter             | 100                     |

**Mandatory Redemption:**

The Series 1997 Term Bonds maturing on October 1, 2016, October 1, 2021, and October 1, 2026 are subject to mandatory redemption by lot in authorized denominations of \$5,000 and any integral multiples of \$5,000, prior to maturity on October 1, in each of the years and in the principal amounts set forth below, at a redemption price equal to the principal amount thereof to be redeemed, plus accrued interest to the date fixed for redemption.

| <b>Redemption Dates</b>          | <b>Redemption Price</b> |
|----------------------------------|-------------------------|
| 2013                             | \$12,025,000            |
| 2014                             | 12,675,000              |
| 2015                             | 13,355,000              |
| 2016 (Final Maturity-2016 Term ) | 14,075,000              |
| 2017                             | 14,835,000              |
| 2018                             | 15,605,000              |
| 2019                             | 16,430,000              |
| 2020                             | 17,290,000              |
| 2021 (Final Maturity-2021 Term)  | 18,195,000              |
| 2022                             | 19,155,000              |
| 2023                             | 20,160,000              |
| 2024                             | 21,215,000              |
| 2025                             | 22,335,000              |
| 2026 (Final Maturity-2026 Term)  | 103,380,000             |

***Projects Funded with Proceeds:***

The Series 1997 Projects consist of the design, construction and construction management expenses associated with the capital improvements related to the expansion of the waste water treatment and collection facilities, the expansion and improvements to the water treatment plant and facilities including pumping stations, water main rehabilitation, and other similar projects.

***Refunded Bonds:*** NOT APPLICABLE

***Refunded Bonds Call Date:*** NOT APPLICABLE

**\$437,195,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1997**  
**Debt Service Schedule**

| <b>Fiscal Year<br/>Ending<br/>Sept. 30,</b> | <b>Type</b> | <b>CUSIP Number</b> | <b>Interest<br/>Rate</b> | <b>Principal</b>     | <b>Interest</b>      | <b>Total Debt<br/>Service</b> |
|---|-------------|---------------------|--------------------------|----------------------|----------------------|-------------------------------|
| 2004  | Serial      | 233620EJ8           | 4.600%                   | \$7,110,000          | \$21,659,935         | \$28,769,935                  |
| 2005  | Serial      | 233620EK5           | 4.700                    | 7,435,000            | 21,321,683           | 28,756,683                    |
| 2006  | Serial      | 233620EL3           | 6.250                    | 7,785,000            | 20,903,679           | 28,688,679                    |
| 2007  | Serial      | 233620EM1           | 6.250                    | 8,275,000            | 20,401,804           | 28,676,804                    |
| 2008  | Serial      | 233620EN9           | 6.250                    | 8,790,000            | 19,868,523           | 28,658,523                    |
| 2009  | Serial      | 233620EP4           | 5.100                    | 9,335,000            | 19,355,793           | 28,690,793                    |
| 2010  | Serial      | 233620EQ2           | 5.125                    | 9,810,000            | 18,866,369           | 28,676,369                    |
| 2011  | Serial      | 233620ER0           | 5.250                    | 10,320,000           | 18,344,088           | 28,664,088                    |
| 2012  | Serial      | 233620ES8           | 5.250                    | 10,855,000           | 17,788,244           | 28,643,244                    |
| 2013  | Serial      | 233620ET6           | 5.250                    | 11,425,000           | 17,203,394           | 28,628,394                    |
| 2014  | Term 1      | 233620EU3           | 5.375                    | 12,025,000           | 16,580,316           | 28,605,316                    |
| 2015  | Term 1      | 233620EU3           | 5.375                    | 12,675,000           | 15,916,503           | 28,591,503                    |
| 2016  | Term 1      | 233620EU3           | 5.375                    | 13,355,000           | 15,216,947           | 28,571,947                    |
| 2017  | Term 1      | 233620EU3           | 5.375                    | 14,075,000           | 14,479,766           | 28,554,766                    |
| 2018  | Term 2      | 233620EV1           | 5.250                    | 14,835,000           | 13,712,081           | 28,547,081                    |
| 2019  | Term 2      | 233620EV1           | 5.250                    | 15,605,000           | 12,913,031           | 28,518,031                    |
| 2020  | Term 2      | 233620EV1           | 5.250                    | 16,430,000           | 12,072,113           | 28,502,113                    |
| 2021  | Term 2      | 233620EV1           | 5.250                    | 17,290,000           | 11,186,963           | 28,476,963                    |
| 2022  | Term 2      | 233620EV1           | 5.250                    | 18,195,000           | 10,255,481           | 28,450,481                    |
| 2023  | Term 3      | 233620EW9           | 5.250                    | 19,155,000           | 9,275,044            | 28,430,044                    |
| 2024  | Term 3      | 233620EW9           | 5.250                    | 20,160,000           | 8,243,025            | 28,403,025                    |
| 2025  | Term 3      | 233620EW9           | 5.250                    | 21,215,000           | 7,156,931            | 28,371,931                    |
| 2026  | Term 3      | 233620EW9           | 5.250                    | 22,335,000           | 6,013,744            | 28,348,744                    |
| 2027  | Term 3      | 233620EW9           | 5.250                    | <u>103,380,000</u>   | <u>2,713,725</u>     | <u>106,093,725</u>            |
| Totals                                      |             |                     |                          | <u>\$411,870,000</u> | <u>\$351,449,182</u> | <u>\$763,319,182</u>          |



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**

**\$150,000,000**  
**Miami-Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1999A**

**Dated:** April 1, 1999

**Final Maturity:** 2029

**Purpose:**

The Series 1999A Bonds were issued pursuant to Ordinance Nos. 93-134 and 99-23 and Resolution No. R-228-99 to provide funds to finance the costs of capital improvements to the Water & Sewer System ("System") and make a deposit to the Reserve Account.

**Security:**

The Series 1999A Bonds are limited obligations of the County payable solely from and secured by: (1) Net Operating Revenues of the System; (2) any funds and accounts established on behalf of the Bondholders; and (3) investment earnings on those funds and accounts.

**Form:**

The Series 1999A Bonds were issued as fully registered bonds in denominations of \$5,000 or any integral multiples of \$5,000. The Series 1999A Bonds are in book-entry only form and registered initially to The Depository Trust Company, New York, New York. Interest is payable semi-annually on April 1 and October 1 of each year, commencing October 1, 1999.

**Agents:**

|                         |  |
|-------------------------|--|
| Successor Registrar:    | Wachovia Bank, National Association, Miami, Florida  |
| Successor Paying Agent: | Wachovia Bank, National Association, Miami, Florida  |
| Bond Counsel:           | Bryant, Miller and Olive, P.A., Tallahassee, Florida |
|                         | Manuel Alonso-Poch, P.A., Coral Gables Florida       |
| Insurance Provider:     | Financial Guaranty Insurance Company                 |

**Ratings:**

|                    |     |
|--------------------|-----|
| Moody's:           | Aaa |
| Standard & Poor's: | AAA |
| Fitch:             | AAA |

**Call Provisions:**

**Optional Redemption:**

The Series 1999A Bonds are subject to optional redemption, prior to maturity by the County, in whole or in part at any time (less than all of a single maturity to be selected by lot) at the following times and redemption prices (expressed as a percentage of the principal amount of such Series 1999A Bonds to be redeemed), plus accrued interest to the redemption date as follows:

| Redemption Dates                           | Redemption Price |
|--|------------------|
| October 1, 2009 through September 30, 2010 | 101%             |
| October 1, 2010 through September 30, 2011 | 100½             |
| October 1, 2011 and thereafter             | 100              |

**Mandatory Redemption:**

The Series 1999A Bonds are subject to mandatory sinking fund redemption by lot, prior to maturity, at a redemption price equal to the principal amount of the Series 1999A Bonds plus accrued interest, without premium, in the following principal amounts and on October 1 of the years set forth below:

**Redemption Dates**

2027  
2028  
2029 (Final Maturity)

**Redemption Price**

\$47,580,000  
49,960,000  
52,460,000

***Projects Funded with Proceeds:***

The Series 1999A Projects consist of the design, construction and construction management expenses associated with the capital improvements related to the expansion of the waste water treatment and collection facilities, the expansion and improvements to the water treatment plant and facilities including pumping stations, water main rehabilitation, and other similar projects.

***Refunded Bonds:*** NOT APPLICABLE

***Refunded Bonds Call Date:*** NOT APPLICABLE



**\$150,000,000**  
**Dade County, Florida**  
**Water and Sewer System Revenue Bonds**  
**Series 1999A**  
**Debt Service Schedule**

| <b>Fiscal Year<br/>Ending<br/>Sept. 30,</b> | <b>Type</b> | <b>CUSIP Number</b> | <b>Interest<br/>Rate</b> | <b>Principal</b>     | <b>Interest</b>      | <b>Total Debt<br/>Service</b> |
|---|-------------|---------------------|--------------------------|----------------------|----------------------|-------------------------------|
| 2004  |             |                     | %                        | \$                   | \$7,500,000          | \$7,500,000                   |
| 2005  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2006  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2007  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2008  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2009  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2010  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2011  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2012  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2013  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2014  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2015  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2016  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2017  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2018  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2019  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2020  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2021  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2022  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2023  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2024  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2025  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2026  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2027  |             |                     |                          |                      | 7,500,000            | 7,500,000                     |
| 2028  | Term        | 59334DC8            | 5.00                     | 47,580,000           | 6,310,500            | 53,890,500                    |
| 2029  | Term        | 59334DC8            | 5.00                     | 49,960,000           | 3,872,000            | 53,832,000                    |
| 2030  | Term        | 59334DC8            | 5.00                     | 52,460,000           | 1,311,500            | 53,771,500                    |
| Totals                                      |             |                     |                          | <u>\$150,000,000</u> | <u>\$191,494,000</u> | <u>\$341,494,000</u>          |



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**

**MIAMI-DADE COUNTY, FLORIDA**  
**WATER AND SEWER DEPARTMENT**  
**INTEREST RATE SWAPS**  
**as of September 30, 2003**  
(in thousands)

The Water and Sewer Department has entered into three interest rate swaps in connection with the Series 1994 Bonds, the Series 1995 Bonds and the Series 1997 Bonds. On the Swap associated with the Series 1995 Bonds, the interest paid to the counterparty of the swap by the Department is a fixed rate of 4.40% until June 15, 2008, at which time the County will recommence paying a variable rate, and the amount to be received from the counterparty is a fixed rate of 5.225%. On the Swap associated with the Series 1997 Bonds, the Department pays BMA/.604 and the counterparty pays LIBOR + 1.455%. The Department's interest rate Swap associated with the Series 1994 Bonds is for the remaining outstanding period of these Bonds. The Department pays a fixed rate of 5.28% and the counterparty pays a variable rate on the outstanding Series 1994 Bonds.

If the counterparties to the swaps default, or if the swaps are terminated, the Department will be exposed to the rates established in each swap agreement. A termination of any swap agreement may result in the Department making or receiving a termination payment. The counterparties to the interest rate swap agreements are large international brokerage and insurance firms and accordingly, the County believes there is little risk of counterparty nonperformance.

| Counterparty                        | Notional Amount/Series of Bonds (000's) | COUNTY PAYS   |                   | COUNTERPARTY PAYS |                   | Term  |
|-------------------------------------|---|---|-------------------|-------------------|-------------------|---|
|                                     |   | Description   | \$ Amount (000's) | Description       | \$ Amount (000's) |   |
| Merrill Lynch Capital Services Inc. | \$215,000 Series 1995                   | Fixed Rate - The Counterparty pays a combined fixed rate of 5.225, the County pays a fixed rate of 4.40% until 6/15/08 and then recommence paying a variable rate | \$11,918          | Fixed - 5.225%    | \$13,692          | 6/15/20 - With new option to terminate on 6/15/08 |
| RFPC, Ltd. <sup>(1)</sup>           | \$200,000 Series 1997                   | BMA/.604  | \$487             | LIBOR +1.455%     | \$2,465           | 10/01/26  |
| AIG Financial Products Corp.        | \$419,275 Series 1994                   | Fixed - 5.28% Remarketing Fee & LOC Charges   | \$22,076          | Variable Rate     | \$4,742           | 10/05/22  |

<sup>(1)</sup> A subsidiary of Rice Financial Products Co., New, York, New York



**SERVE•CONSERVE**

**This Page Left Intentionally Blank**