

# Miami-Dade Water and Sewer Department

A DEPARTMENT OF MIAMI-DADE COUNTY, FL

## Comprehensive Annual Financial Report

FOR THE FISCAL YEARS ENDED SEPTEMBER 30, 2013 AND 2012

PREPARED BY: CONTROLLER DIVISION AND PUBLIC AFFAIRS SECTION

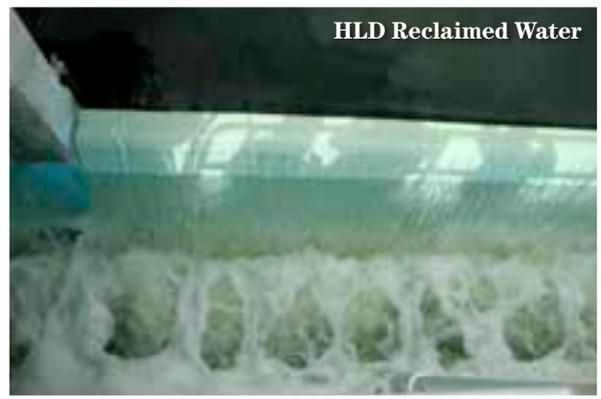




A wire brush and a packer being inserted into a 24 inch wastewater injection well for the MITs



Reverse Osmosis Water Treatment Plant



HLD Reclaimed Water



Fuel for the Plant's emergency generators



Members of the ERP 9.1 Upgrade Team

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### **VISION STATEMENT**

The continuous delivery of excellent, cost-effective water supply and wastewater services in compliance with all regulatory requirements.

### **MISSION STATEMENT**

The Miami-Dade Water and Sewer Department is committed to serving the needs of Miami-Dade County residents, businesses, and visitors by providing high-quality drinking water and wastewater disposal services while providing for future economic growth via progressive planning; implementing water conservation measures; safeguarding public health and the environment; and providing for continuous process improvements and cost efficiencies.



*Delivering Excellence Every Day*



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## MIAMI-DADE COUNTY

Carlos A. Gimenez  
Mayor



## BOARD OF COUNTY COMMISSIONERS

Rebeca Sosa  
Chairwoman

Lynda Bell  
Vice Chair

Barbara J. Jordan  
District 1

Jean Monestime  
District 2

Audrey M. Edmonson  
District 3

Sally A. Heyman  
District 4

Bruno A. Barreiro  
District 5

Rebeca Sosa  
District 6

Xavier L. Suarez  
District 7

Lynda Bell  
District 8

Dennis C. Moss  
District 9

Senator Javier D. Souto  
District 10

Juan C. Zapata  
District 11

José "Pepe" Díaz  
District 12

Esteban Bovo, Jr.  
District 13

Harvey Ruvín  
Clerk of the Circuit and County Courts

Lazaro Solis  
Property Appraiser

Robert A. Cuevas, Jr.  
County Attorney

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.



**Water and Sewer**  
P.O. Box 330316  
3071 SW 38th Avenue  
Miami, Florida 33233-0316  
T 305-665-7471

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February 20, 2014

Honorable Carlos A. Gimenez, Mayor  
Honorable Rebeca Sosa, Chairwoman and Members of the Board of County Commissioners  
Honorable Harvey Ruvin, Clerk of the Circuit and County Courts  
Lazaro Solis, Property Appraiser  
Robert A. Cuevas, Jr., County Attorney  
Miami-Dade County, Florida  
Ladies and Gentlemen:

The Comprehensive Annual Financial Report (CAFR) of the Miami-Dade Water and Sewer Department (Department, or WASD) for the fiscal years ended September 30, 2013 (FY2013) and September 30, 2012 (FY2012) is submitted herewith. The financial statements were prepared in accordance with U.S. generally accepted accounting principles (GAAP) as promulgated by the Governmental Accounting Standards Board (GASB) and audited by a firm of independent certified public accountants retained by the Department. For the fiscal year ended September 30, 2013, the Department received an unqualified opinion from its independent auditor.

This report may be accessed via the Internet at [http://www.miami-dade.gov/wasd/reports\\_financial.asp](http://www.miami-dade.gov/wasd/reports_financial.asp).

While the independent auditor has expressed an opinion on the basic financial statements contained in this report, management is responsible, in all material respects, for both the completeness and reliability of the information contained in this report. The basic financial statements comprise the Management's Discussion and Analysis (MD&A), financial statements, notes to the financial statements, and Required Supplementary Information (RSI). Immediately following the independent auditor's report is the MD&A, which provides a narrative introduction, detail overview and analysis of the Department's financial activities for FY2013. MD&A complements this Letter of Transmittal and should be read in conjunction with it.

## **PROFILE OF GOVERNMENT**

In December 1972, the Board of County Commissioners (Board) of Miami-Dade County, Florida (County) created the Miami-Dade Water and Sewer Authority (Authority) for the purpose of establishing an agency responsible for providing water and wastewater services throughout the County. In 1973, all properties of the water and wastewater systems of the City of Miami and of the County were put under the control of the Authority. The Board changed the status of the Authority to that of a County department effective November 1, 1983, under the provisions of Miami-Dade County Ordinance 83-92, establishing the "Miami-Dade Water and Sewer Authority Department." On October 19, 1993, the Department changed its name to the Miami-Dade Water and Sewer Department.

The Department's water system, considered the largest water utility in the Southeast United States, serving approximately 428,631 retail customers and 15 municipal wholesale customers within Miami-Dade County. Water is drawn primarily from the surficial Biscayne Aquifer, a non-artesian

(or near surface) aquifer, which underlies an area of about 3,200 square miles in Miami-Dade, Broward and Palm Beach counties.

The water system consists of three regional water treatment plants and five small auxiliary treatment facilities that service the southernmost area of the County. There are fifteen wellfields comprised of 94 production wells and five aquifer storage and recovery wells. These wells supply untreated water to the treatment plants. Water distribution throughout the 400 square miles service area is performed via seven remote finished water storage and pumping facilities and more than 7,700 miles of water mains ranging in size from 2 inches to 96 inches in diameter. The service area is subject to wide fluctuations in rainfall, not only in total annual amount, but also month-to-month. An extended dry period usually results in substantial water usage for residential irrigation and corresponding peak demands on the utility. In response, the Department encourages water conservation through water use restrictions, rates and other methods. The conservation program includes: leak detection and repair of the water mains; recycling the water used to backwash filters and treatment plants; reduction of transmission main pressure during periods of critical water shortage; new ordinances establishing water use efficiency standards for new construction and permanent two days a week irrigation restrictions; brochures and public information mailed with bills giving advice on water conservation; rebate programs designed to improve the efficient use of water by retrofitting older fixtures; and using treated wastewater effluent for process water, cleanup and landscape irrigation.

The wastewater system serves approximately 346,285 retail customers and 13 wholesale customers, consisting of 12 municipal customers and the Homestead Air Reserve Base. It consists of three

regional wastewater treatment plants, over 1,000 sewage pump stations and nearly 6,200 miles of collection and transmission pipelines. The disposal of the by-products of the treatment process (sludge and effluent or treated wastewater) is an important part of the Department's plan to improve and expand its sewer system.

Disposal of treated wastewater at the North District Plant and the Central District Plant is accomplished by discharge into the Atlantic Ocean. A portion of the treated effluent at the North District Plant is also disposed via deep injection wells. Environmental studies conducted by the Environmental Protection Agency (EPA) and examinations by the State and the Department conducted in 1994 have shown "no irreparable harm" and "no unreasonable degradation" to the environment as a result of the discharge of effluent from the North District Plant and the Central District Plant into the Atlantic Ocean. This position has since been revised by the State where, during 2008, legislation was passed mandating a phase out of all ocean outfall flows in an effort to significantly reduce this practice.

The South District Plant disposes of its effluent through deep injection wells to the lower Floridan Aquifer at a depth below 2,400 feet. In 1995, the Department completed construction of five additional deep injection wells as part of its 112.5 million gallons per day (MGD) plant expansion project.

Only one well received an operational permit but it is anticipated that the remaining four deep injection wells will receive their operational permit with the completion of an on-going groundwater monitoring study.

The Department continues to plan and design reclaimed water facilities. Currently, the

Department reuses 13 million gallons per day of treated wastewater, which includes 120,000 gallons per day for irrigation of the Florida International University Bay Vista Campus. As part of the 20-Year Water Use Permit, the Department is committed to produce about 170 MGD of reclaimed water for aquifer recharge, irrigation, power plant cooling and potentially coastal wetlands re-hydration. In view of significantly reduced water demand forecasts, the water reclamation goals will continue to be evaluated in terms of cost-effectiveness.

## ECONOMIC CONDITION AND OUTLOOK

This economic condition and outlook report outlines the level of economic activity throughout FY2013 and forecasts the area's economic outlook for next fiscal year.

One year ago, in the year-end outlook for the local economy, it was anticipated that FY2013 would be one of slow recovery as had been the case since the end of the recession in 2009. Miami-Dade County would experience moderate growth in employment and a modest reduction in its unemployment rate. The improvements in the local economy would rest on an expansion of trade and tourism brought about by strong growth in Latin America and a strengthening of the United States economy.

In hindsight, FY2013 confirmed a continued slow growth for the economy and employment as well as a modest reduction in the unemployment rate. The economies of Latin America performed worse than anticipated and the sectors thought to provide strength for the year, trade and tourism, displayed tepid growth. The local economy derived strength from a surprisingly strong real estate sector, both in terms of real estate transactions and new construction.

At the national level, FY2013 saw a deceleration of economic activity, with real gross domestic product (GDP) increasing at an annual rate of 1.7 percent, a considerably weaker showing than the 2.8 percent growth in the preceding year. Slower growth was accompanied by very low inflationary pressure. Prices increased by 1.2 percent, a level not seen since FY 2010. Despite the slow economic growth, the headline unemployment rate decreased to 7.6 percent from 8.3 percent.

For Miami-Dade's main economic engines FY2013 was a very interesting year, the comeback of real estate has been surprisingly strong, tourism went from being majority domestic to majority international and the international trade sector moved towards looking more like the US trade sector with a reduction in exports and strong increases in imports.

What follows is an overview of the economic conditions throughout the past year and a brief discussion about the trends associated with the area's key economic drivers.

## EMPLOYMENT

In FY2013 nonagricultural wage and salary employment (annual average) recorded an overall gain of approximately 10,100 jobs. This was up by one percent, to put total employment at 1,033,292 according to the Florida Department of Economic Opportunity. While overall job growth has been modest, it is nonetheless viewed as favorable, thus making FY2013 a year of recovery. Despite a limited gain in the size of the labor force, the unemployment rate noticeably decreased. The average annual unemployment rate for the year stood at 8.9 percent, compared to 9.5 percent a year earlier. Moreover, unemployment rates have steadily decreased over the year from 9.2 percent to 8.3 percent.

By individual sector, most were contributors to employment growth. The gains accrued mostly in the Service providing industries. The top two sectors that gained jobs were Food Services, and Retail registering gains of 4,000 and 3,500 jobs respectively. Significant job losses occurred in Air Transportation and Local government with 1,300 and 5,300 respectively.

After five straight years of job losses, construction turned the corner by increasing its payrolls by 0.8 percent, while manufacturing continued to slide, down 2.1 percent.

## REAL ESTATE MARKET

Traditionally, the real estate sector in Miami-Dade County is viewed as one of the important measures of the County's economic health. In FY2013, the sector broke away from the slow pace improvement mode experienced since 2011. Residential sales, sales prices and construction increased considerably while foreclosure filings dropped.

During FY2013, sales of existing single-family homes increased 24.5 percent with 12,938 homes sold. This was fueled, in part, by low mortgage rates and expectations of higher rates in the future. A somewhat smaller increase occurred in the sales of condominiums with a total of 17,221 units sold for a 13.0 percent increase. Another reason for this positive performance can be attributed to the foreign-based demand for housing, especially condominiums.

In terms of valuation, housing prices continued its upward trend in FY2013. The median sales price of an existing single-family home in Miami-Dade rose to \$214,505 up by 17.5 percent. Existing condominiums displayed a robust growth in sales price increasing by 23.1 percent from FY2012.

Average mortgage rates for the county stood at 3.61 percent in FY2013, down from an average of 3.91 percent in the previous year. Although the average for the year was down, the rate increased steadily during 2013 from 3.34 percent in the fourth quarter of 2012 to 4.20 percent in the third quarter of 2013. This amounted to 0.86 percent increase during FY2013. This increase did not seem to deter many sales, partly because a large share of sales were cash sales and partly because of expectations of higher mortgage rates ahead. Meanwhile, the consumer price index for the Miami area rose 1.3 percent, down from a 2.3 percent gain in the previous year.

With regard to the development side of the real estate market, 2013 was a breakout year for residential construction. During FY2013 permits were issued for the construction of 8,662 residential units, more than the combined total for the three previous years. The value of such construction exceeded the one billion dollar mark, a level not seen since 2007.

## SALES INDICATORS

Economic activity, as measured by taxable sales, showed some strength during the past year. Total taxable sales rose by 7.1 percent to about \$43.4 billion.

In FY2013, there was an across-the-board increase in taxable sales for all major categories from the previous year. Auto and Accessories led the way in the retail sales category posting an 11.3 percent gain followed by Tourism and Recreation with an increase of 7.6 percent. This performance was reflected in the Miami-Dade's broad market indicator, the Index of Retail Activity, which increased by 6.1 percent during the same period.

## INTERNATIONAL TRADE AND COMMERCE

International trade and commerce is a key component of Miami-Dade's economy. The sector contributed greatly to growth in the county in FY 2011 and FY2012 but moderated its pace in FY2013. Despite the slowdown, merchandise trade passing through the Miami Customs District (that includes an area broader than Miami-Dade) totaled \$125.7 billion, the highest ever. This represents a 3.7 percent increase in total trade, although lower than the very large increase of 19.6 percent two years ago and 10.5 percent in the previous year.

In contrast to the recurring merchandise trade deficits that the United States maintains year after year, the Miami Customs District contributes to a large trade surplus. Although the surplus is still present it was reduced significantly in FY2013. Exports registered a decrease of 4.5 percent compared to an 8.8 percent increase during the prior year. Conversely, imports increased by 16 percent after increasing 13.3 percent in the prior year. Most of the Miami Customs District export markets are in South America, Central America, and the Caribbean. In addition, the majority of all U.S. imported perishables from this region are passing through the Miami District. With the economies in most of the countries in these regions performing below expectations increases in trade flows were muted.

Two of Miami-Dade County's barometers of trade activity are the freight tonnage moving through Miami International Airport (MIA) and Port Miami (Seaport). At the former, overall air freight tonnage went up 9 percent, compared to a 4.8 percent increase in the previous year. At the Seaport, cargo tonnage figures were down by 1.6 percent, in contrast to the previous year's gain of 2.8 percent. With global growth prospects in FY2014 not expected to be robust, trade activity is likely to continue to

underperform in the coming year. Looking beyond the FY2014, the dredging activities underway to accommodate larger vessels in the Post Panama period, augurs well for the future of the Port.

## TOURISM

Tourism in Miami-Dade recovered fairly quickly from the effects of the recession and posted significant gains in FY 2011 and FY2012. Despite growth slowing down considerably in FY2013, the industry reached new heights in terms of number of visitors, occupancy rates and room rates. In FY2013, the Miami area became more of a year round destination than in prior years, and for the first time international visitors surpassed domestic visitors.

Visitors to the Miami area increased about 1.5 percent in FY2013 compared to a larger gain of 5 percent in the previous year. In total, there were 14.1 million overnight visitors over this past year, up from 13.9 million recorded in 2012. The number of domestic visitors was down in FY2013, but an increase of international visitors was large enough to keep the overall number going up. The number of international visitors was up 5.8 percent compared to the previous year, reaching 7.1 million. Domestic visitors decreased by 2.7 percent, to 6.9 million. This reflected a visitor market mix of 49 percent domestic and 51 percent international. Compared to other domestic cities, Miami has the largest percentage of international visitors.

In conjunction with the increase in visitors, the Miami International Airport passenger levels reached 40 million for the first time in FY2013, representing a gain of 1.4 percent compared to a gain of 5.1 percent in the prior year. This outcome consists of decrease in domestic air passengers outweighed by an increase in international air passengers. MIA international passengers activity increased by 4.2 percent to 20.01 million, while domestic passengers

activity decreased by 1.2 percent to 20.09 million. With the continued improvement of the facilities at MIA, aviation officials are projecting that passenger traffic in 2014 will be higher than the previous year. This is based on the continued addition and increase in frequencies of flights from MIA to more destinations domestically and around the world. After falling in the previous year, passenger traffic at the Port Miami rebounded in FY2013 by 8.1 percent to surpass once again the 4 million mark.

Along with the higher number of visitors, hotel booking activity registered improvements as hotel occupancy rates increased on a year-round basis moving in the same direction as a year ago. In FY2013, hotel occupancy rate increased from 76.2 percent to 77.7 percent. The increase in demand came along with a substantial increase of 17.1 percent in the average hotel room rate, reaching \$173.20.

Higher occupancy rates and hotel room rates were reflected in Convention and Development Tax collections, as they increased by 10 percent between FY2012 and FY2013, from \$59.3 million to \$65.2 million.

## **FUTURE OUTLOOK**

After a year of overall slow growth, but important realignment of the different sectors of the local economy, conditions are set for a modest acceleration of economic activity in the upcoming 2014 fiscal year.

This moderately optimistic outlook for the economy of Miami-Dade County starts with a prior year of modest growth to beat and continues with encouraging data contained within FY2013 monthly and quarterly data.

Due to its location and economic trade and tourism ties, Miami-Dade's economy is swayed by developments in both the broader US and Latin American economies.

Year over year economic growth in the United States slowed considerably from 2.8 to 1.7 percent in FY2013. But that 1.7 percent resulted from a very slow first quarter that accelerated ever since, from an annualized rate of 0.1 percent in the first quarter to a rate of 4.1 percent in the fourth quarter. The stock market, a forward looking indicator, recorded its best performance in 25 years during calendar year 2013. After years of very contentious budget battles and a partial government shutdown, the U.S. Congress achieved a bipartisan budget deal that paves the way for calm waters on the political front for the next two years. Thus, the prospect for growth of the nation's economy is bright.

By contrast economic growth in the emerging markets and more importantly Latin America is expected to slow in FY2014. The combination of robust US economy and a slower Latin American expansion is expected to prolong the strengthening of imports and weakening of exports in the Miami Customs District. The same phenomenon is likely to produce a return of Miami-Dade's tourism to its traditional majority-domestic pattern in FY2014 as well.

After a breakout year for real estate and construction, the level of activity in 2014 is expected to remain high with additional proposed projects coming on line and continued strength in real estate transactions derived from pent up demand and a perception of a stronger economy.

Employment should strengthen as a result of more activity in the real estate arena and stabilize to positive growth on all other sectors. The big question for FY2014 is whether Local Government employment will continue to shed jobs as has been the case for the past five years or will it turn the corner and start to positively impact the job picture.



For the upcoming fiscal year, the signs that are present in the current economic environment point to a year of modest gains in payroll employment, and some continued progress on reducing unemployment. Weighing all the likely developments in major areas of the economy leads to a forecast for FY2014 that is likely to be similar to the previous one. Improvements are expected on the economic front with higher growth rates. The degree of improvement will be a function of stability in the government employment and the magnitude of growth in the real estate and construction sectors. A smaller decline in the unemployment rate than that experienced this year is likely to occur in FY2014.

The Miami-Dade economy appears poised to continue its recovery through FY2014 with a modest acceleration in growth. This is based on expected strong performance in the real estate and construction sectors, its strength in the tourism industry, and its large and growing population base.

# Major Initiatives

## **Integrated Water, Wastewater, Reclaimed Water Master Planning**

Due to increasing interdependencies in the future master planning for water, wastewater, and reclaimed water, master planning will be completed in a single combined effort. Work on the first such Integrated Water, Wastewater, and Reclaimed Water Master Plan has been initiated. The planning for compliance with the Florida Ocean Outfall Act, which is described below, will be included. The Integrated Master Plan is scheduled for completion in mid-2015. Initial work has included the development of flow projections for the water and wastewater systems, identification of potential reclaimed water projects, and an additional transmission system of hydraulic model set-up and calibration.

## **Water-Use Efficiency Plan**

The Water Use Efficiency Plan (Plan) is in its seventh year of implementation as required by the 20-year Water Use Permit (WUP) and approved by the Board of County Commissioners. The Plan implements water conservation best management practices and measures through a quantifiable process that provides for accountability of the water saved through the Plan. The Plan's goals of saving water have been exceeded every year since implementation. This effort has allowed the Department to capitalize on the additional policy measures implemented, such as: permanent irrigation restrictions, aggressive public information campaigns, construction requirements for water efficient fixtures, and water loss reduction programs. The combination of these initiatives has provided for an unprecedented consumption reduction of about 42 MGD below projected demands through

FY2013. The Department's conservation efforts have resulted in the extension of the County's Water Use Permit, cancellation of two alternative water supply projections and deferral of several other expensive infrastructure water supply projects, making conservation the least expensive form of an alternative water supply.

The Department's 20-year Water-Use Efficiency Plan was the first in the state developed using the Florida Department of Environmental Protection's (FDEP) Conserve Florida "GUIDE," a web-based application that facilitates the development of goal-based water conservation planning. The Plan's objectives include improving water-use efficiency, reducing loss and waste and complying with the State's legislative criteria and water conservation initiatives.

The following best management practices are currently being implemented:

- ◆ Landscape Irrigation Evaluations and Rebates
- ◆ High Efficiency Toilet (HET) Rebate
- ◆ Multifamily HET Rebate
- ◆ Audits and Retrofits of County facilities
- ◆ Showerhead Exchange Project
- ◆ Multifamily Showerhead Retrofit Project
- ◆ Green Lodging and Restaurant Project
- ◆ Lodging Showerhead Retrofit Project
- ◆ Lodging HET Rebate Project
- ◆ Children's Campaign
- ◆ Public Outreach Program

## **Water Reclamation**

Reclaimed water is highly treated, filtered and disinfected wastewater that is reused for a variety of purposes. Reclaimed water can replace or supplement groundwater supplies. Currently, the Department has been able to replace potable water used for processed water at its wastewater treatment plants with reclaimed water. Valuable drink-

ing water is thus conserved by using reclaimed water in several wastewater treatment plant processes, as well as the landscape irrigation system at two of the Department's wastewater treatment plants and at Florida International University's Biscayne Bay Campus.

Moving forward, the Department has made a substantial commitment to reclaim wastewater during the next 20 years, through a number of projects. The Department has conducted a pilot project to test the feasibility of using reclaimed water to rehydrate coastal wetlands. After careful analysis, the cost of constructing a treatment facility to recharge the Biscayne Aquifer to enable additional withdrawals for the South Miami Heights water treatment plant was determined to be too high, other alternatives have been recommended for consideration. Currently, under review is the feasibility of large scale replenishment of the Floridan aquifer with reclaimed water. This is likely to be a much more cost-effective approach for wastewater reuse that can help maintain the sustainability of the Floridan Aquifer as a secondary source of drinking water to meet future water supply needs without adversely impacting the Everglades resources. The Department has also executed an agreement to provide up to 90 MGD of reclaimed water for cooling at Florida Power and Light's Turkey Point power plant in south Miami-Dade if and when, additional generating units are constructed. This would be the largest single reuse project in the State.

### **Floridan Aquifer**

The Department, in cooperation with the City of Hialeah, has completed design and construction of a new 10 MGD reverse osmosis (RO) Water Treatment Plant in Hialeah. The plant will be supplied solely with water from the Floridan Aquifer, a brackish source that is deeper than the Biscayne Aquifer. The RO plant will initially produce 7.5 million gal-

lons per day of drinking water in October 2013, with increased production to 10 million gallons per day when additional wells are drilled.

### **Aquifer Storage and Recovery (ASR)**

The WUP does allow for use of ASR. The Department has used ASR successfully in the past. ASR involves pumping water from the Biscayne Aquifer, when rainfall and groundwater are plentiful, into the deeper Upper Floridan Aquifer for the purpose of storing the water for later use. Although, as noted in the previous sub-section, Floridan Aquifer water is brackish, the fresher Biscayne Aquifer water forms a freshwater "bubble" underground as it is pumped into the Floridan Aquifer for replenishment, augmentation or storing water for later recovery. The Department was able to recover one billion gallons of freshwater during the drought of 2000-2001. To ensure compliance with regulatory requirements of the ASR wells, located at the Southwest and West Wellfields, the Department has completed construction of an ultraviolet (UV) treatment facility to disinfect Biscayne Aquifer water before it is stored at each of the subject wellfields. Cycle testing of the ASR systems, which will result in a determination of the capacity of the systems was initiated in early 2013.

### **South Miami Heights Water Treatment Plant**

The first stages of construction began in FY2004 with the completion of the perimeter wall and other sections of the exterior and the surroundings of the Department's newest water treatment plant. Installation of traffic lights and turn lanes comprising the entranceway into the facility began in FY2005. The raw water transmission mains that will serve the plant from its future well fields were completed early during FY2008. A parking lot and finished water mains were constructed during FY2008 through FY2011. The parking lot is to serve

the Roberta Hunter Linear Park, where the primary wellfield will be located. The raw water mains will be the means of delivering the water to the plant. The High Service Pump Station and Reservoir was completed in FY2012. Currently, the design criteria package for the treatment facility and well fields was issued to CDM Smith, this includes the Floridan Aquifer testing program and the 30% design of the plant and wells.

This plant will serve the southern portion of the County and together with the five million gallon reservoir, will assure delivery of water that meets and exceeds regulatory standards. The project had been delayed due to budget constraints and restructuring of the aquifer recharge projects. Negotiations with South Florida Water Management District (SFWMD) are under review to obtain water from the Floridan Aquifer and the original allocation from the Biscayne Aquifer. The facility, which will replace three of the five small treatment plants currently being operated in South Miami-Dade, will use the latest in membrane softening and Reverse Osmosis (RO) technologies and will commence production with an initial treatment capacity of 20 MGD.

### **GWUDI Water Treatment Plant Design**

The Department's Hialeah and Preston Water Treatment Plants (WTPs) treat raw water from a combination of four groundwater wellfields, including the Northwest Wellfield (NWWF). Nearby mining activities may trigger the reclassification of the NWWF from groundwater to groundwater under the direct influence of surface water (GWUDI). This potential reclassification has significant implications for the Preston and Hialeah WTPs by requiring the existing facilities to operate under more stringent standards than were intended in their original designs. Improvements to meet the treatment requirements of a reclassification of the NWWF are collectively identified as the GWUDI

Upgrades Project. Separating the NWWF raw water and its treatment from the other wellfields that supply the Preston and Hialeah WTPs dramatically reduces the costs of the GWUDI Upgrades Project. This requires the construction of a GWUDI treatment facility. Constructing significant portions of the GWUDI treatment facility on a previously identified and mitigated Department property near the NWWF (known as the NWWF site) has a lower cost of construction and reduces impact on the community compared to constructing all the GWUDI upgrades at the Preston and Hialeah WTPs sites. As a result, the Department has been authorized to design the GWUDI Upgrades facility at the NWWF site. This facility will convert the NWWF raw water to processed water, with a majority of this processed water being conveyed to the Preston WTP through the existing 96-inch diameter raw water main. The main will be converted to a dedicated GWUDI Upgrades process water main as part of the project. A portion of the GWUDI Upgrades processed water will provide finished water for local distribution. The initial scope of services was approved to proceed with GWUDI Upgrades. The Department directed the scope of services to be amended to proceed with GWUDI Upgrades based on nanofiltration (NF) and supporting processes. The current scope of services has an anticipated date of completion of 2020. At completion, this will be the largest nanofiltration water treatment plant in the nation.

### **Infrastructure Assessment and Replacement Program (IAARP)**

In order to best allocate limited capital replacement and rehabilitation funding, which costs significantly less than emergency mobilization repairs, the Department has established an Infrastructure Assessment and Replacement Program (IAARP) to identify and prioritize renewal and replacement of deteriorable and leaking water mains.

In March 2010, the Department had a catastrophic event wherein a 54-inch Pre-Stressed Concrete Cylinder Pipe (PCCP) ruptured causing the wash-out of an intersection and the flooding of several homes. The Department is the largest user of PCCP in the nation. The IAARP uses electromagnetic (EM) and acoustic technologies to evaluate distressed pipe and leak detection. Engineers at the Department have collected quantitative information for individual pipe sections in an effort to effectively manage and make the best-informed decisions regarding capital planning and the sustainable operation of all pipeline infrastructure. Over the course of two years, the Department has assessed more than 109 miles of the existing 124 miles of PCCP mains. Results show pipelines with distress levels ranging from 0 to almost 20 percent. The question faced by Department engineers now is how to maintain pipeline reliability over the remaining life of the pipeline at an acceptable level of risk and cost effective manner. The Department has installed two Fiber Optics Cable (FOC) inside of the worst condition pipe (5 miles each) to detect wire break events as they occur without the need of removal from service.

The assessment technologies used by the Department assist in 1) identifying, localizing, and quantifying the presence of broken pre-stressed wires and leaks in individual segments of pipe along the pipeline and 2) providing risk analysis and repair prioritization for pipes identified with broken pre-stressed wires and leakage. As such, the Department has been able to categorize the structural damage found, allowing it to prioritize its rehabilitation program and allocate funds accordingly in an emergency and/or annual basis. The program demonstrates that by using quantitative data from EM and acoustic assessments, a customized pipe rehabilitation solution can be built that saves significant

amounts of money for infrastructure renewal while minimizing service disruptions.

For the purpose of maintaining pipeline reliability over the remaining life of the pipeline at an acceptable level of risk and most cost effective measure, the Department has selected Lockwood, Andrews & Newnam, Inc. (LAN) as the Program Management Consultant (PMC) for Miami-Dade County's Comprehensive Infrastructure Assessment and Replacement Program, as an extension and further implementation of said Department's Program (IAARP) for Water Transmission and Distribution Mains. The Program includes the preparation of condition evaluation, forensic analysis, risk determination, and renewal options protocol. The PMC will also assist in WASD's efforts to increase water system pressures and addressing other related water line issues.

Working alongside the Miami-Dade Water and Sewer Department personnel, the PMC will devise and establish a comprehensive program for pipeline infrastructure evaluation and renewal, including condition assessment, risk determination, project identification, and prioritization of necessary water main remediation projects of all diameters; investigate various renewal and replacement methods available and establish protocols to determine the most cost effective method to be utilized in any given situation; and, make full use of the numerous condition assessment, leak detection and trench-less rehabilitation technologies for potable water applications.

The Program will provide the organizational structure required for implementation of the rehabilitation of the County's water system for the next 30 years while maximizing the impact of available funding.

The Program will also develop a comprehensive Capital Improvement Plan (CIP) allowing for systematic evaluation of the project at all times. The CIP will include detailed budget, scheduling, and reporting of information suitable for use in evaluating potential funding opportunities (Bonds, State Revolving Loans, Grants) for the projects. The CIPs generated will involve upgrades to or replacement of existing facilities and additions or extensions of existing facilities in response to ongoing development which is compatible with the Department's General Plan.

Engineering services of the Program are anticipated to include: generating evaluation criteria for the various pipe materials and sizes in the WASD system; creating protocols for utilization of alternative; renewal and replacement technologies; coordinating and training WASD personnel; preparing design reports, drawings and contract specifications; and permitting and procurement activities. Construction management services are required to provide technical support during construction.

### **Regulatory Compliance/Water Ground Water Under the Direct Influence of Surface Water (GWUDI)**

On January 5, 2006, the EPA published the Final Long Term Enhanced Surface Water Rule (the "Surface Water Rule"), which does not apply to the Department because WASD does not use surface water, and the groundwater used by WASD has not yet been determined to be under the direct influence of surface water "GWUDI." However, the Northwest Wellfield is located in an area designated by the Florida Legislature as the Miami-Dade County Lake Belt Area. In order to maximize the efficient recovery of limestone in the area, the Florida Legislature has approved a plan that will allow rock mining in the vicinity of the Northwest Wellfield. As excavations get closer to

the Northwest Wellfield, there is an increased risk of the wells coming under the influence of surface water, which would result in the Surface Water Rule applying to such wells. In January 2006, the Florida Legislature recognized the risk to the Northwest Wellfield and imposed a "water treatment plant upgrade fee" equal to \$0.15 per ton of lime rock and sand sold within the Miami-Dade County Lake Belt Area. The fee became effective January 1, 2007 and was going to remain in effect until the total proceeds collected reach the actual amount necessary to design and construct the required water treatment plant upgrades. However, in 2012, the Florida Legislation passed a bill requiring that beginning July 1, 2012, the proceeds of the water treatment plant upgrade fee, less administrative costs, be transferred by the Department of Revenue to the South Florida Water Management District and deposited into the Lake Belt Mitigation Trust Fund until a total of \$20 million from the proceeds of the water treatment plant upgrade fee, less administrative costs, is deposited into the Lake Belt Mitigation Trust Fund; or a quarterly pathogen sampling demonstrates that the water in any quarry lake in the vicinity of the Northwest Wellfield would be classified as being in Bin 2 or higher as defined in the Surface Water Rule. The water treatment plant upgrade will consist of the GWUDI Water Treatment Plant, previously mentioned, to meet the requirements of the Surface Water Rule.

### **Wastewater System Pump Station Optimization Program (PSOP)**

This is an operational mode under which the wastewater pump stations' operating levels are controlled to maximize the storage capacity available in the collection system and to limit infiltration increases during wet weather. This operational mode was developed in order to address the requirements of the EPA's Second and Final Partial Consent

Decree. However, the new EPA/FDEP Consent Decree lodged on June 6th, 2013, replaces the two previous Consent Decrees. As such, the Department will not need to implement PSOP as a regulatory requirement. However, the Department will further refine and deploy PSOP as an operational tool.

### **Florida Ocean Outfall Act**

In 2008, Chapter 2008-232, Laws of Florida, established the Leah Schad Memorial Ocean Outfall Program (Act) that prohibits the construction of new domestic wastewater ocean outfalls; sets out a timeline for the elimination of existing domestic wastewater ocean outfalls by 2025; and requires that 60% of the wastewater previously discharged be beneficially reused. The Department operates two of the ocean outfalls targeted for elimination.

The Act requires the Department to submit a plan to the FDEP by July 2013, describing how the outfalls will be removed from use for wastewater disposal. On June 28, 2013, the Department submitted the Compliance Plan to the FDEP. The Department analyzed several compliance options. Each option included additional system capacity to meet average daily and peak flow demands anticipated in 2035. Each option included additional treatment that is required to achieve reuse standards or disposal standards through deep injection wells to the “Boulder Zone” of the lower Floridan Aquifer. The recommended alternative includes a new West District plant with an average daily flow of 102 million gallons per day (MGD), reduced daily flows to North District of 85 MGD and to Central District of 83 MGD, and flows to South District of 131 MGD. The estimated cost of system-wide wastewater facilities upgrades for this alternative is \$5.2 billion of which \$3.32 billion is directly attributed to Ocean Outfall Legislation compliance. This approach recognizes site constraints at the North District plant location, reduces storm surge risks by mov-

ing substantial treatment capacity to the west where storm surges are not an issue while avoiding premature investment in completely replacing treatment capacity at coastal facilities that may not be required in the long term, places treatment closer to locations of flow origin to reduce pumping requirements, and utilizes the ocean outfalls for more cost-effective peak flow management. The law now allows up to 5% diversion of flows to the outfalls for peak flow management, but this plan only requires 0.4% of flows on an annual basis to be discharged after treatment through the outfalls.

Reduction of nutrient discharges is accomplished by continued use of four deep injection wells at the North District plant, thereby diverting flows from the outfall, and the construction of an industrial injection well at the Central District plant for disposal of nutrient-rich water (centrate) coming from the centrifuge process used to remove water from the sludge. This combination of nutrient diversion will meet the nutrient reduction requirements with the industrial well in service by 2016.

The statute requires reuse of 117.5 million gallons of treated wastewater per day, by far the largest volume of reuse of any utility in Florida. This will be accomplished through a contract with Florida Power and Light to provide up to 90 MGD of reuse water for cooling purposes at their Turkey Point facilities. An additional 27.5 MGD of reuse water will be used to replenish the Floridan aquifer at the Central, South, and West District plants.

### **Injection Wells Consent Order and High-Level Disinfection**

On April 29, 2004, Consent Order (CO) OGC File No. 03-1376 was entered into between the FDEP and Miami-Dade County to address various issues, including the allegation of fluid movement associated with Class I injection wells at the

County's South District Wastewater Treatment Plant (SDWWTP).

Under the CO, the Department is to treat wastewater at the SDWWTP to a higher level than the current secondary treatment. Wastewater at the SDWWTP will undergo an additional treatment process, known as High Level Disinfection (HLD). This process will add filtration and disinfection with chlorine to wastewater before it is disposed of via the SDWWTP's deep injection wells. Ultimately, the HLD facility will be part of a larger system that will enable the Department to reclaim all of the average daily wastewater flows to the SDWWTP.

Construction began on the new HLD facility during FY2008. In addition to the aforementioned HLD treatment process, the construction program at SDWWTP, which is broken down into 14 separate projects, will also expand the plant's peak flow treatment capacity to 285 MGD from 225 MGD. The HLD project is the largest, most ambitious capital project ever undertaken by the Department. The project is now substantially complete and was constructed substantially under the approved budget. The State of Florida has closed the Consent Order under which the facilities were required to be constructed.

## Consent Decrees and Settlement Agreements

The Consent Decree Settlement Agreement (CD/SA) program consists of sewer collection, transmission and treatment system improvements required by two EPA Consent Decrees and a FDEP Settlement Agreement. To date, the Department has successfully completed approximately 90 percent of the mandated improvements under the first phase of its two EPA Consent Decrees and 100 percent of the improvements required by the FDEP - Settlement Agreement. The Department

continues to be in compliance with all the provisions of the CD/SA and through FY2013 has not incurred any penalties for not completing tasks within deadlines. Approximately 1,670 milestones have been completed satisfactorily as prescribed by these enforcement actions, either on or ahead of schedule.

In February 2008, the Department completed the Rainfall Dependent Peak Flow Management Study. A report of the results was submitted in May 2008 to ensure compliance with the Second and Final Partial Consent Decree (SFPCD). The CD/SA program is divided into three major subprograms: the Wastewater Treatment Plant Expansion Program, the Pump Station Improvement Program and the Infiltration and Inflow Reduction Program. The requirements of the FDEP Settlement Agreement were completed and the Agreement terminated on September 1, 2011; additionally, negotiations with FDEP and EPA for replacement of the two existing EPA Consent Decrees have been successfully completed, and the new Consent Decree was lodged with the US District Court on June 6th, 2013.

## Wastewater Treatment Plant Expansion Program

The Department has completed the requirements for wastewater treatment plant expansion and reuse included in the FDEP Settlement Agreement and the EPA First Partial Consent Decree (FPCD).

### **The Pump Station Improvement Program (PSIP)**

The Pump Station Improvement Program was created to evaluate and improve the operation and transmission capacity for the more than 1,000 wastewater pump stations that Miami-Dade Water and Sewer Department owns and/or operates. Projects include sewer pump station refurbishing, installation of new pumps, electrical upgrades and the installation of new force mains. To date, 666

pump station projects and 223 force main projects have been completed under this program.

### **Infiltration and Inflow (I & I) Reduction Program**

The Department continues to perform sanitary sewer evaluation surveys on approximately 33.1 million feet (6,300 miles) of sewage collection mains and laterals. During FY2013, 2,500 repairs were performed to the gravity system; 3,770,000 feet of gravity sewers and 19,500 manholes were inspected with closed circuit television.

### **Water and Wastewater Transmission System Computer Models**

The Department has transmission system hydraulic computer models which operate with the Geographic Information System (GIS) data for the respective systems. The models compute system flows and pressures and are used by Department hydraulic engineers for planning and evaluating the availability of system capacity for new developments and system upgrades. The wastewater model was used to develop a system of long range transmission system facilities, including pumping stations and pipelines, for the Plan for compliance with the State of Florida Ocean Outfall Compliance Plan which requires closing of the outfalls at the North and Central District Wastewater Treatment Plants by 2025. The water and wastewater hydraulic models will be used also in the Integrated Water, Wastewater and Reclaimed Water Master Plan which is underway and for the development of design criteria for upgrades required to bring over 100 pump stations into compliance with the 10-hour adequacy criterion. Provision has been included in the scope of work for the consultant for Program Management for the new Consent Decree to provide assistance in the maintenance

and calibration of the wastewater model, including the addition of new facilities.

### **Management & Performance Improvement**

The Department is a leader and a model for implementing innovative employee ideas resulting in significant cost savings to the Department and, in turn, its customers. POWER (Partnership Optimizing WASD's Efficiency and Reengineering), the Department's efficiency program, has completed its 15th year of operation. The POWER program began in 1998 when Department management and employee unions joined forces to empower employees to create and implement efficiency initiatives. An estimated total of \$37.5 million in savings has been achieved during the span of the program. During FY2013, department employees implemented 7 efficiency projects, resulting in approximately \$601,389 in estimated savings.

Several Process Improvement Team (PIT) ideas that were in the process of implementation are scheduled for completion. Among them, the Remote Metered Water Filling Stations PIT initiated to analyze and recommend changes to our procedures for metering and billing of water supplied to service trucks. Construction of the pilot station at Kendall Tamiami Airport is complete and the Department is working on the procedures to make the filling station operational. Depending on the success of the pilot program; other stations may be built at other convenient locations throughout Miami-Dade County in the future.

The Utility Signs for Sub-aqueous Pipeline Crossings PIT ensures that standard procedures for installing and maintaining signage or markings for all sub-aqueous pipeline crossings is established to prevent damage from dredging, clean up and anchorage operations in accordance with federal

and state regulations. The benefits include avoidance of disruption of service, protection of infrastructure, public health and welfare, and avoidance of costs associated with pipeline ruptures or sewage discharge. Over 177 pipeline crossing locations have been identified as requiring signage. Signs have already been installed at twelve of those locations and installation is ongoing until all the locations have the signs.

POWER has been recognized as a model program by Miami-Dade County and several organizations, including the National Association of Counties; the Association of Metropolitan Water Agencies (AMWA); the AFL-CIO Working for America Institute; and Harvard University's John F. Kennedy School of Government, which highlighted the POWER program in its "Working Better Together" book. In 2009, the Department won the Platinum Award for Sustainability Competitiveness Achievement from AMWA. In 2011, the Department completed its involvement in the Performance Excellence initiatives identified in the Florida Sterling Council's Feedback Report. Most of the initiatives in the Feedback Report were implemented.

The Department continues to participate in national and state benchmarking surveys. The Department participated in the Florida Benchmarking Consortium (FBC) benchmarking survey for FY2012. Participation in these surveys assists the department in reviewing internal performance of key indicators in comparison to other like agencies in the State and across the country. The Department achieved a number one ranking (nine Florida county agencies participated in the FBC survey) in the Water Distribution Integrity Rate performance measure, which measures the number of leaks and breaks per 100 miles of piping. Due to the Department's Leak Detection Program, the number of leaks has steadily decreased over

the last four years, from 3,353 (FY2010); to 2,401 (FY2011); to 2,110 (FY2012); and to 1,310 (FY2013).

The Department continued to prepare the Business Plan utilizing the County's streamlined business plan process implemented in FY2012 to identify and strategize on ways to attain the Department's most important priorities in concert with the mission and vision statements, at the same time, safeguarding the public health and environment. This process includes aligning the performance measures and Department scorecard to the key priorities and budget of the department and regularly monitoring applicable performance. Key new measures and initiatives have been created in the scorecard to monitor the Department's compliance with the new Consent Decree. This information is also available via the Miami-Dade web page and provides information on performance to the public and transparency of government services.

## Facilities Security

The Department has implemented a number of proactive measures to enhance the security of its water facilities as well as its response capabilities. Staff members have been licensed in the Risk Assessment Methodology Method for Water (RAM-W) for conducting vulnerability assessments. The vulnerability assessment of the water system was completed in March 2003 and submitted to the EPA as mandated. The Department has prepared its Emergency Response Plan (ERP) in accordance with EPA regulations. In accordance with federal requirements, the Department continues to assess, identify and implement feasible opportunities to minimize the vulnerability of the Department's facilities. This program is anticipated to cost in excess of \$60 million when fully implemented. All major water plants are completed. While the EPA has not yet mandated performing vulnerability assessments of wastewater systems,

the Department has decided to perform a vulnerability assessment of its sewer system. This will encompass an assessment of its wastewater treatment facilities, the collection system, and the pumping and transmission system. However, the Department is addressing security of all facilities until the assessment is completed. The Department has hired appropriate staff dedicated to security at the Department's facilities. Security screening procedures have been established for Water and Sewer employees and contractors who require access to designated restricted areas. Criminal history checks are conducted by the Miami Dade Water and Sewer Security Section and the Miami-Dade Police Department.

The Department is constructing a Security Operations Center which will be a comprehensive and fully coordinated surveillance and monitoring system manned 24/7 by dedicated staff with state of the art resources that provides early detection and awareness of security threats. The command and control component will be magnified through the continuous monitoring of the organization's total environment keeping within the guidelines of the Miami-Dade Water and Sewer Department's security objectives, Department of Homeland Security and Presidential directives relating to critical infrastructure protection of the County's water supply.

### Rate Increase

On June 4, 2013, the Board of County Commissioners approved a Resolution authorizing an eight percent water and wastewater retail rate increase, effective October 1, 2013. The monthly bill of the average residential water and wastewater customer using 6,750 gallons was increased by approximately \$3.36, or from \$42.03 to \$45.39. The retail rate also increases the Miami-Dade County Water Conservation Surcharge for retail water customers with consumption in the fourth tier of the usage.

In addition, on September 19, 2013, the Board of County Commissioners approved the County Budget Ordinance, which included the adoption of the FY2013-14 Budget and Multi-Year Capital Plan, to become effective October 1, 2013. The County Budget Ordinance authorized an increase to the per thousand gallon wastewater wholesale rate of \$0.2996 per thousand gallons; from an average of \$2.1528 to an average of \$2.4524 and maintained the water wholesale rates unchanged based on a cost of service study. Various Miscellaneous Fees and Charges were increased within the County Budget Ordinance.

### General Obligation Bonds (GOB) Building Better Communities

In November 2004, Miami-Dade County voters approved a \$2.9 billion bond program which allows the County to issue long-term bonds to fund numerous neighborhood and regional capital projects to be completed over the next 12 years. The General Obligation Bonds are legally backed by the full faith and credit of the County which has committed future taxes over the next 40 years to repay the bonds. General Obligation Bonds typically are the least expensive type of debt available to government. Among the GOB funded capital projects are several addressing current and future water and wastewater infrastructure needs. Planned projects include countywide water and wastewater main installations; pump station rehabilitation projects; reclaimed water facilities and infrastructure; and partial funding for a reverse osmosis water treatment plant in Hialeah. GOB funding continues to be used to mediate the risk associated with Dieldrin contamination of private wells in the Falls area at Caribbean Estates and currently an extensive area at Continental Park. Also, Sewer needs in the commercial corridor on Bird Road and the Industrial Park Area will be addressed by two Low Pressure Sewer System projects underway. In FY2014, the

Department will have access to \$12.6 million dollars of funding for GOB projects.

### GROWING WITH INFORMATION TECHNOLOGY

The Department is committed to using the latest and best-available information technology in order to carry out operations and serve the expanding needs of customers, including functions from researching records to managing assets. The Department has sought to create or purchase computer software that will significantly raise efficiency levels.

#### Automation of Plant Monthly Operating Reports (MORS)

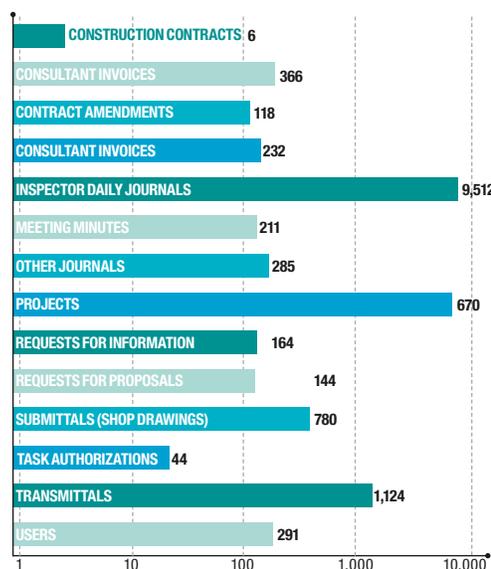
The Department implemented an automated Plant Monthly Operating Reports (MORS) system for water production at the Alexander Orr, Jr. Water Treatment Plant during FY2008. MORS offers streamlined data collection and automated water plant readings required for monthly reporting to regulatory agencies, including Laboratory Information System readings. The process was expanded to include the Department's two other water treatment plants. In FY2010, the MORS was expanded to include the Hialeah and Preston Water Treatment Plants and South Dade Water System.

The MORS is fully operational at all the ancillary plants within the water treatment plants. To increase efficiency, handheld data entry devices were placed in service in FY2013 at all locations. Water treatment personnel are being trained on a regular basis to maximize the usage of the system and its benefits of enhanced reporting and data collection. The MORS use at the plants is expected to save the Department approximately \$413,000 annually.

### Project Control & Tracking System

Project Control and Tracking System (PCTS) is an enterprise project management information system that is used to improve capital project planning, visibility, and execution - from inception to completion. Since its core application, Proliance, was officially launched in May of 2009, PCTS/Proliance has been widely used on a daily basis by major divisions that get involved in the planning, design, permitting, procurement, and construction as a part of capital improvement processes. Proliance has been configured to provide comprehensive process workflow automation, project visibility and cost/contract/change management, construction oversight, and project collaboration. Additional features, such as dashboards, program management, capital planning, budget planning and forecasting, and schedule management will be evaluated and developed in the future.

The dashboard below highlights the project records created during this fiscal year, including the number of Proliance users, the total number of projects, and the total numbers of Proliance documents by record types.



## Supervisory Control and Data Acquisition System (SCADA)

Essential to the Department's daily operations is the ability to monitor and control its water and wastewater functions from a remote location. The Department's SCADA system is at the heart of this capability and is one of the largest of its kind in the country. The SCADA system, which is particularly important in cases of emergency operations and as a tool in meeting requirements of the CD/SA program, has allowed workers in the Department's 24-hour emergency call center to continuously oversee the operations at its pump stations. It has also allowed water and wastewater treatment plant operators to manage plant functions from remote control panels, providing an increased level of efficiency. To-date, all pump stations owned and operated by the Department have SCADA installed.

The Department's three regional water and three regional wastewater treatment plants have SCADA installed and operational. All water wellfields are monitored and controlled by SCADA, and all 94 production wells have flow meters installed with SCADA monitoring for compliance with South Florida Water Management District (SFWMD) regulations.

## Retail Customer Service Division - Meter Reading Section

### AMI Pilot - Extended

The Department is expanding the use of Advanced Meter Infrastructure (AMI) technology to a community of 5,000 residential homes currently billed quarterly. The customer will be billed on a monthly basis and informed when higher than normal consumption is detected. The enhanced pilot program will test new two-way communication technology allowing office staff to view, read, and transmit instructions directly to the water meter. In addition, the Department will determine the

operational impact on its internal work force, field staff and customers.

The Department is confident the use of AMI technology will improve operating efficiencies and experience improved customer satisfaction.

### New Billing System

The Department launched its, new billing system for customer accounts receivable, known as Customer Care and Billing (CC&B), along with a new Mobile Workforce Management system (MWM) on April 29, 2013. The mobile system routes, tracks, prioritizes, and dispatches field activities directly to field customer service representatives through their laptops. Once the fieldwork is completed, the results are electronically transferred in real-time to the new billing system. The Department has benefited from the lessons learned last year by the limited deployment of laptops to the field Customer Service Representative 2's (CSR2) which increased availability and productivity by 20%. The Department has seen an improvement in efficiencies and in customer satisfaction.

### Voice Over Internet Protocol (VoIP) Telecommunications Technology

Voice Over Internet Protocol (VoIP) is the routing of voice communications over the Internet or computer networks that use Internet protocols, rather than through standard phone lines or over the air (such as cellular phones). There are a number of advantages to using VoIP, including lower costs and as a back-up should regular or cellular telephone systems fail (such as could happen during or immediately after a hurricane). All remote WASH sites now operate under VoIP.

### **Geographic Information System (GIS)**

The objective of the Department is to bring backlogged GIS information current. To address this situation, ten contract resources were brought in on January 1st, to help reduce the backlog of GIS donation and system betterment projects. For FY2013, we added approximately 110 miles of pipes and 3,500 above ground assets to the system. In the spring of FY2014, WASD plans are to bring additional resources to help eliminate the backlog within 3.5 years, which is mandated by the Federal Consent Decree.

WASD Sewer Spills and Sunshine State One-Call of Florida (Sunshine 811) Dig Request ticket location layers were added to GIS and are updated on a daily basis. Via DOLFIN, users have the ability to retrieve spill supplementary reports, dig request ticket and view WASD notifications and responses.

### **Windows 7 Migration**

The department has over 2,000 Windows based devices consisting of desktop and laptop computers. These computers were mostly deployed with Windows XP and Office 2007. Microsoft has stated they will no longer support Windows XP after April 8, 2014. Last year, IT started the migration from Windows XP and Office 2007 to Windows 7 and Office 2010. Currently, more than 1,000 devices have been migrated to Windows 7, with remaining migration expected to be completed in 2014. The department is utilizing a mix of Microsoft Terminal Services (Remote Desktop), Blade PC and regular PC for its desktop migration strategy. All EAMS Panasonic laptops will be upgraded to 4 GB of memory and redeployed with Windows 7, Office 2010 and Netmotion.

### **The Enterprise Asset Management System (EAMS)**

During FY2012, the Department successfully completed the implementation of Infor's Enterprise Asset Management System (EAMS). This multiyear project involved the deployment of work order, inventory management, and call center functionality throughout various WASD divisions to assist with managing infrastructure capital assets in a manner that minimizes the total life cycle cost of owning and operating them. In addition, a mobile application was developed to handle preventive maintenance work management in the field. Ten WASD divisions/sections are currently using EAMS to record maintenance activities, call center incidents, and the entire department utilizes the system for materials and parts orders. In addition, EAMS generated reports are being widely used by supervisory and management personnel to track work completion, project costs, productivity, and many other factors to assess efficient operations.

### **Enterprise Resource Planning (ERP)**

The ERP financial system completed a multi-phased upgrade. In the first phase, which ran from June 2010 to November 2010, tools were upgraded which brought improvements to the navigation and look and feel of the ERP system. This was followed by an infrastructure upgrade that was completed by June 2011. The functional application upgrade, representing the largest and most complex phase began in July 2011 and went live February 2013. The project established a rigorous project management protocol in collaboration with WASD, Miami-Dade Aviation Department (MDAD) and Information Technology Department (ITD), with focused assistance from the vendor, Oracle. This effort resulted in: careful planning that garnered a 61% reduction in customizations; establishment of a comprehensive Sharepoint site for project documentation and tracking; disciplined project

controls that resulted in meeting the planned go-live date and budgetary savings. The methodology used by this project is setting the County standard for future upgrades.

## Business Plan – Summarized Fiscal Years: 2014 & 2015

### Key Issues

A key goal of the Department is to maintain its water and sewer infrastructure in a safe, structurally sound and efficiently operating condition, in order to provide excellent service to all customers within Miami-Dade County. The age of more than half of WASD's existing water and sewer infrastructure, including six major treatment plants and more than 14,000 miles of pipelines averages fifty years. As such, the Department has identified more than \$12.6 billion of water and sewer main replacement work that is needed throughout the system. These infrastructure needs, and their related regulatory requirements, will be further achieved by more intensive project management and quality control by staff over the replacement work in process.

WASD's service to all customers is being enhanced by the development of an electronic meter reading system that will interface with the Department's billing system. The new software will assist customers and the Department by facilitating the exchange of information, specifically the ability to capture and report field conditions that require immediate response from field staff. The new software will enhance reports utilized by the Field Section, thereby providing the Department with more useful information to better serve its customers.

The New Customer Division (NCD) is initiating various service improvements with the ultimate goal of streamlining the delivery of more efficient and timely services to developers. The service

improvements include but are not limited to: increased customer communication and rapport by routinely holding workshops with developers; more timely approvals of the developer's project; and implementation of revised New Customer Division (NCD) processes and computer systems.

### Community Outreach

The Department's Public Affairs Office sponsors and participates in several programs aimed at educating the public on the quality of its drinking water, its operations, under-utilized customer services and water conservation and the Department's Multi-Year Capital Improvement Plan.

WASD provides direct customer outreach and advertising via radio, television, print, transit bus benches, movie theatres, publications, the internet about water quality, conservation programs, and customer service programs and services. A greater emphasis is placed on promoting the use of online services. Customers can pay their bill online, request paperless billing, check their usage, and request new service and disconnection, all with the click of the mouse. Advertising these services continues to be a top priority of the Department in an effort to facilitate the customer service experience. The Department participates in numerous outreach events such as workshops, showerhead exchanges, targeted group and school meetings, and various commissioner-sponsored events. In addition to traditional forms of media such as newspapers, television and radio talk shows, Public Affairs also has utilized Facebook, Twitter, YouTube and movie theaters to capture a wider and more diverse audience.

The Office also revamped and revised its internal and external websites making them more user-friendly and more transaction-oriented for customers to conduct their business 24-hours-a-day. The

website has become a central point for customers to conduct business with the Department. The website was redesigned to improve customer contact and transactions. When a customer submits the request via e-mail, there is an immediate auto response that replies that the request has been received. Furthermore, informational videos (currently posted on the Miami-Dade County portal and YouTube) promote tap water, the proper disposal of grease, how to read a meter, and how to check for leaks.

To promote the department's Multi-Year Capital Improvement Program and Consent Decree, an advertising campaign has been developed to educate the community of the need for upgrades throughout the system as well as the need for funding. A series of print and radio ads have been developed to promote the need for these very important improvement projects. The tag line, It's time for an Upgrade, Our Water is Worth It, is seen throughout various mediums which will include an outdoor advertising component in FY2014.

In FY2013, the Office planned the Fifth Annual Model Water Tower Competition in an effort to dialogue with an underserved demographic – teens. The competition engages students by having them apply scientific theory learned in the classroom and apply it in real life situations by building a working model water tower. By initiating this communication with high school students, they were introduced to government services, as well as future career opportunities in the water profession. The Department continued its growing outreach efforts to Miami-Dade County's sizable Hispanic community during FY2013. The Department conducted appearances on a number of Spanish language radio shows, advocating for water issues, as well as advertising in small community newspapers. The Consumer Confidence

Report (CCR) for this fiscal year was designed in the form of a newspaper, incorporating information in both English and Spanish. In fiscal year 2013, government regulations allowed for the CCR to be posted on the Department's website with announcement notices included in customers' bills to inform them of the document. Customers who preferred a hardcopy were mailed one. Distributing the CCR in this method, as well as the external customer newsletter Pipeline being published electronically, greatly reduces the department's carbon footprint, as well as realizes thousands of dollars of savings in postage and printing.

# Other Information

## INDEPENDENT AUDIT

The accompanying financial statements have been audited by the Department's independent auditors and their report on the financial statements resulting from their audit is included in the financial section of this report.

## AWARDS

### Certificate of Achievement Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Department for its Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012.

The Certificate of Achievement is a prestigious national award that recognizes conformance with the highest standards for preparation of state and local government financial reports. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards.

Such report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. The Department has received a Certificate of Achievement for the past 30 fiscal years. We believe our current report continues to conform to the Certificate of Achievement's program requirements and are submitting it to the GFOA. We expect that participation in this program will result in improvements to our reports in coming years.

## ACKNOWLEDGEMENTS

We wish to thank all of the Department's employees for their hard work and dedication during the past fiscal year. We would also like to thank the Department's Controller Division and the Public Affairs Section, and the County's Internal Services Department's Printing and Graphics Section for their tireless efforts and professionalism in preparing this report, as well as our external auditors for their invaluable assistance. Finally, a special acknowledgement is extended to the Mayor and Board of County Commissioners for their continued leadership in enabling the Department to fulfill its role.



John W. Renfrow, P.E.  
Director



Joseph A. Ruiz, Jr.  
Deputy Director - Operations



Frances G. Morris  
Assistant Director - Finance



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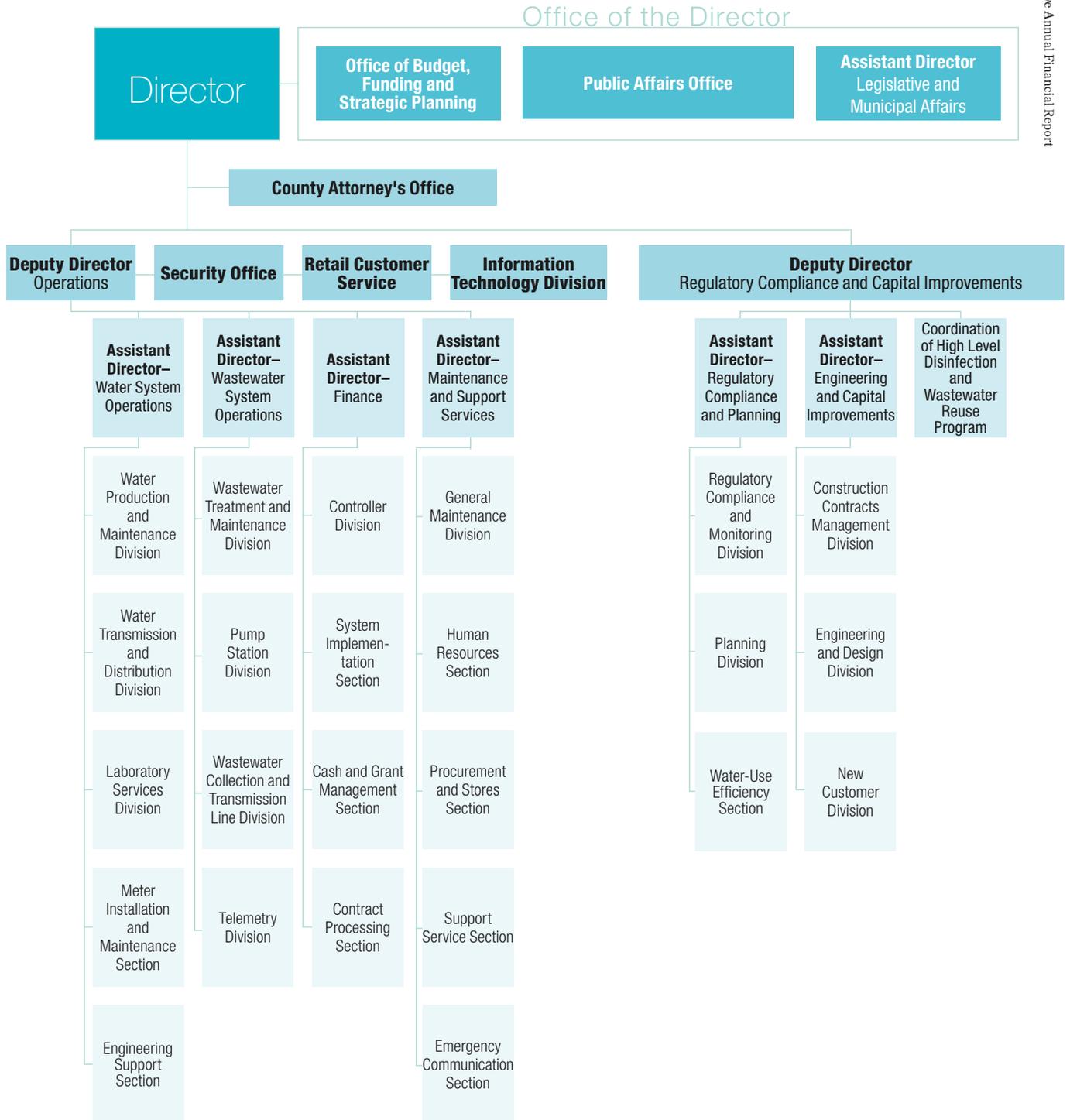
**Miami-Dade Water and Sewer  
Department, Florida**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**September 30, 2012**

Executive Director/CEO

# Organizational Chart



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# Financial Section

## INDEPENDENT AUDITORS' REPORT

Honorable Carlos A. Gimenez, Mayor, and  
Honorable Chairperson and Members  
Board of County Commissioners  
Miami-Dade County, Florida

### *Report on the Financial Statements*

We have audited the accompanying financial statements of the Miami-Dade Water and Sewer Department, a department of Miami-Dade County, Florida (the Department) which comprises the statements of net position as of September 30, 2013 and 2012 and the related statements of revenues, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements as listed in the table of contents.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Department, as of September 30, 2013 and 2012, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of a Matter***

As discussed in Note 1 to the financial statements, the Department implemented Governmental Accounting Standards Board (GASB) Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position* as of October 1, 2012. Our opinion is not modified with respect to this matter.

### ***Other Matters***

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the schedule of funding progress on pages 36–39 and 61 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Supplementary Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Department's financial statements. The information identified in the table of contents as the Supplementary Financial Data are presented for purposes of additional analysis and is not a required part of the financial statements.

The Supplementary Financial Data is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Supplementary Financial Data is fairly stated, in all material respects, in relation to the financial statements as a whole.

#### *Other Information*

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

#### **Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated February 20, 2014 on our consideration of the Department's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Department's internal control over financial reporting and compliance.

*Marcum LLP*

Miami, FL  
February 20, 2014

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# Management's Discussion & Analysis

## **OVERVIEW**

The following Management's Discussion and Analysis (MD&A) serves as an introduction to the financial statements of the Miami-Dade Water and Sewer Department (Department) for the fiscal year ended September 30, 2013. The MD&A presents management's examination and analysis of the Department's financial condition and performance. It should be read in conjunction with the financial information of the transmittal letter in the introductory section and the financial statements in the financial section of this report. The financial statements include the statements of net position; statements of revenues, expenses and changes in net position; statements of cash flows; notes to the financial statements; and required supplementary information.

The statements of net position present the financial position of the Department as of a specific date. It provides information about the nature and amount of resources (assets) and obligations (liabilities), with net position being the difference between assets and liabilities. Increases or decreases in net position may serve as a useful indicator of whether the financial position of the Department is improving or deteriorating.

The statements of revenues, expenses, and changes in net position present information showing how the Department's net position changed during the fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs which may not coincide with the timing of the related cash flows.

The statements of cash flows present the cash activities of the Department segregated in the following four major categories: operating, non-capital financing, capital and related financing, and investing. This statement also presents the changes in cash and cash equivalents of the Department.

The notes to the financial statements provide required disclosures and other information that are essential to the full understanding of data provided in the statements.

## **FINANCIAL POSITION**

A summary of the Department's net position and related changes for the fiscal years ended September 30, 2013, 2012 and 2011 is shown on the following page. The unrestricted portion of net position (available to meet ongoing and future obligations of the Department) increased by \$17.7 million, or 4.1% in 2013. In 2012, unrestricted net position had an increase of \$18.7 million, or 4.5%.

Total expenses increased by \$22.5 million, or by 3.9%, in 2013, and decreased by \$2.9 million or by 0.5% in 2012. The 2013 increase is primarily due to a higher level of depreciation and administrative support charges. The 2012 decrease is primarily due to a lower level of administrative support and outside consultants charges.

Total net position as of September 30, 2013, was approximately \$2.2 billion. The Department's total net position decreased by \$25.9 million, or by 1.2%, from prior year which is primarily due to an increase in operating expenses and a decrease in investment income. In 2012, net position increased by \$36.7 million, or by 1.7% from the prior year. The increase is primarily due to a reduction in non-operating expenses as a result of a decrease in the County General Fund transfer.

# Management's Discussion & Analysis

	(In thousands)		
<b><u>SUMMARY OF NET POSITION</u></b>	<b><u>2013</u></b>	<b><u>2012</u></b>	<b><u>2011</u></b>
Current and Other Assets	\$ 1,225,104	\$ 959,592	\$ 1,018,250
Capital Assets, net	3,492,280	3,473,954	3,434,125
Total Assets	<u>4,717,384</u>	<u>4,433,546</u>	<u>4,452,375</u>
Long-term Liabilities	2,311,722	2,006,909	2,039,700
Current Liabilities	208,327	203,362	226,054
Total Liabilities	<u>2,520,049</u>	<u>2,210,271</u>	<u>2,265,754</u>
Net Position			
Net Investment in Capital Assets	1,474,197	1,567,455	1,530,096
Restricted	273,623	223,887	243,292
Unrestricted	449,515	431,933	413,233
Total Net Position	<u>\$ 2,197,335</u>	<u>\$ 2,223,275</u>	<u>\$ 2,186,621</u>
<b><u>SUMMARY OF CHANGES IN NET POSITION</u></b>			
Water operating revenues	\$ 248,312	\$ 251,130	\$ 253,696
Wastewater operating revenues	300,096	285,172	291,964
Investment Income	(18,351)	21,797	6,193
Other nonoperating revenues	32,917	28,375	19,326
Total revenues	<u>562,974</u>	<u>586,474</u>	<u>571,179</u>
Water source of supply	10,874	10,705	13,558
Water power and pumping	1,816	1,798	1,942
Water treatment	60,188	59,811	62,138
Water transmission and distribution	27,882	27,423	27,929
Wastewater collection system	21,638	20,150	20,385
Wastewater pumping	34,692	34,085	30,950
Wastewater treatment	79,367	74,367	72,512
Customer accounting	8,304	7,299	7,410
Customer service	16,851	16,275	16,821
General and Administrative	78,552	73,164	79,165
Depreciation	177,570	163,315	159,158
Interest expense	78,538	85,478	85,511
Other nonoperating expenses	4,345	4,106	3,429
Total expenses	<u>600,617</u>	<u>577,976</u>	<u>580,908</u>
(Loss) Income before contributions and transfers	(37,643)	8,498	(9,729)
Capital contributions	19,459	28,156	33,556
Transfers to County's General Fund	-	-	(32,220)
(Decrease) Increase in net position	<u>(18,184)</u>	<u>36,654</u>	<u>(8,393)</u>
Net position at beginning of year	<u>2,215,519</u> <sup>(1)</sup>	<u>2,186,621</u>	<u>2,195,014</u>
Net position at end of year	<u>\$ 2,197,335</u>	<u>\$ 2,223,275</u>	<u>\$ 2,186,621</u>

<sup>(1)</sup> For fiscal year 2013, the beginning balance of net position was restated to include a \$7.8M correction related to the Series 2007 bond interest payment. Monies were previously held in escrow by Miami-Dade Finance Dept. but were subsequently paid out October 2007.

### Reconciliation of Net Position

Ending balance of net position at 09/30/2012	\$ 2,223,275
Series 2007 net position adjustment	(7,756)
Adjusted beginning balance of net position at 10/01/2012	<u>\$ 2,215,519</u>

# Management's Discussion & Analysis

## CAPITAL ASSETS

The following table summarizes the Department's capital assets, net of accumulated depreciation, for the fiscal years ended September 30, 2013, 2012 and 2011 (in thousands). Total capital assets increased by \$18.3 million, or 0.5%, in 2013. This increase is due to capital additions, net of plant retirements of \$219.7 million, offset by \$170.7 million net increase in accumulated depreciation. Total capital assets increased by \$39.8 million, or 1.2%, in 2012. This increase is due to capital additions, net of plant retirements of \$158.3 million, offset by \$150.4 million net increase in accumulated depreciation. Additional information on changes in capital assets can be found in Note 6 to the financial statements on page 50.

	(In thousands)		
	<u>2013</u>	<u>2012</u>	<u>2011</u>
Land	\$ 50,373	\$ 50,373	\$ 47,520
Structures and improvements (net)	2,374,458	2,314,517	2,320,810
Equipment (net)	222,804	219,006	221,521
Construction work in progress	844,645	890,058	844,274
Total capital assets	<u>\$ 3,492,280</u>	<u>\$ 3,473,954</u>	<u>\$ 3,434,125</u>

This year's major expenditures in capital assets included:

### Water projects:

- Transmission mains, meters and services (\$38.6 million)
- Treatment facilities and equipment (\$15.9 million)
- Pumping facilities (\$3.7 million)
- Meters (\$1.5 million)

### Wastewater projects:

- Force mains (\$40.9 million)
- Treatment facilities (\$36.9 million)
- Pump stations (\$7.8 million)
- Gravity mains and services (\$5.8 million)
- Infiltration and inflow reduction program (\$4.6 million)

Budgeted capital expenditures for fiscal year 2013 amount to \$167.0 million and include \$62.0 million in water projects and \$105.0 million in wastewater projects.

## LONG-TERM DEBT

Long-term debt outstanding (including current portion) at September 30, 2013, 2012 and 2011 is presented in the following table (in thousands). FY2013 shows an increase of \$308.5 million from the previous year, and FY2012 shows a decrease of \$32.1 million from FY2011.

	(In thousands)		
	<u>2013</u>	<u>2012</u>	<u>2011</u>
Revenue Bonds	\$ 2,178,341	\$ 1,880,872	\$ 1,932,611
State Loan Obligations	154,873	143,843	124,163
Total long-term debt	<u>\$ 2,333,214</u>	<u>\$ 2,024,715</u>	<u>\$ 2,056,774</u>

During FY2013, draws made on state revolving loan commitments, recorded as debt, including capitalized interest, totaled \$20.5 million. Current long-term debt maturities were met in the amount of \$64.8 million. Additional long-term debt details can be found in Note 7 on page 50 of this report.

# Management's Discussion & Analysis

On August 2, 2013, the Department issued \$340.3 million of Miami-Dade County Water and Sewer System Revenue Bonds, Series 2013A and \$152.4 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2013B. The Series 2013B Bonds were issued to refund all of the Dade County Water and Sewer System Revenue Bonds, Series 1999A and were also associated with the interest rate swap agreement. The Department recognizes the swap association with the 2013B Bonds.

The Department is required to maintain rates and charges sufficient to meet two tiers of debt service coverage requirements. First, adjusted annual net operating revenues must equal or exceed 1.25 percent of the debt service on senior lien revenue bonds. The Department met the primary debt coverage for the year with a ratio of 1.51 percent. Second, adjusted net operating revenues, after payment of revenue bond debt service, must be at least equal to 1.15 percent of the debt service for the subordinate state loan obligations. The Department met the secondary debt service coverage with a ratio of 3.21 percent.

## ***REQUEST FOR INFORMATION***

Questions concerning this report or request for additional information should be directed to Frances G. Morris, Assistant Director – Finance at 786-552-8104 or, at her office address at 3071 SW 38<sup>th</sup> Avenue, Miami, Florida 33146.

# Statements of Net Position

	September 30,	(In thousands)	
		<u>2013</u>	<u>2012</u>
<b>ASSETS</b>			
<i>CURRENT ASSETS:</i>			
Cash and cash equivalents	\$	32,671	\$ 61,287
Investments		51,740	18,884
Accounts receivable (net of allowance for uncollectible accounts of \$20.5 million in 2013 and \$17.6 million in 2012)		104,504	103,282
Inventory of materials and supplies		37,366	36,719
Other current assets		1,561	3,110
Restricted cash and cash equivalents		<u>131,691</u>	<u>132,906</u>
Total current assets		<u>359,533</u>	<u>356,188</u>
<i>NON-CURRENT RESTRICTED ASSETS:</i>			
Cash and cash equivalents		174,690	199,039
Investment derivative instrument		33,407	51,098
Investments		501,609	186,605
Long-term receivable - General Fund		25,000	25,000
Contracts receivable		35	-
Grants receivable		<u>452</u>	<u>204</u>
Total restricted assets		<u>735,193</u>	<u>461,946</u>
<i>OTHER ASSETS:</i>			
Debt issue costs, net		25,950	25,086
Other charges, net		<u>104,428</u>	<u>116,373</u>
Total other assets		<u>130,378</u>	<u>141,459</u>
<i>CAPITAL ASSETS:</i>			
Land		50,373	50,373
Structures and Improvements		4,204,065	4,012,486
Equipment		<u>992,921</u>	<u>950,014</u>
Utility plant in service before depreciation		5,247,359	5,012,873
Less accumulated depreciation		<u>(2,599,724)</u>	<u>(2,428,977)</u>
Net utility plant in service		2,647,635	2,583,896
Construction work in progress		<u>844,645</u>	<u>890,058</u>
Total capital assets		<u>3,492,280</u>	<u>3,473,954</u>
Total non-current assets		<u>4,357,851</u>	<u>4,077,359</u>
Total assets		<u>\$ 4,717,384</u>	<u>\$ 4,433,547</u>

(Continued)

# Statements of Net Position

(Continued)	September 30,	(In thousands)	
		<u>2013</u>	<u>2012</u>
<b>LIABILITIES</b>			
<i>CURRENT LIABILITIES (PAYABLE FROM UNRESTRICTED CURRENT ASSETS):</i>			
Accounts payable and accrued expenses		\$ 42,965	\$ 40,781
Customer and developer deposits		12,649	11,175
Current portion of long-term debt		9,117	6,848
Rebatable arbitrage earnings		1,838	1,899
Liability for compensated absences		9,636	9,542
Other liabilities		<u>431</u>	<u>212</u>
Total current liabilities (payable from unrestricted current assets)		<u>76,636</u>	<u>70,457</u>
<i>CURRENT LIABILITIES (PAYABLE FROM RESTRICTED CURRENT ASSETS):</i>			
Accounts payable and accrued expenses		17,357	18,004
Retainage payable		7,030	8,849
Current portion of long-term debt		59,828	57,280
Accrued interest payable		46,224	47,191
Liability for self-insurance		<u>1,252</u>	<u>1,582</u>
Total current liabilities (payable from restricted current assets)		<u>131,691</u>	<u>132,906</u>
Total current liabilities		<u>208,327</u>	<u>203,363</u>
<i>NON-CURRENT LIABILITIES:</i>			
Revenue bonds payable, net		2,121,226	1,826,222
State loan obligations, net		143,043	134,365
Liability for self-insurance		1,486	1,970
Liability for compensated absences		31,202	29,810
Liability for post-employment benefits		5,003	4,004
Unearned revenues		<u>9,762</u>	<u>10,538</u>
Total non-current liabilities		<u>2,311,722</u>	<u>2,006,909</u>
Total liabilities		<u>2,520,049</u>	<u>2,210,272</u>
<b>NET POSITION</b>			
Net investment in capital assets		1,474,197	1,567,455
Restricted for:			
Capital projects		118,898	109,528
Debt service		154,725	114,359
Unrestricted		<u>449,515</u>	<u>431,933</u>
Total net position		<u>2,197,335</u>	<u>2,223,275</u>
Total liabilities and net position		<u>\$ 4,717,384</u>	<u>\$ 4,433,547</u>

The accompanying notes to financial statements are an integral part of these statements.

# Statements of Revenues, Expenses, and Changes in Net Position

	(In thousands)	
For the years ended September 30,	<u>2013</u>	<u>2012</u>
<i>OPERATING REVENUES:</i>		
Water	\$ 248,312	\$ 251,130
Wastewater	<u>300,096</u>	<u>285,172</u>
Total operating revenues	<u>548,408</u>	<u>536,302</u>
 <i>OPERATING AND MAINTENANCE EXPENSES:</i>		
Water source of supply	10,874	10,705
Water power and pumping	1,816	1,798
Water treatment	60,188	59,811
Water transmission and distribution	27,882	27,423
Wastewater collection system	21,638	20,150
Wastewater pumping	34,692	34,085
Wastewater treatment	79,367	74,367
Customer accounting	8,304	7,299
Customer service	16,851	16,275
General and administrative	<u>78,552</u>	<u>73,164</u>
Total operating and maintenance expenses	<u>340,164</u>	<u>325,077</u>
Operating income before depreciation	208,244	211,225
<i>DEPRECIATION</i>	<u>177,570</u>	<u>163,315</u>
Operating income	30,674	47,910
 <i>NON-OPERATING REVENUES (EXPENSES):</i>		
Investment (loss) income	(18,351)	21,797
Interest expense	(78,538)	(85,478)
Amortization of debt issue costs	(3,002)	(2,970)
Operating grants	923	2,541
Customer connection fees	25,447	20,509
Other revenues	6,547	5,325
Other expenses	<u>(1,343)</u>	<u>(1,136)</u>
(Loss) Income before contributions and transfers	<u>(37,643)</u>	<u>8,498</u>
Capital contributions	19,459	28,156
(Decrease) increase in net position	(18,184)	36,654
Net position at beginning of year	<u>2,215,519</u> <sup>(1)</sup>	<u>2,186,621</u>
Net position at end of year	<u>\$ 2,197,335</u>	<u>\$ 2,223,275</u>

<sup>(1)</sup>For fiscal year 2013, the beginning balance of net position was restated to include a \$7.8M correction related to the Series 2007 bond interest payment. Monies were previously held in escrow by Miami Dade Finance Dept. but were subsequently paid out October 2007.

#### Reconciliation of Net Position

Ending balance of net position at 09/30/2012	\$ 2,223,275
Series 2007 net position adjustment	<u>(7,756)</u>
Adjusted beginning balance of net position at 10/01/2012	<u>\$ 2,215,519</u>

# Statements of Cash Flows

	(In thousands)	
For the years ended September 30,	<u>2013</u>	<u>2012</u>
<i>CASH FLOWS FROM OPERATING ACTIVITIES:</i>		
Cash received from customers	\$ 577,950	\$ 563,600
Cash paid to suppliers for goods and services	(149,345)	(141,556)
Cash paid to employees for services	<u>(181,503)</u>	<u>( 179,430)</u>
Net cash provided by operating activities	<u>247,102</u>	<u>242,614</u>
<i>CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:</i>		
Operating grants received	922	2,541
Loan to County's General Fund	<u>-</u>	<u>(25,000)</u>
Net cash provided (used) by non-capital financing activities	<u>922</u>	<u>(22,459)</u>
<i>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</i>		
Proceeds from bond issues, loan agreements and notes	513,170	30,909
Principal payments - bond, loans and notes	(214,125)	(61,504)
Bond premium and issue costs	(3,844)	(966)
Interest paid	(83,947)	(87,158)
Acquisition and construction of capital assets	<u>(164,878)</u>	<u>(191,395)</u>
Net cash provided (used) by capital and related financing activities	<u>46,376</u>	<u>(310,114)</u>
<i>CASH FLOWS FROM INVESTING ACTIVITIES:</i>		
Purchase of investment securities	(578,909)	(272,346)
Proceeds from sale and maturity of investment securities	228,069	417,626
Interest on investments	<u>2,260</u>	<u>1,859</u>
Net cash (used) provided by investing activities	<u>(348,580)</u>	<u>147,139</u>
Net (decrease) increase in cash and cash equivalents	(54,180)	57,180
Cash and cash equivalents at beginning of year	<u>393,232</u>	<u>336,052</u>
Cash and cash equivalents at end of year	<u>\$ 339,052</u>	<u>\$ 393,232</u>

(Continued)

# Statements of Cash Flows

(Continued)	For the years ended September 30,	(In thousands)	
		<u>2013</u>	<u>2012</u>
<i>RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:</i>			
Operating income		\$ 30,674	\$ 47,910
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation		177,570	163,315
Provision for uncollectible accounts		2,957	2,198
Amortization of charges		77	77
Amortization of unearned revenues		530	(776)
Non-operating other, net		30,651	24,696
Increase (decrease) in assets:			
Accounts Receivable		(3,643)	1,498
Inventory of materials and supplies		(647)	(2,081)
Other current assets		1,549	416
Contracts receivable		(283)	(27)
Other charges		1,151	3,370
Increase (decrease) in liabilities:			
Accounts payable and accrued expenses		2,184	(167)
Customer and developer deposits		1,475	46
Accrued interest payable		967	-
Liability for compensated absences		1,486	1,103
Other liabilities		219	(10)
Liability for other post-employment benefits		999	704
Liability for self-insurance		(814)	342
		<u>\$ 247,102</u>	<u>\$ 242,614</u>
Net cash provided by operating activities			

*NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES*

Property, plant and equipment contributions were received in amounts of \$19.5 million and \$28.2 million in fiscal years 2013 and 2012, respectively.

The change in the fair value of investments was a \$3.0 million decrease and a \$1.4 million decrease in fiscal year 2013 and 2012, respectively.

The change in the fair value of swaps was a \$17.7 million decrease and a \$21.5 million increase in fiscal year 2013 and 2012, respectively.

	(In thousands)	
	<u>2013</u>	<u>2012</u>
<i>RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR</i>		
Unrestricted current cash and cash equivalents	\$ 32,671	\$ 61,287
Restricted current cash and cash equivalents	131,691	132,906
Restricted non-current cash and cash equivalents	174,690	199,039
Total cash and cash equivalents at end of year	<u>\$ 339,052</u>	<u>\$ 393,232</u>

The accompanying notes to financial statements are an integral part of these statements.

# Notes to Financial Statements

**SEPTEMBER 30, 2013 AND 2012**

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### REPORTING ENTITY

The Miami-Dade Water and Sewer Department (Department) functions as a self-supporting governmental enterprise fund of Miami-Dade County, Florida (County). An enterprise fund is used to account for the financing of services to the general public on a continuing basis with costs recovered primarily through user charges. Accordingly, its financial statements have been prepared on the accrual basis of accounting. The Department issues a separate comprehensive annual financial report and its financial statements are combined in the County's comprehensive annual financial report.

The accompanying financial statements combine the accounts of both the Water and Wastewater Systems to provide meaningful information with respect to the Department, with all transactions of the Department accounted for as one enterprise fund. All significant inter-system accounts and transactions have been eliminated.

### BASIS OF ACCOUNTING

The financial statements are prepared in conformity with generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB). The Department implemented and follows the guidance of GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements* for the proprietary fund financial statements. Governments also have the option of following subsequent FASB pronouncements for enterprise funds subject to this same limitation. The Department has elected not to follow subsequent FASB guidance.

### OPERATING/NONOPERATING REVENUES AND EXPENSES

Operating revenues and expenses are those that result from providing water and wastewater services. Nonoperating revenues and expenses include capital, financing, investing and other activities either not related to or incidental to the provision of water and wastewater services.

### REVENUE RECOGNITION

All water and wastewater revenues are recognized when the related services are provided. Unbilled receivables have been estimated and accrued as revenue from the date of last reading of the meters based on the billing cycle. Unbilled accounts receivable were approximately \$36.8

million and \$33.2 million as of September 30, 2013 and 2012, respectively.

### CAPITAL ASSETS

Property acquired with an initial individual cost of \$1,000 or more and an estimated useful life in excess of one year is capitalized at cost. Major outlays for construction of capital assets and improvements are capitalized at cost. Expenditures for maintenance and repairs are expensed as incurred. Property contributions received from municipalities are recorded as capital assets by the Department at the acquisition cost to the municipality. Property contributed in aid of construction is capitalized at its estimated fair market value on the date received.

Only those intangible assets valued at more than \$100,000 are recorded as an asset (threshold determinations are based on aggregate cost). For fiscal year 2013, no separately identifiable intangible assets met the threshold for recording.

Annualized depreciation expense, expressed as a percent of depreciable capital assets, was 3.4% and 3.3% for fiscal years ended September 30, 2013 and 2012, respectively. The Department utilizes the single-unit straight-line depreciation method with normal retirements charged to accumulated depreciation, and gain or loss is recognized on retirements. Assets with a change in estimated life are depreciated based on net book value over the remaining life of the asset. Estimated useful lives of capital assets in service are as follows:

	Water System	Wastewater System
	(Years)	
Structures and improvements	25-45	25-45
Equipment	3-20	3-20

Total depreciation expense for the fiscal years ended September 30, 2013 and 2012 was \$177.6 million and \$163.3 million, respectively.

In June 2011, the GASB issued Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. This statement establishes financial reporting requirements for standardizing the presentation of deferred outflows of resources and deferred inflows of resources and their effects on net position. The statement of net position re-

# Notes to Financial Statements

ports the residual amount as net position, rather than net assets. This statement was effective for fiscal year 2013.

## *CASH, CASH EQUIVALENTS AND INVESTMENTS*

Cash includes cash on hand, amounts in demand deposits, and positions in investment pools that can be deposited or withdrawn without notice or penalty. Cash equivalents are short-term, highly liquid securities with known market values and maturities, when acquired, of less than three months.

The Department has opted to report money market and non-participating investments, with remaining maturities of one year or less at the time of purchase, at amortized cost, which approximates fair value.

Investments are carried at fair value. The net increase or decrease in the fair value of investments is included as part of investment income in the accompanying statements of revenues, expenses and changes in net position.

## *INVENTORY*

Materials and supplies inventories are stated at lower of weighted average cost or market.

## *INTEREST ON INDEBTEDNESS*

Interest is charged to expense, as incurred, except for interest related to borrowings used for construction projects which is capitalized, net of interest earned on construction funds borrowed. Interest incurred during the fiscal years ended September 30, 2013 and 2012 was \$92.6 million and \$92.5 million, respectively. Interest in the amount of, \$14.0 million and \$7.1 million was capitalized in fiscal years 2013 and 2012, respectively, net of interest earned on construction funds from tax-exempt borrowing of \$0.3 million and \$0.6 million in fiscal years 2013 and 2012, respectively.

For interest rate swap agreements, the amounts recorded in the financial statements are the net interest expense along with amortization of fees paid or received resulting from these agreements. The Department recorded an upfront payment for the swap option that was terminated during FY 2009 and is amortizing the payment, net of interest expense, in the financial statements.

Effective October 1, 2011, the Department adopted GASB Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions*,

which requires recognition, measurement and disclosure of information regarding derivative instruments entered into by the Department and reported at fair value. GASB Statement 64 amends GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*.

## *BOND DISCOUNT, PREMIUM AND ISSUANCE COSTS*

Discounts and premiums on bonds and notes payable are amortized using the straight-line method over the life of the related bond issuances or term of the notes. Bond issuance costs, an asset, are capitalized and amortized over the life of the bonds in a manner similar to discounts and premiums. Discounts and premiums are presented Net of the Related Debt.

## *CAPITAL CONTRIBUTIONS*

The Department records external capital contributions as revenues to the proprietary funds.

## *GRANTS FROM GOVERNMENT AGENCIES*

The Department records grants when all applicable eligibility requirements have been met. This normally occurs as amounts are expended and become reimbursable from the granting agency.

## *COMPENSATED ABSENCES*

The Department accounts for compensated absences by accruing a liability for employees' compensation for future absences.

## *COST ALLOCATION*

Certain engineering overhead and other costs are generally allocated to capital projects and operating expenses using standard rates developed by independent consultants. The rate is based on various allocation bases which bear reasonable relation with the type of allocable expenditure.

## *USE OF ESTIMATES*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures/expense during the reporting period. Actual results could differ from those estimates.

# Notes to Financial Statements

## 2. CASH, CASH EQUIVALENTS AND INVESTMENTS

The County is authorized through the Florida Statutes §218.415, Ordinance No. 84-47, Resolution R-31-09 and its Investment Policy to make certain investments. The County's Investment Policy objectives are, in order of priority, the safety of principal, liquidity of funds and maximizing investment income.

The Department pools all cash, cash equivalents and investments, with the exception of certain amounts which are required to be held in trust and escrow accounts under the terms of bond ordinances and loan agreements. Various self-balancing account groups are participants in such pooling, sharing on a pro-rata basis in the pooled earnings, according to their respective average monthly balances.

### DEPOSITS

The carrying amounts of the Department's local deposits were \$296.6 million and \$314.4 million as of September 30, 2013 and 2012, respectively. The bank balances at local depositories were \$321.7 million and \$328.2 million as of September 30, 2013 and 2012, respectively, consisting of demand deposit accounts only. All deposits are fully insured by Federal Depository Insurance and a multiple financial institution collateral pool required by Chapter 280 Florida Statutes, "Florida Security for Public Deposits Act". Under the Act, all qualified public depositories are required to pledge eligible collateral having a market value equal to or greater than the average daily or monthly balance of all public deposits, times the depository's collateral pledging level. The pledging level may range from 50% to 125% depending upon the depository's financial condition and establishment period. All collateral must be deposited with a State-approved financial institution. Any losses to public depositories are covered by applicable deposit insurance, sale of securities pledged as collateral and, if necessary, assessments against other qualified public depositories of the same type as the depository in default.

As a rule, the County intends to hold all purchased securities until their final maturity date. There may be occasional exceptions, including, but not limited to the need to sell securities to meet unexpected liquidity needs.

Cash on hand and cash held by other parties as of September 30, 2013 was approximately \$319.5 million.

### INVESTMENTS

The Department's investments at September 30, 2013 and 2012, are shown in the following table (in thousands).

	Fair Value	
	2013	2012
Federal Home Loan Mortgage Corporation	\$ 195,492	\$ 66,637
Federal Home Loan Bank	118,518	65,247
Federal Farm Credit Bank	55,200	49,333
Federal National Mortgage Association	156,638	65,602
Treasury Notes	38,323	22,232
Interest Bearing	8,695	7,425
Total Investments	<u>\$ 572,866</u>	<u>\$ 276,476</u>

### CREDIT RISK

The Policy, minimizes credit risk by restricting authorized investments to: Local Government Surplus Funds Trust Fund, or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act; Securities and Exchange Commission (SEC) registered money market funds with the highest credit rating from a nationally recognized rating agency; interest-bearing time deposits or saving accounts in qualified public depositories, pursuant to Florida Statutes §280.02, which are defined as banks, savings banks, or savings associations organized under the laws of the United States with an office in this state that is authorized to receive deposits, and has deposit insurance under the provisions of the Federal Deposit Insurance Act; direct obligations of the United States Treasury; federal agencies and instrumentalities; securities of, or other interests in, and open-end or closed-end management-type investment company or investment trust registered under the Investment Company Act of 1940, provided that the portfolio is limited to the obligations of the United States government or any agency or instrumentality thereof and fully collateralized by such United States government obligations, and provided that such investment company or investment trust takes delivery of such collateral either directly or through an authorized custodian; commercial paper of prime quality with a stated maturity of 270 days or less from the date of its issuance, which has the highest letter and numerical rating as provided for by at least two nationally recognized rating services; banker acceptances which have a stated maturity of 180 days or less from the date of issuance, and have the highest letter and numerical rating as provided for by at least two nationally recognized rating services, and are drawn on and accepted by commercial banks and which are eligible for purchase by the Federal Reserve Bank, investments in repurchase agreements ("Repos") collateralized by securities author-

# Notes to Financial Statements

ized by this policy. All Repos shall be governed by a standard SIFMA Master Repurchase Agreement; municipal securities issued by U.S., state or local governments, having at time of purchase, a stand-alone credit rating of AA or better assigned by two or more recognized credit rating agencies or a short-term rating of A1/P1 or equivalent from one or more recognized credit rating agencies. Securities lending, securities or investments purchased or held under the provisions of this section, may be loaned to securities dealers or financial institutions provided the loan is collateralized by cash or securities having a market value of at least 102 percent of the market value of the securities loan upon ignition of the transaction.

The following table summarizes the investments by type and credit ratings at September 30, 2013 and 2012.

	<u>Credit Ratings</u>	
	<u>2013</u>	<u>2012</u>
Federal Home Loan Mortgage Corporation	AA+/A-1+	AA+/A-1+
Federal Home Loan Bank	AA+/A-1+	AA+/A-1+
Federal Farm Credit Bank	AA+/A-1+	AA+/A-1+
Federal National Mortgage Association	AA+/A-1+	AA+/A-1+
Treasury Notes	AA+/A-1+	AA+/A-1+
Commercial Paper	N/A	A1/P1

Guaranteed investment contracts (GIC) are not subject to credit rating because they are direct contractual investments and are not securities. These GIC provide for a guaranteed return on investments over a specified period of time.

### *CUSTODIAL CREDIT RISK*

The Policy requires that bank deposits be secured per Chapter 280, Florida Statutes. This requires local governments to deposit funds only in financial institutions designated as qualified public depositories by the Chief Financial Officer of the State of Florida and creates the Public Deposits Trust Fund, a multiple financial institution pool with the ability to assess its member financial institutions for collateral shortfalls if a default or insolvency has occurred. At September 30, 2013 all the County's bank deposits were in qualified public depositories.

The Policy requires the execution of a Custodial Safekeeping Agreement (CSA) for all purchased securities which shall be held for credit of the County in an account separate and apart from the assets of the financial institution.

### *CONCENTRATION OF CREDIT RISK*

The Policy establishes limitations on portfolio composition by investment type and by issuer to limit its exposure to concentration of credit risk. The Policy provides that a maximum of 50% of the portfolio may be invested in the State of Florida Local Government Surplus Funds Trust Fund ("Pool"); however, the bond proceeds may be temporarily deposited in the Pool until alternative investments have been purchased. Prior to any investment in the Pool, approval must be received from the Board of County Commissioners. A maximum of 30% of the portfolio may be invested in SEC registered money market funds with no more than 10% to any single money market fund; a maximum of 20% of the portfolio may be invested in non-negotiable interest bearing time certificates of deposit and savings account with no more than 5% deposited with any one insurer. There is no limit on the percent of the total portfolio that may be invested in direct obligations of the U.S. Treasury or federal agencies and instrumentalities; with no limits on individual issuers (investment in agencies containing call options shall be limited to a maximum of 25% of total portfolio). A maximum of 5% of the portfolio may be invested in open-end or closed-end funds; a maximum of 50% of the portfolio may be invested in prime commercial paper with a maximum of 5% with any one issuer; a maximum of 25% of the portfolio may be invested in bankers acceptances with a maximum of 10% with any one issuer, but a maximum of 60% of the portfolio may be invested in both commercial paper and bankers acceptances. A maximum of 20% of the portfolio may be invested in repurchase agreements with the exception of one (1) business day agreements, with a maximum of 10% of the portfolio with any one institution or dealer with the exception of one (1) business day agreements. Investments in derivative products is prohibited by Miami-Dade County. A maximum of 25% of the portfolio may be directly invested in municipal obligations, up to 5% with any one municipal issuer.

As of September 30, 2013 and 2012, the following issuers held 5% or more of the investment portfolio:

	<u>% of Portfolio</u>	
	<u>2013</u>	<u>2012</u>
Federal Home Loan Mortgage Corporation	34.13	24.10
Federal Home Loan Bank	20.69	23.60
Federal Farm Credit Bank	9.64	17.84
Federal National Mortgage Association	27.34	23.73
Treasury Notes	6.69	8.04
Interest Bearing	1.52	2.69

# Notes to Financial Statements

The schedule excludes investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds and external investments pools.

### INTEREST RATE RISK

The Policy limits interest rate risk by requiring the matching of known cash needs and anticipated net cash outflow requirements; following historical spread relationships between different security types and issuers; evaluating both interest rate forecasts and maturity dates to consider short-term market expectations. The Policy requires that investments made with current operating funds shall maintain a weighted average of no longer than one year. Investments for bond reserves, construction funds and other non-operating funds shall have a term appropriate to the need for funds and in accordance with debt covenants. The Policy limits the maturity of an investment to a maximum of five years.

As of September 30, 2013 and 2012 the County had the following investments with the respective weighted average maturity in years.

	Weighted Average in Years	
	2013	2012
Federal Home Loan Mortgage Corporation	0.56	1.06
Federal Home Loan Bank	0.54	0.38
Federal Farm Credit Bank	1.33	1.28
Federal National Mortgage Association	1.01	1.16
Treasury Notes	0.13	0.38

### FOREIGN CURRENCY RISK

The Policy limits the County's foreign currency risk by excluding foreign investments as an investments option.

### 3. RECEIVABLES

Receivables at September 30, 2013 and 2012 were as follows (in thousands):

	2013	2012
Trade Accounts	\$ 115,833	\$ 111,588
Non-retail accounts	8,270	9,286
Grants & Contracts	487	-
Other County funds	25,924	25,014
Gross receivables	150,514	145,888
Less: allowance for doubtful accounts	(20,523)	(17,606)
Net receivables	<u>\$ 129,991</u>	<u>\$ 128,282</u>

On September 22, 2011, the Department signed a Memorandum of Understanding (MOU) establishing a \$25 million loan to the County's General Fund as adopted in the fiscal year 2011-2012 Budget Ordinance.

The Department transferred \$25 million cash to the General Fund and booked a receivable from the County. The term of this loan will be five years, no interest, with repayments of \$5 million per year to begin at the end of fiscal year 2013-2014.

### 4. OTHER CURRENT ASSETS

Other current assets at September 30, 2013 and 2012 were as follows (in thousands):

	2013	2012
Beginning Balance	\$ 3,110	\$ 3,526
Prepaid Expenses	1,170	7
Advance to City of Hialeah	3,567	19,535
Grant Receipts	-	1,117
Construction in Progress	(6,286)	(21,075)
Ending Balance	<u>\$ 1,561</u>	<u>\$ 3,110</u>

The County entered into an agreement with the City of Hialeah (City) to construct a 10 MGD, expandable to 17.5 MGD, reverse osmosis water treatment plant. The City and the County shall have equal 50% ownership of a reverse osmosis water treatment plant (WTP), inclusive of land, structures, facilities and appurtenances to be situated in the Annexation Area of the City. The County shall contribute and pay for 50% of the planning, design, construction and construction management (design and construction) cost for the WTP, in an amount not less than \$80 million, and the City shall contribute 50% of the design and construction cost for the WTP, in an amount not less than \$80 million based on an estimate. In Fall of 2013, the Plant began Interim Operations with a production capability of 7.5 MGD, with County and City each receiving 50% of the production. In fiscal year 2013, an additional \$3.6 million was contributed to the City of Hialeah. As of September 30, 2013, the Department has contributed approximately \$42.1 million towards the construction of the WTP.

# Notes to Financial Statements

## 5. RESTRICTED ASSETS

Certain bond ordinances and loan agreements require the Department to establish accounts to be used in accounting for proceeds and collateral pledged as a result of the various issues of debt. In many cases, the applicable ordinances refer to the restricted accounts as “funds”. Such accounts are not “funds” as defined by the National Council of Governmental Accounting (*NCGA Statement No. 1: Governmental Accounting and Financial Reporting Principles*) and, therefore, are not funds for financial reporting purposes, but are maintained as separate ac-

counts. Restricted assets at September 30, 2013 and 2012 are represented in the following table (in thousands):

	2013	2012
Debt Service	\$ 199,891	\$ 160,554
Construction	340,303	146,529
Renewal and Replacement	101,339	68,464
Plant Expansion	97,551	79,068
Self-Insurance	4,345	5,144
Other	123,455	135,093
<b>Total Restricted Assets</b>	<b>\$ 866,884</b>	<b>\$ 594,852</b>

## 6. CAPITAL ASSETS

Capital asset activity during fiscal years 2013 and 2012 was as follows (in thousands):

	Balance		2012		Balance		2013		Balance	
	09/30/11	Additions	Deletions	09/30/12	Additions	Deletions	09/30/13			
Capital Assets, not being depreciated:										
Land	\$ 47,520	\$ 2,853	\$ -	\$ 50,373	\$ -	\$ -	\$ 50,373			
Construction work in progress	844,274	188,696	(142,912)	890,058	166,585	(211,998)	844,645			
Total capital assets, not being depreciated	891,794	191,549	(142,912)	940,431	166,585	(211,998)	895,018			
Capital Assets, being depreciated										
Structures and improvements	3,895,888	121,728	(5,130)	4,012,486	195,834	(4,255)	4,204,065			
Equipment	924,973	35,343	(10,302)	950,014	46,338	(3,431)	992,921			
Total capital assets, being depreciated	4,820,861	157,071	(15,432)	4,962,500	242,172	(7,686)	5,196,986			
Less accumulated depreciation:										
Structures and improvements	(1,575,080)	(126,458)	3,569	(1,697,969)	(135,119)	3,482	(1,829,606)			
Equipment	(703,450)	(36,855)	9,297	(731,008)	(42,451)	3,341	(770,118)			
Total accumulated depreciation	(2,278,530)	(163,313)	12,866	(2,428,977)	(177,570)	6,823	(2,599,724)			
Total capital assets, being depreciated, net	2,542,331	(6,242)	(2,566)	2,533,523	64,602	(863)	2,597,262			
Total capital assets, net	\$ 3,434,125	\$ 185,307	\$ (145,478)	\$ 3,473,954	\$ 231,187	\$ (212,861)	\$ 3,492,280			

## 7. LONG-TERM DEBT

Long-term debt includes various bonds and loans which have been issued or approved by the County for the improvement of the Department’s water and wastewater infrastructure, and defeasance of outstanding debt. General covenants, along with debt service requirements, are disclosed on page 51. See Note 5, Restricted Assets, for a discussion of the accounts used in accounting for proceeds and collateral pledged as a result of the issuance of the various forms of debt.

The Department’s debt instruments contain various covenants and restrictions, which among other things, (1) prohibit the Department from taking any action that could jeopardize its tax-exempt status, and (2) require the Department to meet certain financial tests. Management believes that the Department was in compliance with all such covenants and restrictions at September 30, 2013.

### DADE COUNTY REVENUE BONDS, SERIES 1995

On October 19, 1995, \$346.8 million of Dade County Water and Sewer System Revenue Bonds, Series 1995 were issued to finance capital improvements to the water and wastewater systems. On September 29, 2006, \$295.2 million of Dade County Water and Sewer System Revenue Refunding Variable Rate Demand Bonds, Series 2005 were issued to refund the Series 1995 Bonds maturing after October 1, 2011.

The Series 1995 Revenue Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 through the year 2011 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year’s debt service requirements were met in fiscal year 2013.

# Notes to Financial Statements

## CHANGES IN LONG-TERM LIABILITIES

A summary of long-term liability activity during fiscal years 2012 and 2013 is presented in the following table (in thousands):

Description	Outstanding Rate	Balance 09/30/2011	2012		Balance 09/30/2012	2013		Balance 09/30/2013	Due in 2014
			Additions	Deletions		Additions	Deletions		
<i>Dade County Revenue Bonds</i>									
Series 1995	4.10%-6.25%	\$ 5,140	\$ -	\$ 5,140	\$ -	\$ -	\$ -	\$ -	\$ -
Series 1999A	5.00%-5.00%	150,000	-	-	150,000	-	150,000	-	-
Series 2003	2.00%-5.00%	86,910	-	29,725	57,185	-	31,065	26,120	26,120
Series 2007	4.00%-5.00%	333,405	-	11,200	322,205	-	11,695	310,510	12,160
Series 2008A & B	3.25%-5.25%	437,095	-	3,110	433,985	-	3,270	430,715	9,880
Series 2008C	4.00%-6.00%	305,415	-	1,000	304,415	-	5,985	298,430	6,265
Series 2010	2.00%-5.00%	594,330	-	100	594,230	-	2,635	591,595	2,690
Series 2013A	5.00%-5.00%	-	-	-	-	340,265	-	340,265	-
Series 2013B	5.00%-5.00%	-	-	-	-	152,400	-	152,400	-
Less: Unamortized Discount		(4,125)	-	(251)	(3,874)	-	(1,924)	(1,950)	-
Deferred amounts on refunding		(19,094)	-	(3,325)	(15,769)	6,149	5,601	(15,221)	-
Plus: Unamortized Premium		43,535	-	5,040	38,495	19,261	12,279	45,477	-
Total revenue bonds		\$ 1,932,611	\$ -	\$ 51,739	\$ 1,880,872	\$ 518,075	\$ 220,606	\$ 2,178,341	\$ 57,115
<i>State Loan Obligations</i>									
State Revolving Fund	2.56%-4.17%	124,163	30,909	11,229	143,843	20,505	9,475	154,873	11,830
Total long-term debt		\$ 2,056,774	\$ 30,909	\$ 62,968	\$ 2,024,715	\$ 538,580	\$ 230,081	\$ 2,333,214	\$ 68,945
<i>Other liabilities</i>									
Compensated Absences		38,249	11,355	10,252	39,352	6,466	4,980	40,838	9,636
Self-Insurance		3,210	4,903	4,561	3,552	5,328	6,141	2,738	1,252
Other post-employment benefits		3,300	704	-	4,004	999	-	5,003	-
Deferred revenues		11,314	-	776	10,538	-	776	9,762	-
Total long-term liabilities		\$ 2,112,847	\$ 47,871	\$ 78,557	\$ 2,082,161	\$ 551,373	\$ 241,978	\$ 2,391,555	\$ 79,833

## DEBT SERVICE REQUIREMENTS

As of September 30, 2013, the Department's debt service requirements to maturity for their term were as follows (in thousands):

Maturing in Fiscal Year	Revenue Bonds		State Loans		Total		
	Principal	Interest	Principal	Interest	Principal	Interest	Debt
2014	\$ 57,115	\$ 97,802	\$ 11,826	\$ 2,518	\$ 68,941	\$ 100,320	\$ 169,261
2015	59,745	103,364	12,982	3,059	72,727	106,423	179,150
2016	62,640	100,483	12,042	2,738	74,682	103,221	177,903
2017	65,735	97,412	10,927	2,429	76,662	99,841	176,503
2018	68,990	94,159	9,758	2,173	78,748	96,332	175,080
2019-2023	402,185	413,673	40,498	7,589	442,683	421,262	863,945
2024-2028	476,005	296,968	25,978	4,154	501,983	301,122	803,105
2029-2033	310,530	194,708	27,936	1,700	338,466	196,408	534,874
2034-2038	284,275	127,624	2,926	32	287,201	127,656	414,857
2039-2043	362,815	47,120	-	-	362,815	47,120	409,935
	\$ 2,150,035	\$ 1,573,313	\$ 154,873	\$ 26,392	\$ 2,304,908	\$ 1,599,705	\$ 3,904,613
Unamortized Discount, Deferred & Premium Amounts	28,306	-	-	-	28,306	-	28,306
Total	\$ 2,178,341	\$ 1,573,313	\$ 154,873	\$ 26,392	\$ 2,333,214	\$ 1,599,705	\$ 3,932,919

# Notes to Financial Statements

## *MIAMI-DADE COUNTY REVENUE BONDS, SERIES 1999A*

On May 5, 1999, \$150 million of Dade County Water and Sewer System Revenue Bonds, Series 1999A were issued to finance capital improvements to the water and wastewater systems. On August 2, 2013, \$152.4 million of Miami-Dade County Water and Sewer Revenue Refunding Bonds, Series 2013B, were issued to refund the Series 1999A bonds maturing October 2029.

The Series 1999A Revenue Bonds were collateralized by net operating revenues of the Department and were due serially on October 1 through the year 2029 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

## *MIAMI-DADE COUNTY REVENUE BONDS, SERIES 2003*

On October 9, 2003, \$248.9 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2003 were issued to refund the County's Water and Sewer System Revenue Refunding Bonds, Series 1993, and to pay issue costs.

The Series 2003 Refunding Bonds are collateralized by net operating revenues of the Department and are due serially on October 1 through the year 2013 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

## *MIAMI-DADE COUNTY REVENUE BONDS, SERIES 2007*

On September 29, 2007, \$344.7 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2007 were issued to refund the Miami-Dade County Water and Sewer System Revenue Bonds, Series 1997 maturing after October 1, 2009, and to pay issue costs.

The Series 2007 Refunding Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2008 through the year 2026 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

## *MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE BONDS, SERIES 2008A*

On July 15, 2008, the County issued \$68.3 million of Miami-Dade County Water and Sewer System Revenue

Bonds, Series 2008A to pay the costs of terminating the AIG Financial Products Corporation interest rate swap associated with the variable rate Dade County Water and Sewer System Revenue Bonds, Series 1994 and to pay issuance costs.

The Series 2008A Revenue Bonds are collateralized by the net operating revenues of the Department and are due serially October 1 starting in 2009 through the year 2022 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

## *MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2008B*

On July 15, 2008, \$374.6 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2008B were issued to redeem all of the County's Water and Sewer System Revenue Bonds, Series 1994 and to pay issuance and surety costs.

The Series 2008B Refunding Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2009 through the year 2022 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

## *MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2008C*

On December 18, 2008, \$306.8 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2008C were issued to redeem all of the County's Dade County Water and Sewer System Revenue Refunding Variable Rate Demand Bonds, Series 2005 and to pay issuance and surety costs. The refunding resulted in a gain of \$13.8 million.

The Series 2008C Refunding Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2009 through the year 2026 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

## *MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE BONDS, SERIES 2010*

On March 10, 2010, \$594.3 million of Miami-Dade County Water and Sewer System Revenue Bonds, Series

# Notes to Financial Statements

2010 were issued to finance capital improvements under the Department's Multi-Year Capital plan, repay the Regions Bank Line of Credit and to pay issue costs.

The Series 2010 Revenue Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 starting in 2010 through the year 2040 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

*MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE BONDS, SERIES 2013A*

On August 2, 2013, the County issued \$340.3 million of Miami-Dade County Water and Sewer System Revenue Bonds, Series 2013A to pay cost of constructing and acquiring certain improvements under the Department's Multi-Year Capital Plan, pay capitalized interest on the bonds, make a deposit to the Reserve Account and to pay issue costs.

The Series 2013A Revenue Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 through the year 2043 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

*MIAMI-DADE COUNTY WATER AND SEWER SYSTEM REVENUE REFUNDING BONDS, SERIES 2013B*

On August 2, 2013, the County issued \$152.4 million of Miami-Dade County Water and Sewer System Revenue Refunding Bonds, Series 2013B to refund all the County's outstanding Water and Sewer System Revenue Bonds, Series 1999A, to make a deposit to the Reserve Account and pay issue costs.

The Series 2013B Revenue Bonds are collateralized by the net operating revenues of the Department and are due serially on October 1 through the year 2030 with semi-annual interest due on April 1 and October 1 of each year. Net revenue requirements of at least 1.10 times the current year's debt service requirements were met in fiscal year 2013.

*STATE REVOLVING FUND*

Under the State Revolving Fund program, the Department has received various loan commitments for the construction of water and wastewater treatment facilities. Draws to date against committed loans as of September

30, 2013 are detailed in the following table (in thousands). Related payments of principal and interest are due through the year 2034.

<u>Loan #</u>	<u>Draws</u>	<u>Closed Out Date</u>
375310	\$ 45,906	06/07/99
377400	36,402	06/07/99
377450	27,831	05/18/01
377470	11,959	08/21/00
377490	3,098	05/02/01
377500	25,874	12/01/03
377650	2,618	08/08/03
377670	3,604	10/27/03
377860	4,253	09/20/06
377870	4,979	09/20/06
37788P	3,252	09/27/04
37789A	845	08/01/07
37789L	2,891	09/26/06
300010	39,534	08/04/08
300080	4,691	04/28/03
377900	95,000	Active
130200	1,416	Active
130201	137	Active
	\$ 314,290	

No further draws will be made against closed loans.

The Department has agreed to maintain rates, together with other pledged revenues, sufficient to provide "net revenues" equal to at least 1.15 times the annual loan payments after meeting the primary debt service requirements. Reserve and debt service funding requirements, as required by the agreements, were met in fiscal year 2013.

*INTEREST RATE SWAP AGREEMENTS*

The Department is currently a party to two interest rate swap agreements related to the various revenue bonds issued by the Department. The fair value of a swap is determined at September 30, 2013 based on an estimated mark-to-mid market assessment.

On June 15, 2008, Merrill Lynch Capital Services, Inc. exercised their option to terminate a fixed to variable rate swap option with a notional amount of \$215 million with respect to the Series 2007 Bonds at no cost to either party.

On August 2, 2013, the Department issued fixed rate bonds refunding the Miami-Dade County Revenue Bonds, Series 1999A. With the refunding of all outstanding obligations of the Series 1999A Bonds by the issu-

# Notes to Financial Statements

## INTEREST RATE SWAP AGREEMENTS

Below is a recap of each of the interest rate swap agreements that the Department has entered into:

Associated Series of Bonds	Notional Amount as of 09/30/13	Counterparty	Counterparty Ratings as of 09/30/13 <sup>(2)</sup>	Start Date	Termination Date	Counterparty Payment	County Payment	Fair Value at 09/30/13
Series 2007	\$ 200,000,000	Bank of New York Mellon	Guarantor-Aa1, AA-, AA-	07/18/02	10/01/26	Variable-USD-Libor-BBA+1.465%	Variable-(USD-SIFMA Municipal Swap Index/.0604)	\$ 6,625,222
Series 2013B <sup>(1)</sup>	\$ 205,070,000	Bank of New York Mellon	Guarantor-Aa1, AA-, AA-	03/06/06	10/01/29	Variable-(USD-ISDA-Swap Rate) x 90.15% + 1.58%	Variable-(USD-SIFMA Municipal Swap Index/.0604)	\$26,781,970

<sup>(1)</sup> The underlying debt for the swap has been replaced with the Series 2013B Bonds.

<sup>(2)</sup> Moody's, S&P, Fitch.

ance of the fixed rate debt, the Series 2013B Bonds, the Department recognizes the swap association with the 2013B Bonds.

During fiscal year 2010, Statement No. 53 of the Governmental Accounting Standards Board, Accounting and Financial Reporting for Derivative Instruments, (GASB 53) became effective. This statement refers to the recognition, measurement and disclosure of information regarding derivative instruments entered into by the Department and reported at fair value. In accordance with GASB 53, Swap Financial Group, LLC evaluated the Department's swaps to determine whether they are effective hedging derivative instruments. It was determined that both swaps are basis swaps. Given that there is no identified financial risk being hedged by the swaps that can be expressed in terms of exposure to adverse changes in cash flows or fair values, the swaps are treated as investment derivative instruments, and not hedging derivative instruments. Accordingly, the change in fair value at September 30, 2013 was a decrease of \$17.7 million. This change in fair value is reflected in the investment income line item of the statement of revenues expenses and changes in net assets. This decrease brings the total fair value to \$33.4 million which is reflected in the Investment Derivative Instrument line item of the noncurrent asset section of the balance sheet.

### Risk Disclosure

**Credit Risk.** Because all of the swaps rely upon the performance of the third parties who serve as swap counterparties, the Department is exposed to credit risk or the risk that the counterparty fails to perform according to its contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swaps, as shown and labeled fair value on the Interest Rate Swap Agreements chart above. All fair values have been calculated using the mark-to-mid-market method. To mitigate credit risk, the County maintains strict credit standards for swap counterparties. All swap counterparties for longer term swaps are rated at least in the double-A category by both Moody's and Standard & Poor's. To further mitigate credit risk, the Department swap documents require counterparties to post collateral for the Department's benefit if they are downgraded below a designated threshold.

**Basis Risk.** The Department's swap agreements expose the County to basis risk. Should the relationship between the variable rate the Department receives on the swap fall short of the variable rate on the associated bonds, the expected savings may not be realized. As of September 30, 2013, the Department had no variable rate debt outstanding.

# Notes to Financial Statements

*Tax Risk.* For basis swaps, the interplay between the taxable index and the tax exempt index may be affected by changes to the marginal tax rates, the elimination of tax preferences or a flat tax. The Department considers these risks to be remote.

*Termination Risk.* The Department swap agreements do not contain any out-of-ordinary terminating events that would expose it to significant termination risk. In keeping with the market standards the Department or the counterparty may terminate each swap if the other party fails to perform under the terms of the contract. In addition, the swap documents allow either party to terminate in the event of a significant loss of creditworthiness. If at the time of the termination, a swap has a negative value, the Department would be liable to the counterparty for a payment equal to the fair value of such swap unless the counterparty is the defaulting party. The Department is subject to Bank of New York Mellon's 10 year call provision, whereby Bank of New York Mellon has a one time termination option.

## 8. PAYABLES

Payables and accrued expenses at September 30, 2013 and 2012 were as follows (in thousands):

	<u>2013</u>	<u>2012</u>
Other County funds	\$ 6,425	\$ 5,911
Vendors	19,950	20,553
Other governments	18,142	16,841
Salaries and benefits	10,002	9,645
Contractors	5,558	5,597
Other	245	238
Total payables	<u>\$ 60,322</u>	<u>\$ 58,785</u>

## 9. PENSION PLAN

The Department, as an agency of the County, participates in the Florida Retirement System (the FRS), a cost-sharing multi-employer defined benefit public employment retirement system, which covers substantially all of the Department's full-time and part-time employees.

The FRS was created in 1970 by consolidating several employee retirement systems and is administered by the State of Florida. All eligible employees as defined by the State of Florida who were hired after 1970, and those employed prior to 1970 who elected to be enrolled, are covered by the FRS.

The legislature created a new defined contribution program that was added to the menu of choices available to FRS members beginning June 2002. Formally created as

the Public Employee Optional Retirement Program, the "FRS Investment Plan" is available as an option for all current and future members, including renewed members (FRS retirees who have returned to FRS employment). The FRS Investment Plan is a defined contribution plan where the contribution amount is fixed by a set percentage determined by law and the contribution is made to an individual account in each participant's name. Participant contributions are not allowed. With a defined contribution plan, in which the monthly contribution rate is fixed, the final benefit will be the total account value (contributions plus investment earnings less expenses and losses) distributed during retirement.

The 2011 Florida Legislative session passed Senate Bill 2100, making substantive changes to the FRS. The bill was signed into law effective July 1, 2011. The bill requires all FRS Investment and Pension Plan members to make 3% employee contributions on a pretax basis. Employees who are in the Deferred Retirement Option Program (DROP) are not required to pay employee contributions. The bill changes the annual interest rate of the DROP from 6.5% to 1.3% per year. Furthermore, the bill eliminates the cost-of-living adjustment (COLA) on FRS services earned on or after July 1, 2011. However, a reduced COLA will be calculated if a member's retirement or DROP participation date is effective on or after August 1, 2011.

Under the new bill, the Pension Plan's vesting requirement changes from 6 years to 8 years. For new employees initially enrolled in the Pension Plan on or after July 1, 2011, those members will be vested upon completion of 8 years of creditable services. For existing employees, vesting will remain at 6 years of creditable service.

The bill also changes the Pension Plan's normal retirement date. For Special Risk Class, the age increases from 55 to 60 years of age, and the years of creditable service increases from 25 to 30 years. For all other classes, the age increases from 62 to 65 years of age, and the years of creditable service increases from 30 to 33 years. Upon vesting, those members are entitled to an annual retirement benefit payable monthly for life. The FRS also provides for early retirement at reduced benefits and death and disability benefits. These benefit provisions and all other requirements are established by State statute.

The covered payroll for Department employees in the FRS for the years ended September 30, 2013 and 2012 was \$158.9 million and \$153.2 million, respectively,

# Notes to Financial Statements

while the Department’s total payroll was \$158.4 million and \$158.5 million for fiscal 2013 and 2012, respectively. Pension costs of the Department, as required and defined by Florida statute, ranged between 6.95% and 19.06% of gross salaries during fiscal years 2013 and 2012. For the years ended September 30, 2013, 2012, and 2011, the Department’s actual contributions met all required contributions. These contributions aggregated \$9.0 million, \$7.7 million and \$14.4 million, respectively, which represented 5.7%, 5.0% and 9.4% of covered payroll, respectively, and 0.4%, 0.4% and 0.7% of the total contributions required of all participating agencies, respectively, for fiscal years 2013, 2012 and 2011.

The FRS funding policy provides for monthly employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are adequate to accumulate sufficient assets to pay benefits when due based upon plan assumptions. Employer contribution rates are established by state law as a level percentage of payroll (Chapter 121.70 Florida Statutes). Employer contribution rates are determined using the entry-age actuarial cost method. The consulting actuary recommends rates based on the annual valuation, but actual contribution rates are established by the Florida Legislature.

Ten-year historical trend information is presented in the FRS’ June 30, 2012 annual report. This information is useful in assessing the FRS’ accumulation of sufficient assets to pay pension benefits as they become due. A copy of the Florida Retirement System’s annual report can be obtained by writing to the Department of Management Services, Division of Retirement, P.O. Box 9000, Tallahassee, FL 32315-9000, by calling (877) 377-1737 or by visiting their website at <http://FRS.myFlorida.com>.

## 10. RISK MANAGEMENT

The Department is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; job-related injuries or illnesses to employees; natural disasters and employee health and accident. In the year ended September 30, 1987, the Department established a self-insurance program for general and automobile liability exposures as provided by Section 706 of County Ordinance 78-82, as amended. Ordinance 78-82 was amended and restated by Ordinance 93-134 and Section 609 continues to provide for such self-insurance program.

Claims are administered by the County’s Risk Management Division, and the program is based upon an actuari-

al study performed annually by consulting actuaries. Liabilities are reported when it is possible that a loss has occurred and the amount of that loss can be reasonably estimated. Liabilities also include an amount for claims that have been incurred but not reported (IBNR). Because actual claims liability depend on such complex factors as inflation, change in legal doctrines and damage awards, the process used in computing claims liability does not necessarily result in an exact amount. Claims liabilities are re-evaluated periodically to take into consideration recently settled claims, the frequency of claims and other economic and social factors.

Changes in the balance of claim liabilities for the general and automobile self-insurance program during fiscal years 2013 and 2012 were as follows (in thousands):

	2013	2012
Balance at beginning of year	\$ 3,552	\$ 3,210
Claims and changes in estimates	(261)	859
Less: Payments	(553)	(517)
Balance at end of year	<u>\$ 2,738</u>	<u>\$ 3,552</u>

The Department participates in the workers’ compensation self-insurance program of the County, administered by the Risk Management Division. Risk Management charges a “premium” to each County department based on amounts necessary to provide funding for expected payments during the fiscal year. The estimate of IBNR losses is performed by an independent actuary. The Department maintains a liability in the amount of \$1.7 million and \$1.7 million at September 30, 2013 and September 30, 2012, respectively, for possible funding of these IBNR losses. The County maintains no excess coverage with independent carriers for workers’ compensation. The Department’s total self-insurance liability was \$4.4 million and \$5.2 million as of September 30, 2013 and 2012, respectively.

The Department also participates in the County’s group health and life self-insurance program, administered by an independent administrator. The County charges a uniform “premium” per employee to each County department based on recent trends in actual claims experience and makes provisions for catastrophic losses. Current year premiums are adjusted for County-wide prior year actual claims experience.

The Department purchases a master property insurance policy covering most properties. For windstorm losses,

# Notes to Financial Statements

the policy carries a deductible of 5% of the total insured value of the damaged building(s), including contents, subject to a minimum of \$250,000 and a maximum of \$40,000,000 per occurrence. A \$1,000,000 deductible applies to most other perils. The current limit of the policy is \$165,000,000 per occurrence.

The Department continues to carry commercial insurance for all other risks of loss. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

## 11. CONTRIBUTIONS

Contributions during fiscal years 2013 and 2012 are presented as follows (in thousands):

	2013	2012
Contributed Facilities		
Developers	\$ 19,459	\$ 28,157

## 12. RELATED PARTY TRANSACTIONS

The Department provides water and wastewater services to other County departments as part of the normal course of business, based on regular retail rates. The Department also provides billing services to other County departments. The County provides various services to the Department which are charged using direct and indirect cost allocation methods. The Department reimburses the County (General Fund) for certain administrative services. The following table presents a list of providers of services and respective payments for the years ended September 30, 2013 and 2012 (in thousands):

	2013	2012
General Fund	\$ 20,359	\$ 12,346
Public Works & Waste Mgmt	16,375	3,353
Regulatory & Economic Resources	15,635	131
Internal Services	12,839	16,496
Information Technology	12,471	9,231
Other County Departments	15,651	16,429

In addition to the payments, the Department had related payables of \$6.4 million and \$5.9 million at September 30, 2013 and 2012, respectively. The Department also has receivables from other County departments amounting to \$25.9 million and \$25.1 million at September 30, 2013 and 2012, respectively. The Department has every intention of paying the outstanding payables on a timely basis, and is confident it will collect the outstanding receivables.

The Department has also entered into other transactions with various County entities. These transactions arise from the normal course of business and in connection with the management of ongoing projects.

## 13. COMMITMENTS AND CONTINGENCIES

### CONSTRUCTION

The Department had contractual commitments of \$193.0 million for plant and infrastructure construction at September 30, 2013.

### LEGAL CONTINGENCIES

The County is a defendant in various actions brought by parties in the normal course of business of the Department. Based on consultation with the County Attorney's Office, it is the opinion of management that the ultimate resolution of these suits would not materially affect the financial position of the Department or its ability to conduct its business.

### FEDERAL GRANTS

Federal grant awards are audited under the provisions of the Single Audit Act and Office of Management and Budget Circular A-133 to determine that the Department has complied with the terms and conditions of the grant awards. Federal grants received are also subject to audit by the federal grantor agency. It is management's opinion that no material liabilities will result from any such audits.

### REBATABLE ARBITRAGE EARNINGS

Federal tax law requires that arbitrage interest earnings be remitted to the federal government, unless the local government qualifies for an exemption. As of September 30, 2013 and 2012, the Department recorded obligations to rebate approximately \$1.8 and \$1.9 million, respectively, of interest earned on bond proceeds invested in taxable securities in excess of interest costs. These arbitrage rebates are payable five years from the date of bond issuance and each five years thereafter. The amount of the obligation, if any, will be determined based on actual interest earned.

### SETTLEMENT AGREEMENTS

In 1993, the Department entered into a settlement agreement with the Florida Department of Environmental Protection (FDEP) resulting in very limited restriction on new sewer construction in certain areas of the County until adequate capacity became available in the wastewater system. Subsequently, in 1994 and 1995, two consent decrees, the First Partial Consent Decree (FPCD)

# Notes to Financial Statements

and the Second and Final Partial Consent Decree (SFPCD), were entered into with the United States of America whereby the Department accelerated its improvement program of the wastewater system, subject to a schedule of stipulated penalties if certain established completion dates are not met. All requirements of the Settlement Agreement were satisfied and the Agreement closed by FDEP on September 1, 2011. The Department continues to be in compliance with all provisions of the two Consent Decrees, and through fiscal year 2013 has not incurred any penalties.

On April 29, 2004, the Consent Order, (CO) OGC File No. 03-1376, was entered into between the State of Florida Department of Environment Protection and Miami-Dade County. It required the County to provide high level disinfection for the effluent prior to injection. The CO was subsequently superseded by The Amended Consent Order (ACO), OGC File No. 03-1376(A), which became effective on April 14, 2010. All terms and provisions of the ACO were satisfied without incurring any penalties for not completing tasks within deadlines, and the ACO was closed by FDEP on July 29, 2013. The total project cost of the CO and ACO improvements was less than the estimated \$600 million and the project was completed ahead of the 2014 compliance date.

On May 21, 2013, the Board of County Commissioners approved a Resolution authorizing execution of a new Consent Decree between Miami-Dade County, the United States of America, the State of Florida and Florida Department of Environmental Protection (FDEP). It was lodged with the Clerk of the Court for the U.S. District Court for the Southern District of Florida on June 6, 2013. Once approved by the federal judge, the terms and conditions of the new Consent Decree are intended to replace and supersede the terms and provisions of the FPCD and the SFPCD, and upon its date of entry, the FPCD and SFPCD will be terminated. The terms and conditions of the new Consent Decree recognize that appropriate modifications and updates are warranted due to the fact that conditions within and circumstances surrounding the Miami-Dade's WCTS have changed since entry of the FPCD and SFPCD in mid 1990s.

## 14. POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS

### PLAN DESCRIPTION

Miami-Dade County administers a single-employer defined benefit healthcare plan (the Plan) that provides postemployment medical and dental coverage to retirees

as well as their eligible spouses and dependents. Benefits are provided through the County's group health insurance plan, which covers both active and retired members. Benefits are established and may be amended by the Miami-Dade County Board of County Commissioners ("the BCC"), whose powers derive from F.S. 125.01(3)(a). The Plan does not issue a publicly available financial report.

To be eligible to receive retiree medical and dental benefits, participants must be eligible for retirement benefits under the Florida Retirement System (FRS) or the Public Health Trust of Miami-Dade County, Florida, Defined Benefit Retirement Plan and pay required contributions. Refer to note 9, Pension Plan, for a description of eligibility requirements.

The medical plans offered provide hospital, medical and pharmacy coverage. Pre-65 retirees are able to select from three medical plans as follows:

- AvMed POS
- AvMed HMO High Option
- AvMed HMO Low Option

Post-65 retirees are able to select from three medical plans, as follows. The County only contributes to post-65 retirees electing an AvMed Medicare Supplement Plan.

- AvMed Medicare Supplement Low Option with prescription drug coverage
- AvMed Medicare Supplement High Option with prescription drug coverage
- AvMed Medicare Supplement High Option without prescription drug coverage

### FUNDING POLICY

The County contributes to both the pre-65 and post-65 retiree medical coverage. Retirees pay the full cost of dental coverage. Medical contributions vary based on the plan and tier. For pre-65 retirees, the County explicitly contributed an average of 15% of the cost for the AvMed POS plan and 33% for the AvMed HMO High and AvMed HMO Low plans. The post-65 retiree contributions also vary by plan and tier with the County contributing an average of 33% of the entire plan cost. However, it is the County's policy that after fiscal year 2008, its per capita contribution for retiree health care benefits will remain at the 2008 dollar level. As a result, the retiree contributions will be increased to the extent necessary so that they are sufficient to provide for the difference between the gross costs and the fixed County contributions.

# Notes to Financial Statements

The postretirement medical and dental benefits are currently funded on a pay-as-you-go basis. No assets have been segregated and restricted to provide postretirement benefits. For fiscal years 2013 and 2012, the Department contributed \$2.0 and \$2.2 million, respectively, to the plan.

### ANNUAL OPEB COST AND NET OPEB OBLIGATION

The Department's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the *annual required contribution of the employer (ARC)*, an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and to amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

The Department's annual OPEB cost for fiscal years 2013 and 2012 is as follows (dollar amounts in thousands):

	2013	2012
Annual required contribution	\$ 2,999	\$ 2,868
Interest on OPEB obligation	176	145
Adjustment of annual required contribution	187	148
Annual OPEB Cost	2,988	2,865
Contributions made	1,989	2,161
Increase in net OPEB obligation	999	704
Net OPEB obligation – beginning of year	4,004	3,300
Net OPEB obligation – end of year	<u>\$ 5,003</u>	<u>\$ 4,004</u>

The Department's annual OPEB cost, the percentage of annual cost contributed to the plan, and the net OPEB obligation for fiscal years 2013, 2012 and 2011 were as follows (dollars in thousands):

	2013	2012	2011
Annual OPEB cost	\$ 2,988	\$ 2,865	\$ 2,372
Percentage of Annual OPEB Cost Contributed	66.6%	75.4%	68.7%
Net OPEB Obligation	\$ 5,003	\$ 4,004	\$ 3,300

### FUNDED STATUS AND FUNDING PROGRESS

The schedule below shows the balance of the County's actuarial accrued liability (AAL), all of which was unfunded as of September 30, 2013 and 2012. An estimated 9% of this liability can be attributed to the Department (dollar amounts in thousands).

	2013	2012
Actuarial Valuation Date	10/01/2012	10/01/2011
Actuarial Value of Assets (a)	0	0
Actuarial Accrued Liability (AAL) (b)	\$ 362,669	\$ 357,006
Unfunded AAL (UAAL) (b-a)	\$ 362,669	\$ 357,006
Funded Ratio (a/b)	0%	0%
Estimated Covered Payroll (c)	\$1,447,127	\$1,661,941
UAAL as % of Covered Payroll ((b-a)/c)	25%	21%

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events in the future. Amounts determined regarding the funded status of the plan and the annual required contributions by the County are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The required schedule of funding progress, presented as required supplementary information, provides multi-year trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

### ACTUARIAL METHODS AND ASSUMPTION

Projections of benefits are based on the substantive plan (the Plan as understood by the employer and plan members) and include the types of benefits in force at the valuation date and the pattern of sharing benefit costs between the County and the plan member to that point. Actuarial calculations reflect a long-term perspective and employ methods and assumptions that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

The actuarial cost method used in the valuation to determine the Actuarial Accrued Liability (AAL) and the Actuarial Required Contribution (ARC) was the Projected Unit Credit Method with service prorated. Under this method, the total present value of benefits is determined by projecting the benefit to be paid after the expected retirement date (or other event) and discounting those amounts to the valuation date. The normal cost is computed by dividing the total present value of benefits by the participant's total service (actual plus expected service) at retirement. The AAL under this method represents the total present value of benefits multiplied by the ratio of the participant's actual service to date and divided by expected service at retirement. The AAL for participants currently receiving payments and deferred vested participants is calculated as the actuarial present value of future benefits expected to be paid. No normal cost for these participants is payable. The AAL and normal cost were calculated at the measurement date, which is the

# Notes to Financial Statements

beginning of the applicable fiscal year using standard actuarial techniques.

a cost of service study. Other miscellaneous fees and charges increased effective October 1, 2013.

The following summarizes other significant methods and assumptions used in valuing the AAL and benefits under the plan.

Actual valuation date	10/1/2012
Amortization method	Level percentage of payroll, closed
Remaining amortization period	25 years
Actuarial Assumptions:	
Discount rate	4.40%
Payroll growth assumption	3.00%
Inflation rate	3.00%
Health care trend rates	8% initial to 5% ultimate
Mortality table	RP 2000*

\*Prepared by the Department of Treasury under the Retirement Protection Act of 1994.

Further, the participation assumption used in the valuation (the assumed percentage of future retirees that participate and enroll in the health plan) is 20% for those prior to age 55 (50 if special risk) and 60% until age 65. Once reaching Medicare eligibility, the participation rate is assumed to be 20%.

The valuation assumes that the County will continue to fund the liability on a pay-as-you-go basis and that the County's policy is that its per-capita contribution for retiree benefits will remain at the 2008 level. As a result, the retiree contributions will be increased to the extent necessary so that they are sufficient to provide for the difference between gross costs and the fixed County contributions.

## 15. SUBSEQUENT EVENTS

On June 4, 2013, the Board of County Commissioners approved a Resolution authorizing an eight percent water and wastewater retail rate increase, effective October 1, 2013. The retail rate also increases the Miami-Dade County Water Conservation Surcharge for retail water customers with consumption in the fourth tier to encourage water conservation. In addition, The County Ordinance authorized an increase to the per thousand gallon wastewater wholesale rate per thousand gallons and maintained the water wholesale rates unchanged based on

# Required Supplementary Information

Schedule of Funding Progress  
 Postemployment Healthcare Plan  
 Miami-Dade County\*  
 (dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Estimated Covered Payroll (c)	UAAL as % of Covered Payroll ([b-a]/c)
10/01/2012	\$ 0	\$ 362,669	\$ 362,669	0%	\$ 1,447,127	25%
10/01/2011	0	357,006	357,006	0%	1,661,941	21%
10/01/2010	0	297,218	297,218	0%	1,620,593	18%
10/01/2009	0	281,470	281,470	0%	1,573,391	18%
10/01/2008	0	255,259	255,259	0%	1,527,564	17%
10/01/2007	0	242,331	242,331	0%	1,483,072	16%

\* This schedule shows the balance of the County's actuarial accrued liability (AAL). An estimated 9% of this liability can be attributed to the Department.

# Supplementary Financial Data

Bond Ordinance 93-134 requires the Department to establish restricted accounts to be used in accounting for proceeds and collateral pledged as a result of the debt. In many cases, the bond ordinance refers to the restricted accounts as “funds”. Such accounts are not “funds” as defined by *NCGA Statement 1: Governmental Accounting and Financial Reporting Principles* and, therefore, are not funds for financial reporting purposes.

Similarly, the Water and Wastewater Systems do not meet the above-referenced definition and, therefore, combining statements are not presented. The following system schedules are furnished solely as supplementary information and are not required by GAAP.

# Water System

## STATEMENTS OF NET POSITION

	(In thousands)	
September 30,	<u>2013</u>	<u>2012</u>
<b>ASSETS</b>		
<i>CURRENT ASSETS:</i>		
Cash and cash equivalents	\$ 19,292	\$ 24,306
Investments	20,959	13,739
Accounts Receivable (net of allowance for uncollectible accounts of \$8.2 million in 2013 and \$8.0 million in 2012)	49,616	49,652
Inventory of materials and supplies	19,032	19,150
Other current assets	1,561	3,110
Restricted cash and cash equivalents	43,879	47,033
Total current assets	<u>154,339</u>	<u>156,990</u>
 <i>NON-CURRENT RESTRICTED ASSETS:</i>		
Cash and cash equivalents	105,505	118,292
Investment derivative instrument	16,704	25,549
Investments	222,621	61,510
Long-term receivable - General Fund	25,000	25,000
Grants Receivable	10	52
Total restricted assets	<u>369,840</u>	<u>230,403</u>
 <i>OTHER ASSETS:</i>		
Debt issue costs, net	5,902	5,257
Other charges, net	19,617	23,975
Total other assets	<u>25,519</u>	<u>29,232</u>
 <i>CAPITAL ASSETS:</i>		
Land	17,671	17,671
Structures and Improvements	1,671,271	1,586,313
Equipment	327,781	305,205
Utility plant in service before depreciation	2,016,723	1,909,189
Less accumulated depreciation	(838,084)	(770,466)
Net utility plant in service	1,178,639	1,138,723
Construction work in progress	195,783	222,581
Total capital assets	<u>1,374,422</u>	<u>1,361,304</u>
Total non-current assets	<u>1,769,781</u>	<u>1,620,939</u>
Total assets	<u>\$ 1,924,120</u>	<u>\$ 1,777,929</u>

(Continued)

# Water System

## STATEMENTS OF NET POSITION

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Miami-Dade Water and Sewer Department

(Continued)	September 30,	(In thousands)	
		2013	2012
<b>LIABILITIES</b>			
<i>CURRENT LIABILITIES (PAYABLE FROM UNRESTRICTED CURRENT ASSETS):</i>			
Accounts payable and accrued expenses		\$ 15,351	\$ 13,681
Customer and developer deposits		7,761	6,744
Current portion of long-term debt		1,829	1,778
Rebatable arbitrage earnings		1,221	1,262
Liability for compensated absences		2,575	2,623
Other liabilities		387	206
Total Current Liabilities (payable from unrestricted current assets)		29,124	26,294
<i>CURRENT LIABILITIES (PAYABLE FROM RESTRICTED CURRENT ASSETS):</i>			
Accounts payable and accrued expenses		7,316	7,850
Retainage payable		1,475	1,444
Current portion of long-term debt		23,682	25,570
Accrued interest payable		10,153	10,586
Liability for self-insurance		1,252	1,582
Total current liabilities (payable from restricted current assets)		43,878	47,032
Total current liabilities		73,002	73,326
<i>NON-CURRENT LIABILITIES:</i>			
Revenue bonds payable, net		515,093	392,680
State loan obligations, net		22,182	24,593
Liability for self-insurance		1,486	1,970
Liability for compensated absences		12,469	11,857
Liability for post-employment benefits		5,003	4,004
Unearned revenues		1,549	1,672
Total non-current liabilities		557,782	436,776
Total liabilities		630,784	510,102
<b>NET POSITION</b>			
Net investment in capital assets		943,883	971,727
Restricted for:			
Capital projects		41,310	33,749
Debt service		55,531	40,073
Unrestricted		252,612	222,278
Total net position		1,293,336	1,267,827
Total liabilities and net position		\$ 1,924,120	\$ 1,777,929

# Water System

## SCHEDULES OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	(In thousands)	
For the years ended September 30,	<u>2013</u>	<u>2012</u>
<i>OPERATING REVENUES:</i>		
Retail	\$ 207,117	\$ 202,633
Wholesale	29,210	35,330
Other revenues	11,985	13,167
Total operating revenues	<u>248,312</u>	<u>251,130</u>
 <i>OPERATING AND MAINTENANCE EXPENSES:</i>		
Source of supply	10,874	10,705
Power and pumping	1,816	1,798
Treatment	60,188	59,811
Transmission and distribution	27,882	27,423
Customer accounting	4,471	3,727
Customer service	9,437	9,114
General and administrative	35,292	32,936
Total operating and maintenance expenses	<u>149,960</u>	<u>145,514</u>
 Operating income before depreciation	 98,352	 105,616
 <i>DEPRECIATION</i>	 <u>69,581</u>	 <u>61,158</u>
 Operating income	 28,771	 44,458
 <i>NON-OPERATING REVENUES (EXPENSES):</i>		
Investment (loss) income	(8,574)	10,980
Interest expense	(14,203)	(17,437)
Amortization of debt issue costs	(707)	(694)
Operating grants	369	621
Customer connection fees	5,535	6,166
Other revenues	2,269	4,749
Other expenses	(1,005)	(818)
 Income before contributions and transfers	 12,455	 48,025
Capital contributions	11,490	15,749
Transfer from (to) Wastewater System	1,564	(43,218)
 Increase in net position	 25,509	 20,556
 Net position at beginning of year	 <u>\$ 1,267,827</u>	 <u>1,247,271</u>
 Net position at end of year	 <u>\$ 1,293,336</u>	 <u>\$ 1,267,827</u>

# Water System

## SCHEDULES OF CASH FLOWS

	(In thousands)	
For the years ended September 30,	<u>2013</u>	<u>2012</u>
<i>CASH FLOWS FROM OPERATING ACTIVITIES:</i>		
Cash received from customers	\$ 255,949	\$ 262,671
Cash paid to suppliers for goods and services	(65,454)	(65,595)
Cash paid to employees for services	(77,119)	(77,002)
Transfer to Wastewater System	<u>1,564</u>	<u>(43,218)</u>
Net cash provided by operating activities	<u>114,940</u>	<u>76,856</u>
<i>CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:</i>		
Operating grants received	368	621
Loan to County's General Fund	<u>-</u>	<u>(25,000)</u>
Net cash provided (used) by non-capital financing activities	<u>368</u>	<u>(24,379)</u>
<i>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</i>		
Proceeds from bond issues, loan agreements and notes	200,770	-
Principal payments - bond, loans and notes	(87,045)	(25,747)
Bond premium and issue costs	(1,330)	(165)
Interest paid	(14,352)	(18,735)
Acquisition and construction of capital assets	<u>(66,207)</u>	<u>(50,306)</u>
Net cash provided (used) by capital and related financing activities	<u>31,836</u>	<u>(94,953)</u>
<i>CASH FLOWS FROM INVESTING ACTIVITIES:</i>		
Purchase of investment securities	(279,990)	(84,508)
Proceeds from sale and maturity of investment securities	(60,040)	231,667
Interest on investments	<u>171,931</u>	<u>(68,760)</u>
Net cash (used) provided by investing activities	<u>(168,099)</u>	<u>78,399</u>
Net (decrease) increase in cash and cash equivalents	(20,955)	35,923
Cash and cash equivalents at beginning of year	<u>189,631</u>	<u>153,708</u>
Cash and cash equivalents at end of year	<u>\$ 168,676</u>	<u>\$ 189,631</u>

(Continued)

# Water System

## SCHEDULES OF CASH FLOWS

(Continued)	For the years ended September 30,	(In thousands)	
		2013	2012
<i>RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:</i>			
Operating income		\$ 28,771	\$ 44,458
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation		69,581	61,158
Provision for uncollectible accounts		1,477	870
Amortization of unearned revenues		(123)	(123)
Non-operating other, net		6,799	10,096
Transfer from Wastewater System		1,564	(43,218)
Increase (decrease) in assets:			
Accounts Receivable		(1,224)	633
Inventory of materials and supplies		116	(251)
Other current assets		1,550	416
Contracts receivable		41	(27)
Other charges		2,337	2,770
Increase (decrease) in liabilities:			
Accounts payable and accrued expenses		1,670	(1,448)
Customer and developer deposits		1,017	20
Accrued interest payable		433	-
Liability for compensated absences		565	419
Other liabilities		181	37
Liability for other post-employment benefits		999	704
Liability for self-insurance		(814)	342
		\$ 114,940	\$ 76,856

### *NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES*

Property, plant and equipment contributions were received in amounts of \$11.5 million and \$15.7 million in fiscal years 2013 and 2012, respectively.

The change in the fair value of investments was a \$1.3 million decrease and a \$0.6 million decrease in fiscal year 2013 and 2012, respectively.

The change in the fair value of swaps was a \$8.8 million decrease and a \$10.8 million increase in fiscal year 2013 and 2012, respectively.

	(In thousands)	
	2013	2012
<i>RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR</i>		
Unrestricted current cash and cash equivalents	\$ 19,292	\$ 24,306
Restricted current cash and cash equivalents	43,879	47,033
Restricted non-current cash and cash equivalents	105,505	118,292
Total cash and cash equivalents at end of year	\$ 168,676	\$ 189,631

# Water System

## SCHEDULE OF OPERATING AND MAINTENANCE EXPENSES

### Budget and Actual

For the year ended September 30, 2013

(In thousands)

	<u>Budget</u>	<u>Actuals</u>	<u>Variance under</u>
Source of supply	\$ 12,200	\$ 10,874	\$ 1,326
Power and pumping	2,011	1,816	195
Treatment	68,455	60,188	8,267
Transmission and distribution	26,747	27,882	(1,135)
Customer accounting	4,002	4,471	(469)
Customer service	9,572	9,437	135
General and administrative	<u>38,898</u>	<u>35,292</u>	<u>3,606</u>
Totals	<u>\$ 161,885</u>	<u>\$ 149,960</u>	<u>\$ 11,925</u>

# Wastewater System

## STATEMENTS OF NET POSITION

	(In thousands)	
September 30,	2013	2012
<b>ASSETS</b>		
<i>CURRENT ASSETS:</i>		
Cash and cash equivalents	\$ 13,379	\$ 36,981
Investments	30,781	5,145
Accounts receivable		
(net of allowance for uncollectible accounts of \$12.3 million in 2013 and \$9.6 million in 2012)	54,888	53,630
Inventory of materials and supplies	18,334	17,569
Restricted cash and cash equivalents	87,812	85,873
Total current assets	205,194	199,198
<i>NON-CURRENT RESTRICTED ASSETS:</i>		
Cash and cash equivalents	69,185	80,747
Investment derivative instrument	16,703	25,549
Investments	278,988	125,095
Grants receivable	442	152
Contracts receivable	35	-
Total restricted assets	365,353	231,543
<i>OTHER ASSETS:</i>		
Debt issue costs, net	20,048	19,829
Other charges, net	84,811	92,398
Total other assets	104,859	112,227
<i>CAPITAL ASSETS:</i>		
Land	32,702	32,702
Structures and Improvements	2,532,794	2,426,173
Equipment	665,140	644,809
Utility plant in service before depreciation	3,230,636	3,103,684
Less accumulated depreciation	(1,761,640)	(1,658,511)
Net utility plant in service	1,468,996	1,445,173
Construction work in progress	648,862	667,477
Total capital assets	2,117,858	2,112,650
Total non-current assets	2,588,070	2,456,420
Total assets	\$ 2,793,264	\$ 2,655,618

(Continued)

# Wastewater System

## STATEMENTS OF NET POSITION

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Miami-Dade Water and Sewer Department

(Continued)	September 30,	(In thousands)	
		2013	2012
<b>LIABILITIES</b>			
<i>CURRENT LIABILITIES (PAYABLE FROM UNRESTRICTED CURRENT ASSETS):</i>			
Accounts payable and accrued expenses		\$ 27,614	\$ 27,100
Customer and developer deposits		4,888	4,431
Current portion of long-term debt		7,288	5,070
Rebatable arbitrage earnings		617	637
Liability for compensated absences		7,061	6,919
Other liabilities		44	6
Total Current Liabilities (payable from unrestricted current assets)		47,512	44,163
 <i>CURRENT LIABILITIES (PAYABLE FROM RESTRICTED CURRENT ASSETS):</i>			
Accounts payable and accrued expenses		10,041	10,154
Retainage payable		5,555	7,405
Current portion of long-term debt		36,146	31,710
Accrued interest payable		36,071	36,605
Total current liabilities (payable from restricted current assets)		87,813	85,874
Total current liabilities		135,325	130,037
 <i>NON-CURRENT LIABILITIES:</i>			
Revenue bonds payable, net		1,606,133	1,433,542
State loan obligations, net		120,861	109,772
Liability for compensated absences		18,733	17,953
Unearned revenues		8,213	8,866
Total non-current liabilities		1,753,940	1,570,133
Total liabilities		1,889,265	1,700,170
 <b>NET POSITION</b>			
Net investment in capital assets		530,314	595,728
Restricted for:			
Capital projects		77,588	75,779
Debt service		99,194	74,286
Unrestricted		196,903	209,655
Total net position		903,999	955,448
Total liabilities and net position		\$ 2,793,264	\$ 2,655,618

# Wastewater System

## SCHEDULES OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	(In thousands)	
For the years ended September 30,	<u>2013</u>	<u>2012</u>
<i>OPERATING REVENUES:</i>		
Retail	\$ 230,661	\$ 226,370
Wholesale	59,544	47,380
Other revenues	9,891	11,422
Total operating revenues	<u>300,096</u>	<u>285,172</u>
 <i>OPERATING AND MAINTENANCE EXPENSES:</i>		
Collection system	21,638	20,150
Pumping	34,692	34,085
Treatment	79,367	74,367
Customer accounting	3,833	3,572
Customer service	7,414	7,161
General and administrative	43,260	40,228
Total operating and maintenance expenses	<u>190,204</u>	<u>179,563</u>
 Operating income before depreciation	 109,892	 105,609
 <i>DEPRECIATION</i>	 <u>107,989</u>	 <u>102,157</u>
 Operating income	 1,903	 3,452
 <i>NON-OPERATING REVENUES (EXPENSES):</i>		
Investment (loss) income	(9,777)	10,817
Interest expense	(64,335)	(68,041)
Amortization of debt issue costs	(2,295)	(2,276)
Operating Grants	554	1,920
Customer connection fees	19,912	14,343
Other revenues	4,278	576
Other expenses	(338)	(318)
 Loss before contributions and transfers	 (50,098)	 (39,527)
Capital contributions	7,969	12,407
Transfer (to) from Water System	(1,564)	43,218
 (Decrease) increase in net position	 (43,693)	 16,098
Net position at beginning of year	<u>947,692</u> <sup>(1)</sup>	<u>939,350</u>
Net position at end of year	<u>\$ 903,999</u>	<u>\$ 955,448</u>

<sup>(1)</sup> For fiscal year 2013, the beginning balance of net position was restated to include a \$7.8M correction related to the Series 2007 bond interest payment. Monies were previously held in escrow by Miami Dade Finance Dept. but were subsequently paid out October 2007.

### Reconciliation of Net Position

Ending balance of net position at 09/30/2012	\$ 955,448
Series 2007 net position adjustment	(7,756)
Adjusted beginning balance of net position at 10/01/2012	<u>\$ 947,692</u>

# Wastewater System

## SCHEDULES OF CASH FLOWS

	(In thousands)	
For the years ended September 30,	<u>2013</u>	<u>2012</u>
<i>CASH FLOWS FROM OPERATING ACTIVITIES:</i>		
Cash received from customers	\$ 322,001	\$ 300,929
Cash paid to suppliers for goods and services	(83,891)	(75,961)
Cash paid to employees for services	(104,384)	(102,428)
Transfer from Water System	<u>(1,564)</u>	<u>43,218</u>
Net cash provided by operating activities	<u>132,162</u>	<u>165,758</u>
<i>CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES:</i>		
Operating grants received	<u>554</u>	<u>1,920</u>
Net cash provided by non-capital financing activities	<u>554</u>	<u>1,920</u>
<i>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</i>		
Proceeds from bond issues, loan agreements and notes	312,400	30,910
Principal payments - bond, loans and notes	(127,080)	(35,757)
Bond premium and issue costs	(2,514)	(801)
Interest paid	(69,595)	(68,423)
Acquisition and construction of capital assets	<u>(98,671)</u>	<u>(141,089)</u>
Net cash provided (used) by capital and related financing activities	<u>14,540</u>	<u>(215,161)</u>
<i>CASH FLOWS FROM INVESTING ACTIVITIES:</i>		
Purchase of investment securities	(298,919)	(187,838)
Proceeds from sale and maturity of investment securities	288,109	185,959
Interest on investments	<u>(169,671)</u>	<u>70,619</u>
Net cash (used) provided by investing activities	<u>(180,481)</u>	<u>68,740</u>
Net (decrease) increase in cash and cash equivalents	(33,225)	21,257
Cash and cash equivalents at beginning of year	<u>203,601</u>	<u>182,344</u>
Cash and cash equivalents at end of year	<u>\$ 170,376</u>	<u>\$ 203,601</u>

(Continued)

# Wastewater System

## SCHEDULES OF CASH FLOWS

(Continued)	For the years ended September 30,	(In thousands)	
		2013	2012
<i>RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:</i>			
Operating income		\$ 1,903	\$ 3,452
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation		107,989	102,157
Provision for uncollectible accounts		1,480	1,328
Amortization of charges		77	77
Amortization of unearned revenues		653	(653)
Non-operating other, net		23,852	14,600
Transfer to Water System		(1,564)	43,218
Increase (decrease) in assets:			
Accounts Receivable		(2,419)	865
Inventory of materials and supplies		(763)	(1,830)
Other current assets		(1)	-
Contracts receivable		(324)	-
Other charges		(1,186)	600
Increase (decrease) in liabilities:			
Accounts payable and accrued expenses		514	1,281
Customer and developer deposits		458	26
Accrued interest payable		534	-
Liability for compensated absences		921	684
Other liabilities		38	(47)
		<b>\$ 132,162</b>	<b>\$ 165,758</b>

*NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES*

Property, plant and equipment contributions were received in amounts of \$8.0 million and \$12.4 million in fiscal years 2013 and 2012, respectively.

The change in the fair value of investments was a \$1.7 million decrease and a \$0.8 million decrease in fiscal year 2013 and 2012, respectively.

The change in the fair value of swaps was a \$8.9 million decrease and a \$10.8 million increase in fiscal year 2013 and 2012, respectively.

	(In thousands)	
	2013	2012
<i>RECONCILIATION OF CASH AND CASH EQUIVALENTS AT END OF YEAR</i>		
Unrestricted current cash and cash equivalents	\$ 13,379	\$ 36,981
Restricted current cash and cash equivalents	87,812	85,873
Restricted non-current cash and cash equivalents	69,185	80,747
Total cash and cash equivalents at end of year	<b>\$ 170,376</b>	<b>\$ 203,601</b>

# Wastewater System

## SCHEDULE OF OPERATING AND MAINTENANCE EXPENSES

Budget and Actual

For the year ended September 30, 2013

(In thousands)

	<u>Budget</u>	<u>Actuals</u>	<u>Variance under (over)</u>
Collection system	\$ 20,547	\$ 21,638	\$ (1,091)
Pumping	32,869	34,692	(1,823)
Treatment	70,850	79,367	(8,517)
Customer accounting	3,413	3,833	(420)
Customer service	7,221	7,414	(193)
General and administrative	<u>47,509</u>	<u>43,260</u>	<u>4,249</u>
Totals	<u>\$ 182,409</u>	<u>\$ 190,204</u>	<u>\$ (7,795)</u>

# Statistical Section

# Statistical Section

This part of the Department’s comprehensive annual report details information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Department’s overall financial health.

## **Contents**

### ***Financial Trends***

These schedules, found on pages 77-80, contain trend information to help the reader understand how the Department’s financial performance and well-being have changed over time.

### ***Revenue Capacity***

These schedules, found on pages 81-83, contain information to help the reader assess the factors affecting the Department’s ability to generate revenue.

### ***Debt Capacity***

These schedules, found on pages 84-85 present information to help the reader assess the affordability of the Department’s current levels of outstanding debt and the Department’s ability to issue additional debt in the future.

### ***Demographic and Economic Information***

These schedules, found on pages 86-92, offer demographic and economic indicators to help the reader understand the environment within which the Department’s financial activities take place.

### ***Operating and Capital Information***

These schedules, found on pages 93-95, contain service and infrastructure data to help the reader understand how the information in the Department’s financial report related to the services the Department provides and the activities it performs.

# Net Position

**BY COMPONENTS** LAST TEN FISCAL YEARS

(in thousands)      2013      2012      2011      2010      2009      2008      2007      2006      2005      2004

*COMBINED WATER AND WASTEWATER SYSTEMS:*

Net investment in capital assets	\$ 1,474,197	\$ 1,567,455	\$ 1,530,096	\$ 1,535,755	\$ 1,590,038	\$ 1,396,153	\$ 1,402,138	\$ 1,438,567	\$ 1,670,373	\$ 1,640,651
Restricted	273,623	223,887	243,292	279,576	150,114	397,803	468,819	384,233	247,947	306,469
Unrestricted	449,515	431,933	413,233	379,683	436,651	345,543	282,464	294,435	190,364	169,030
Total net position	<u>\$ 2,197,335</u>	<u>\$ 2,223,275</u>	<u>\$ 2,186,621</u>	<u>\$ 2,195,014</u>	<u>\$ 2,176,803</u>	<u>\$ 2,139,499</u>	<u>\$ 2,153,421</u>	<u>\$ 2,117,235</u>	<u>\$ 2,108,684</u>	<u>\$ 2,116,150</u>

*WATER SYSTEM*

Net investment in capital assets	\$ 943,883	\$ 971,727	\$ 947,539	\$ 936,355	\$ 911,206	\$ 830,671	\$ 832,337	\$ 807,171	\$ 908,612	\$ 915,479
Restricted	96,841	73,822	84,993	110,491	50,571	140,103	146,483	117,705	78,232	96,186
Unrestricted	252,612	222,278	214,739	193,724	233,984	191,960	172,356	187,205	147,984	120,605
Total net position	<u>\$ 1,293,336</u>	<u>\$ 1,267,827</u>	<u>\$ 1,247,271</u>	<u>\$ 1,240,570</u>	<u>\$ 1,195,761</u>	<u>\$ 1,162,734</u>	<u>\$ 1,151,176</u>	<u>\$ 1,112,081</u>	<u>\$ 1,134,828</u>	<u>\$ 1,132,270</u>

*WASTEWATER SYSTEM*

Net investment in capital assets	\$ 530,314	\$ 595,728	\$ 582,557	\$ 599,400	\$ 678,832	\$ 565,482	\$ 569,801	\$ 628,396	\$ 761,761	\$ 725,172
Restricted	176,782	150,065	158,298	169,086	99,543	257,700	322,336	266,527	169,715	210,283
Unrestricted	196,903	209,655	198,495	185,958	202,667	153,583	110,108	110,231	42,380	48,425
Total net position	<u>\$ 903,999</u>	<u>\$ 955,448</u>	<u>\$ 939,350</u>	<u>\$ 954,444</u>	<u>\$ 981,042</u>	<u>\$ 976,765</u>	<u>\$ 1,002,245</u>	<u>\$ 1,005,154</u>	<u>\$ 973,856</u>	<u>\$ 983,880</u>

# Combined Water and Wastewater Systems

## SCHEDULE OF REVENUES AND EXPENSES – LAST TEN FISCAL YEARS

78 (in thousands)	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>OPERATING REVENUES:</i>										
Retail	\$ 437,778	\$ 429,003	\$ 428,832	\$ 393,420	\$ 372,265	\$ 342,303	\$ 330,475	\$ 341,555	\$ 297,374	\$ 295,176
Wholesale	88,754	82,710	90,671	84,489	68,178	72,246	75,690	78,310	75,013	71,501
Other	21,876	24,589	26,157	40,486	38,293	22,927	22,455	20,450	19,573	18,896
Total operating revenues	548,408	536,302	545,660	518,395	478,736	437,476	428,620	440,315	391,960	385,573
<i>OPERATING AND MAINTENANCE EXPENSES:</i>										
Source of supply	10,874	10,705	13,558	12,354	14,208	12,006	6,710	5,381	5,710	5,110
Collection system	21,638	20,150	20,385	21,523	15,987	19,293	19,965	18,111	15,582	14,534
Pumping	36,508	35,883	32,892	31,919	32,611	32,790	34,647	33,605	27,800	26,095
Treatment	139,555	134,178	134,650	130,010	134,454	129,219	121,931	118,524	105,427	89,511
Transmission and distribution	27,882	27,423	27,929	28,459	25,428	26,528	25,747	23,081	21,900	21,452
Customer accounting and service	25,155	23,574	24,231	28,003	27,572	25,906	27,599	22,974	22,704	22,505
General and administrative	78,552	73,164	79,165	97,364	78,669	76,222	74,028	71,210	59,256	53,706
Total operating and maintenance expense	340,164	325,077	332,810	349,632	328,929	321,964	310,627	292,886	258,379	232,913
Operating income before depreciation	208,244	211,225	212,850	168,763	149,807	115,512	117,993	147,429	133,581	152,660
DEPRECIATION	177,570	163,315	159,158	160,469	152,428	154,881	158,691	184,820	118,261	122,800
Operating income (loss)	30,674	47,910	53,692	8,294	(2,621)	(39,369)	(40,698)	(37,391)	15,320	29,860
<i>NON-OPERATING REVENUES(EXPENSES):</i>										
Investment (loss) income	(18,351)	21,797	6,193	18,160	13,440	28,489	43,347	48,892	22,487	8,785
Interest expense	(78,538)	(85,478)	(85,511)	(71,229)	(63,787)	(66,320)	(63,507)	(68,905)	(73,276)	(76,349)
Other income	28,572	24,269	15,897	18,588	33,857	36,517	56,614	1,116	806	326
(Loss) income before contributions and transfers	(37,643)	8,498	(9,729)	(26,187)	(19,111)	(40,683)	(4,244)	(56,288)	(34,663)	(37,378)
Capital contributions	19,459	28,156	33,556	30,487	56,415	26,761	40,430	87,707	54,898	42,936
Transfers to County's General Fund	-	-	(32,220)	-	-	-	-	(22,868)	(27,701)	(37,899)
(Decrease) increase in net position	\$ (18,184)	\$ 36,654	\$ (8,393)	\$ 4,300	\$ 37,304	\$ (13,922)	\$ 36,186	\$ 8,551	\$ (7,466)	\$ (32,341)

# Water System

## SCHEDULE OF REVENUES AND EXPENSES – LAST TEN FISCAL YEARS

(in thousands)	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>OPERATING REVENUES:</i>										
Retail	\$ 207,117	\$ 202,633	\$ 202,189	\$ 193,632	\$ 169,568	\$ 154,796	\$ 151,034	\$ 157,827	\$ 138,297	\$ 137,739
Wholesale	29,210	35,330	37,990	38,554	29,041	22,909	27,045	29,193	21,962	22,122
Other	11,985	13,167	13,517	12,936	27,102	12,839	12,631	11,142	10,646	10,230
Total operating revenues	248,312	251,130	253,696	245,122	225,711	190,544	190,710	198,162	170,905	170,091
<i>OPERATING AND MAINTENANCE EXPENSES:</i>										
Source of supply	10,874	10,705	13,558	12,354	14,208	12,006	6,710	5,381	5,710	5,110
Pumping	1,816	1,798	1,942	2,003	2,407	2,134	2,593	3,274	1,604	2,257
Treatment	60,188	59,811	62,138	61,967	64,457	61,317	55,925	56,164	50,221	40,660
Transmission and distribution	27,882	27,423	27,929	28,459	25,428	26,528	25,747	23,081	21,900	21,452
Customer accounting and service	13,908	12,841	13,325	15,602	15,325	14,337	15,308	13,144	13,915	12,546
General and administrative	35,292	32,936	35,644	43,860	35,380	34,864	33,299	31,967	25,776	20,349
Total operating and maintenance expenses	149,960	145,514	154,536	164,245	157,205	151,186	139,582	133,011	119,126	102,374
Operating income before depreciation	98,352	105,616	99,160	80,877	68,506	39,358	51,128	65,151	51,779	67,717
<i>DEPRECIATION</i>	69,581	61,158	61,122	62,604	59,028	60,859	61,349	79,708	35,488	34,251
Operating income (loss)	28,771	44,458	38,038	18,273	9,478	(21,501)	(10,221)	(14,557)	16,291	33,466
<i>NON-OPERATING REVENUES(EXPENSES):</i>										
Investment (loss) income	(8,574)	10,980	3,061	8,383	6,713	12,273	17,489	21,841	10,060	4,016
Interest expense	(14,203)	(17,437)	(18,932)	(14,088)	(15,313)	(15,035)	(15,090)	(9,324)	(18,862)	(19,657)
Other income (loss)	6,461	10,024	8,602	8,374	19,491	12,997	27,800	(1,599)	460	326
Income (loss) before contributions and transfers	12,455	48,025	30,769	20,942	20,369	(11,266)	19,978	(3,639)	(7,949)	18,151
Capital contributions	11,490	15,749	24,108	18,245	28,896	14,518	23,701	31,788	16,251	14,245
Transfers to County's General Fund	-	-	(14,499)	-	-	-	-	(10,176)	(12,188)	(11,865)
Transfer from (to) Wastewater System	1,564	(43,218)	(33,677)	(1,333)	(16,238)	8,306	(4,584)	(40,720)	(9,454)	(32,305)
Increase (decrease) in net position	\$ 25,509	\$ 20,556	\$ 6,701	\$ 37,854	\$ 33,027	\$ 11,558	\$ 39,095	\$ (22,747)	\$ 2,558	\$ (11,774)

# Wastewater System

## SCHEDULE OF REVENUES AND EXPENSES – LAST TEN FISCAL YEARS

80 (in thousands)	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>OPERATING REVENUES:</i>										
Retail	\$ 230,661	\$ 226,370	\$ 226,643	\$ 215,945	\$ 202,697	\$ 187,507	\$ 179,441	\$ 183,728	\$ 159,077	\$ 157,437
Wholesale	59,544	47,380	52,681	45,936	39,137	49,337	48,645	49,117	53,051	49,379
Other	9,891	11,422	12,640	11,392	11,191	10,088	9,824	9,308	8,927	8,666
Total operating revenues	300,096	285,172	291,964	273,273	253,025	246,932	237,910	242,153	221,055	215,482
<i>OPERATING AND MAINTENANCE EXPENSES:</i>										
Collection system	21,638	20,150	20,385	21,523	15,987	19,293	19,965	18,111	15,582	14,534
Pumping	34,692	34,085	30,950	29,916	30,204	30,656	32,054	30,331	26,196	23,838
Treatment	79,367	74,367	72,512	68,043	69,997	67,902	66,006	62,360	55,206	48,851
Customer accounting and service	11,247	10,733	10,906	12,401	12,247	11,569	12,291	9,830	8,789	9,959
General and administrative	43,260	40,228	43,521	53,504	43,289	41,358	40,729	39,243	33,480	33,357
Total operating and maintenance expenses	190,204	179,563	178,274	185,387	171,724	170,778	171,045	159,875	139,253	130,539
Operating income before depreciation	109,892	105,609	113,690	87,886	81,301	76,154	66,865	82,278	81,802	84,943
<i>DEPRECIATION</i>	107,989	102,157	98,036	97,865	93,400	94,022	97,342	105,112	82,773	88,549
Operating income (loss)	1,903	3,452	15,654	(9,979)	(12,099)	(17,868)	(30,477)	(22,834)	(971)	(3,606)
<i>NON-OPERATING REVENUES(EXPENSES)</i>										
Investment (loss) income	(9,777)	10,817	3,132	9,777	6,727	16,216	25,858	27,051	12,427	4,769
Interest expense	(64,335)	(68,041)	(66,579)	(57,141)	(48,474)	(51,285)	(48,417)	(59,581)	(54,414)	(53,995)
Other income	22,111	14,245	7,295	10,214	14,366	23,520	28,814	2,715	346	-
Loss before contributions and transfers	(50,098)	(39,527)	(40,498)	(40,129)	(39,480)	(29,417)	(24,222)	(52,649)	(42,612)	(52,832)
Capital contributions	7,969	12,407	9,448	12,242	27,519	12,243	16,729	55,919	38,647	28,691
Transfers to County's General Fund	-	-	(17,721)	-	-	-	-	(12,692)	(15,513)	(26,034)
Transfer (to) from Water System	(1,564)	43,218	33,677	1,333	16,238	(8,306)	4,584	40,720	9,454	32,305
(Decrease) increase in net position	\$ (43,693)	\$ 16,098	\$ (15,094)	\$ (33,554)	\$ 4,277	\$ (25,480)	\$ (2,909)	\$ 31,298	\$ (10,024)	\$ (17,870)

Miami-Dade Water and Sewer Department

# Water and Wastewater System Rates

LAST TEN FISCAL YEARS

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>WATER RATES:</i>										
Lifeline (first 3,750 gallons)			N/A							
Meter Size Rate										
5/8"	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
1"	9.41	9.41	9.41	8.96	8.00	8.61	8.22	7.87	7.15	7.15
1.5"	18.82	18.82	18.82	17.92	16.00	13.43	12.82	12.27	11.15	11.15
2"	30.10	30.10	30.10	28.67	25.60	28.73	27.42	26.24	23.85	23.85
3"	60.21	60.21	60.21	57.34	51.20	61.32	58.51	55.99	50.90	50.90
4"	94.08	94.08	94.08	89.60	80.00	95.77	91.39	87.45	79.50	79.50
6"	188.16	188.16	188.16	179.20	160.00	153.22	146.22	139.92	127.20	127.20
8"	301.06	301.06	301.06	286.72	256.00	268.16	255.88	244.86	222.60	222.60
10"	432.77	432.77	432.77	412.16	368.00	574.63	548.31	524.70	447.00	447.00
12"	809.09	809.09	809.09	770.56	688.00	1,085.41	1,035.70	991.10	901.10	901.00
14"	1,505.28	1,505.28	1,505.28	1,433.60	1,280.00	2,043.13	1,949.55	1,865.60	1,696.00	1,696.00
16"	2,069.76	2,069.76	2,069.76	1,971.20	1,760.00	3,830.87	3,655.41	3,498.00	3,180.00	3,180.00
Composite rate (revenues/flows)	2.99	2.93	2.95	2.75	2.57	2.38	2.24	2.20	1.97	1.97
<i>WASTEWATER RATES:</i>										
Base rate (per 1,000 gallons)	N/A	N/A	N/A	N/A	N/A	3.25	3.25	3.25	3.25	3.25
Meter Size Rate										
5/8"	3.25	3.25	3.25	3.25	3.25					
1"	9.56	9.56	9.56	9.10	8.13					
1.5"	19.11	19.11	19.11	18.20	16.25					
2"	30.58	30.58	30.58	29.12	26.00					
3"	61.15	61.15	61.15	58.24	52.00					
4"	95.55	95.55	95.55	91.00	81.25					
6"	191.10	191.10	191.10	182.00	162.50					
8"	305.76	305.76	305.76	291.20	260.00					
10"	439.53	439.53	439.53	418.60	373.75					
12"	821.73	821.73	821.73	782.60	698.75					
14"	1,528.80	1,528.80	1,528.80	1,456.00	1,300.00					
16"	2,102.10	2,102.10	2,102.10	2,002.00	1,787.50					
Composite rate (revenues/flows)	4.69	4.64	4.67	4.38	4.08	3.78	3.54	3.47	3.04	3.05

Increases in Water and Wastewater rates must be approved by the Board of County Commissioners.

Base rate, for Water, not used in fiscal years 2000-2002.

Beginning fiscal year 2009, base rate is no longer used for Wastewater; Meter size rate is now used for the two systems.

# Water Usage

LAST TEN FISCAL YEARS

(millions of gallons)	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>WATER PUMPED:</i>										
Water treatment plants:										
Alexander Orr, Jr.	58,666	59,805	60,191	59,969	57,025	57,257	61,118	64,242	63,929	64,546
John E. Preston	30,586	27,232	26,555	27,632	30,638	29,468	29,456	32,602	31,367	29,715
Hialeah	21,241	22,688	23,685	24,335	23,880	22,794	25,573	25,926	26,154	27,555
South Dade Water System	2,670	2,658	2,580	2,274	2,502	2,384	2,407	2,380	2,580	2,433
Purchase water	178	152	179	145	386	676	538	493	1,767	2,000
Total water pumped	113,341	112,535	113,190	114,355	114,431	112,579	119,092	125,643	125,797	126,249
<i>WATER SOLD:</i>										
Wholesale:										
Hialeah	9,429	9,121	9,598	9,103	8,110	8,081	8,228	8,616	8,685	7,730
Miami Beach	7,903	7,918	8,410	6,952	6,489	6,848	7,931	8,107	7,898	7,994
North Miami	1,655	1,374	1,331	1,175	1,502	2,123	1,827	1,775	1,534	1,602
Opa-Locka	876	876	887	788	845	909	946	1,031	994	960
Hialeah Gardens	576	591	693	654	695	694	703	716	713	655
Medley	516	479	328	400	393	398	433	496	488	577
Bal Harbor	494	430	486	455	466	447	462	476	526	552
North Bay Village	415	391	387	395	365	343	322	360	359	375
Bay Harbor Islands	309	310	302	317	329	358	366	394	418	435
Surfside	299	312	317	328	343	327	371	395	385	369
West Miami	236	292	275	293	290	266	267	300	284	283
Homestead <sup>(1)</sup>	151	40	-	-	-	-	-	-	-	-
Indian Creek Village	120	122	133	121	140	133	146	165	143	156
Virginia Gardens	95	93	91	98	100	63	60	77	44	10
North Miami Beach <sup>(2)</sup>	-	-	-	100	107	1,013	2,588	3,888	4,633	4,652
Miami Springs <sup>(3)</sup>	-	-	-	-	-	771	870	704	758	1,016
Total wholesale	23,074	22,349	23,238	21,179	20,174	22,774	25,520	27,500	27,862	27,366
Retail	63,386	63,169	62,937	64,430	66,086	65,147	67,302	71,674	70,114	70,033
Total water sold	86,460	85,518	86,175	85,609	86,260	87,921	92,822	99,174	97,976	97,399
Non-account water	26,881	27,017	27,015	28,746	28,171	24,658	26,270	26,469	27,821	28,850
Non-account water as a percentage of total water pumped	23.72%	24.01%	23.87%	25.14%	24.62%	21.90%	22.06%	21.07%	22.12%	22.85%
Unaccounted for water as a percentage of total water pumped	8.88%	3.02%	10.46%	8.27%	9.90%	3.70%	6.20%	6.21%	10.56%	8.34%

<sup>(1)</sup> Homestead usage of water is limited to an as needed basis. Their usage is not consistent to that of a wholesale customer.

<sup>(2)</sup> North Miami Beach constructed their own water plant and beginning fiscal year 2009, has not had the need to purchase water.

<sup>(3)</sup> Miami Springs water system was purchased by the Department and beginning fiscal year 2009, is no longer a wholesale customer.

# Wastewater Treatment

LAST TEN FISCAL YEARS

(millions of gallons)	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>WASTEWATER PLANT FLOWS:</i>										
North District Plant	32,000	35,141	27,403	31,810	31,984	34,047	34,200	33,969	33,113	31,105
Central District Plant	43,696	45,014	37,653	41,654	45,095	41,987	40,469	40,866	44,705	41,968
South District Plant	36,574	41,472	33,036	33,997	32,241	33,163	33,257	33,214	34,491	30,409
Total wastewater plant flows	111,970	121,627	98,092	107,461	109,320	109,197	107,926	108,049	112,309	103,482
<i>WASTEWATER TREATED:</i>										
Wholesale:										
Miami Beach	8,141	7,452	6,983	7,870	8,733	8,764	8,611	8,653	8,721	7,862
Hialeah	7,050	7,002	6,084	6,903	7,373	8,109	7,699	8,770	10,955	10,342
North Miami	3,745	3,699	3,418	3,523	3,533	3,923	3,764	3,963	4,080	3,885
Coral Gables	1,088	1,144	987	1,060	1,114	1,196	1,199	1,334	1,956	2,503
Hialeah Gardens	865	940	817	801	618	607	612	596	542	144
Homestead	736	946	879	419	529	383	502	193	162	17
Opa-Locka	733	684	653	492	627	714	1,389	1,121	783	711
North Miami Beach	622	727	718	859	940	853	799	806	812	888
Medley	544	708	628	504	619	834	601	689	667	862
Florida City	457	494	412	404	412	431	462	457	420	416
North Bay Village <sup>(1)</sup>	408	316	39	-	-	-	-	-	-	-
West Miami	162	202	163	144	128	131	130	174	177	138
Homestead Air Force Base	69	65	47	98	185	196	168	114	236	357
Miami Springs <sup>(2)</sup>	-	-	-	-	-	1,237	1,272	1,210	1,422	1,010
Total wholesale	24,620	24,379	21,828	23,077	24,811	27,378	27,208	28,080	30,933	29,135
Retail	49,345	48,752	48,547	49,315	49,671	49,646	50,609	53,020	52,261	51,682
Unaccounted for wastewater	38,005	48,496	27,717	35,069	34,838	32,173	30,109	26,949	29,115	22,665
Total wastewater treated	111,970	121,627	98,092	107,461	109,320	109,197	107,926	108,049	112,309	103,482
Unaccounted for wastewater as a percentage of total wastewater treated	33.94%	39.87%	28.26%	32.63%	31.87%	29.46%	27.90%	24.94%	25.92%	21.90%
<i>ANNUAL RAINFALL (inches):<sup>(3)</sup></i>	60.6	97.9	58.7	68.6	51.3	63.6	58.4	67.0	65.4	60.0

<sup>(1)</sup> North Bay Village was added as a new wholesale customer beginning in fiscal year 2011.

<sup>(2)</sup> Miami Springs was purchased by WASD and beginning fiscal year 2009 is no longer a wholesale customer.

<sup>(3)</sup> Source: National Weather Service Forecast Office in Miami for rainfall recorded in inches at Miami International Airport.

# Debt Service Coverage

LAST TEN FISCAL YEARS

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Miami-Dade Water and Sewer Department

(in thousands)	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>PRIMARY DEBT SERVICE COVERAGE</i>										
Net operating revenues	\$ 208,432	\$ 211,225	\$ 212,850	\$ 168,763	\$ 149,807	\$ 115,513	\$ 117,993	\$ 147,429	\$ 133,581	\$ 152,660
Investment earnings <sup>(1)</sup>	1,479	1,336	2,111	2,550	12,596	29,390	32,170	19,324	13,781	3,489
Net transfers from (to) Rate Stabilization Fund	-	-	-	-	-	-	-	-	11,238	23,136
Net revenues available for debt service	\$ 209,911	\$ 212,561	\$ 214,961	\$ 171,313	\$ 162,403	\$ 144,903	\$ 150,163	\$ 166,753	\$ 158,600	\$ 179,285
Debt service requirements <sup>(2)</sup>	\$ 138,711	\$ 137,625	\$ 115,198	\$ 114,653	\$ 103,627	\$ 113,758	\$ 113,291	\$ 110,848	\$ 104,123	\$ 114,196
Actual coverage	1.51	1.54	1.87	1.49	1.57	1.27	1.33	1.50	1.52	1.57
Required coverage	1.25	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
<i>SUBORDINATE DEBT SERVICE COVERAGE</i>										
Net revenues available for debt service	\$ 209,911	\$ 212,561	\$ 214,961	\$ 171,313	\$ 162,403	\$ 144,903	\$ 150,163	\$ 166,753	\$ 158,600	\$ 179,285
Less: Maximum principal and interest <sup>(3)</sup>	161,340	146,270	146,270	146,270	115,198	114,030	113,142	113,291	115,032	115,272
Adjusted net revenues	\$ 48,571	\$ 66,291	\$ 68,691	\$ 25,043	\$ 47,205	\$ 30,873	\$ 37,021	\$ 53,462	\$ 43,568	\$ 64,013
<i>STATE REVOLVING FUND LOANS DEBT SERVICE COVERAGE</i>										
Net revenues available for debt service	\$ 209,911	\$ 212,561	\$ 214,961	\$ 171,313	\$ 162,403	\$ 144,903	\$ 150,163	\$ 166,753	\$ 158,600	\$ 179,285
Less: revenue required for primary debt service coverage <sup>(4)</sup>	173,389	151,388	126,718	126,119	113,989	125,133	124,620	121,933	114,536	125,615
Adjusted net revenues	\$ 36,522	\$ 61,173	\$ 88,243	\$ 45,194	\$ 48,414	\$ 19,770	\$ 25,543	\$ 44,820	\$ 44,064	\$ 53,670
Debt service requirements <sup>(5)</sup>	\$ 11,386	\$ 13,501	\$ 13,501	\$ 13,479	\$ 13,470	\$ 13,434	\$ 11,563	\$ 15,328	\$ 15,205	\$ 13,966
Actual coverage	3.21	4.53	6.54	3.35	3.59	1.47	2.21	2.92	2.90	3.84
Required coverage	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15

<sup>(1)</sup> Excludes interest income from Construction Fund

<sup>(2)</sup> Represents debt service requirements on outstanding Bonds for such fiscal year.

<sup>(3)</sup> Maximum principal and interest requirements on the Bonds for such fiscal year

<sup>(4)</sup> Represents 110% of primary debt service requirements.

<sup>(5)</sup> Represents debt service requirements on outstanding State Revolving Fund Loans for such fiscal year.

# Ratio of Outstanding Debt by Type

LAST TEN FISCAL YEARS

(in thousands)

Fiscal Year	Revenue Bonds	Loans	Notes	Line of Credit <sup>(1)</sup>	Total Outstanding Debt	Total Per Customer
2013	\$ 2,178,341	\$ 154,873	\$ -	\$ -	\$ 2,333,214	\$ 3.01
2012	1,880,872	143,843	-	-	2,024,715	2.64
2011	1,932,611	124,162	-	-	2,056,773	2.70
2010	1,980,844	119,255	-	-	2,100,099	2.77
2009	1,432,012	119,093	-	40,000	1,591,105	2.11
2008	1,452,127	107,943	-	-	1,560,070	2.07
2007	1,431,595	117,776	-	-	1,549,371	2.06
2006	1,464,162	124,940	140	-	1,589,242	2.14
2005	1,493,589	137,853	345	-	1,631,787	2.24
2004	1,523,497	144,618	539	-	1,668,654	2.34

<sup>(1)</sup> Financing from Regions Bank to fund multiple Capital Improvement Projects as per County Ordinance 08-126. Entered upon on April 27, 2009.

# Customer Statistics

## Largest System Customers Current Year and Nine Years Ago October 2012 - September 2013

<u>Name</u>	<u>Dollar Amount<sup>(1)</sup> (in thousands)</u>	<u>Percent of System Gross Revenues</u>
<i>WATER SYSTEM:</i>		
City of Hialeah	\$ 16,163	6.5
City of Miami Beach	13,545	5.5
Dade County Aviation	4,986	2.0
City of North Miami	2,837	1.1
City of Opa Locka	1,502	1.0
Florida Power & Light Company	1,449	1.0
Hialeah Gardens	988	0.4
Medley	884	0.4
Bal Harbour	847	0.3
North Bay Village	712	0.3
<i>WASTEWATER SYSTEM:</i>		
City of Miami Beach	\$ 17,606	5.9
City of Hialeah	15,339	5.1
City of North Miami	8,097	2.7
Dade County Aviation	2,770	1.0
City of Coral Gables	2,380	0.8
Hialeah Gardens	1,866	0.6
City of Homestead	1,737	0.6
City of Opa-Locka	1,588	0.5
City of North Miami Beach	1,338	0.5
Medley	1,166	0.4

## October 2003 - September 2004

<u>Name</u>	<u>Dollar Amount (in thousands)</u>	<u>Percent of System Gross Revenues</u>
<i>WATER SYSTEM:</i>		
City of Miami Beach	\$ 6,614	3.9
City of Hialeah	5,565	3.3
City of North Miami Beach	3,954	2.3
Dade County Aviation	1,812	1.1
City of North Miami	1,384	0.8
City of Opa Locka	816	0.5
Florida Power & Light	802	0.5
City of Miami Springs	731	0.4
Hialeah Gardens	557	0.3
Bal Harbour	470	0.3
<i>WASTEWATER SYSTEM:</i>		
City of Hialeah	\$ 17,657	8.2
City of Miami Beach	13,364	6.2
City of North Miami	6,625	3.1
City of Coral Gables	4,230	2.0
City of Miami Springs	1,746	0.8
City of North Miami Beach	1,521	0.7
City of Medley	1,441	0.7
City of Opa-Locka	1,201	0.6
Dade County Aviation	1,067	0.5
City of Florida City	611	0.3

<sup>(1)</sup> Using billed flows in place of net amount

# Customer Statistics

## Number of Retail Customers at Fiscal Year-End Last Ten Fiscal Years

Year	Number of Customers		Ratio of Wastewater Customers to Water Customers
	Water	Wastewater	
2013	428,631	346,285	80.8%
2012	424,764	342,539	80.6%
2011	422,016	339,927	80.6%
2010	420,367	338,368	80.5%
2009	417,983	336,272	80.5%
2008	418,258	336,290	80.4%
2007	416,620	334,426	80.3%
2006	412,121	329,615	80.0%
2005	406,059	323,615	79.7%
2004	398,318	316,257	79.4%

# Population

## Miami-Dade County, Florida Selected Years 2013-2004

<u>Year</u>	<u>Annual Resident Population</u>	<u>Increase (Decrease)</u>	<u>Percent Change</u>
2013	2,565,685	14,430	1.0%
2012	2,551,255	(44,759)	(1.7%)
2011	2,596,014	32,129	1.3%
2010	2,563,885	31,885	1.3%
2009	2,532,000	40,604	1.3%
2008	2,491,396	29,819	1.2%
2007	2,461,577	29,758	1.2%
2006	2,431,819	29,714	1.2%
2005	2,402,105	29,687	1.3%
2004	2,372,418	29,679	-

Source: U.S. Bureau of the Census figures 2010; Planning Research Section, Miami-Dade County Department of Planning and Zoning estimates for other years.

# Building Permits

## Number of Buildings Permits Issued for Housekeeping Units and Value of Permits for Housekeeping and Total Units Miami-Dade County, Florida 2012-2003

Calendar Year	Number of Permits Issued		Value of Permits Issued Residential Construction
	Single Family Houses	Multi-family Buildings	
2012	1,819	3,250	(1)
2011	962	1,656	(1)
2010	941	2,262	395,139
2009	624	771	252,407
2008	1,086	2,388	477,424
2007	3,246	4,836	1,210,618
2006	6,548	13,469	3,323,113
2005	9,918	16,198	3,750,203
2004	9,499	13,251	2,565,383
2003	8,740	6,793	1,697,337

Source: University of Florida, Bureau of Economic and Business  
Research, [Building Permit Activity in Florida](#)

(1) Information Unavailable

# Construction Activity

## Construction Activity Miami-Dade County, Florida 2013-2004

Fiscal Year	Commercial Construction		Residential Construction	
	Number of Buildings	Value (in thousands)	Number of Units	Value (in thousands)
2013	105	\$ 81,734	2,387	\$ 309,243
2012	95	130,148	1,535	187,533
2011	120	54,001	1,963	182,480
2010	231	184,566	1,453	129,129
2009	202	263,754	556	55,417
2008	274	477,442	1,262	159,407
2007	288	295,413	2,404	315,586
2006	394	327,729	8,001	899,980
2005	914	273,735	8,893	1,031,757
2004	794	359,033	9,603	982,420

Source: Miami-Dade County Building Department. Includes only Unincorporated Area.

# Principal Employers

## Principal Employers Miami-Dade County, Florida Current Year and Nine Years Ago

### 2013

<u>Employer</u>	<u>Employees</u>	<u>Rank</u>	<u>Percentage of Total County Employment</u>
Miami-Dade County Public Schools	33,477	1	2.58
Miami-Dade County	25,502	2	1.97
U.S. Federal Government	19,600	3	1.51
Florida State Government	18,300	4	1.41
University of Miami	12,720	5	0.98
Baptist Health South Florida	10,793	6	0.83
American Airlines	9,850	7	0.76
Jackson Health System	8,208	8	0.63
Publix Supermarkets	4,604	9	0.36
City of Miami	3,656	10	0.28
Florida International University	3,534	11	0.27
Mount Sinai Medical Center	3,500	12	0.27
Homestead AFB	3,000	13	0.23
Miami Children's Hospital	2,630	14	0.20
Sedanos Supermarket	2,600	15	0.20
Total	<u>161,974</u>		<u>12.49</u>

### 2004

<u>Employer</u>	<u>Employees</u>	<u>Rank</u>	<u>Percentage of Total County Employment</u>
Miami-Dade County Public Schools	54,387	1	5.02
Miami-Dade County	32,265	2	2.98
U.S. Federal Government	20,100	3	1.86
Florida State Government	18,900	4	1.74
Jackson Health Systems	11,700	5	1.08
Baptist Health South Florida	10,300	6	0.95
University of Miami	9,367	7	0.86
American Airlines	9,000	8	0.83
Miami Dade College	7,500	9	0.69
Florida International University	5,000	10	0.46
Total	<u>178,519</u>		<u>16.47</u>

Source: The Beacon Council, Miami, Florida, Miami Business Profile

# Economic Statistics

*Last 10 fiscal years*

<u>Year</u>	<u>Total Personal Income</u>	<u>Per Capita Personal Income</u>	<u>Unemployment Rate</u>	<u>Labor Force</u>
2013	(1)	(1)	8.9%	1,296,680
2012	100,688,604	39,466	9.7%	1,290,751
2011	96,657,710	37,834	12.7%	1,300,030
2010	92,227,399	36,846	12.0%	1,257,324
2009	90,915,774	37,909	8.9%	1,218,871
2008	88,954,732	37,264	5.3%	1,205,913
2007	85,978,571	35,791	3.6%	1,192,231
2006	82,481,222	34,709	3.8%	1,158,801
2005	75,090,488	31,867	4.3%	1,113,560
2004	69,724,010	29,817	5.4%	1,097,454

Source: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis/ Regional Economic Information System.

Legend: (1) Information Unavailable

# Employees by Identifiable Activity

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>WATER:</i>										
Water Distribution	205	206	210	206	214	210	202	205	214	220
Water Production and Maintenance <sup>(1)</sup>	231	226	240	232	240	239	98	89	92	95
Laboratory Services	56	55	49	51	47	50	-	-	-	-
<i>SEWER:</i>										
Sewer Collection	183	187	175	189	188	180	182	184	184	185
Plant Maintenance <sup>(1)</sup>	-	-	-	-	-	-	315	323	320	329
Wastewater Treatment and Maintenance <sup>(1)</sup>	340	337	341	329	331	324	161	158	155	160
Pump Station Maintenance	193	192	193	187	192	206	196	192	194	200
<i>ENGINEERING:</i>										
Engineering & Design	70	75	75	75	77	82	148	152	149	150
New Customer	73	73	74	89	87	107	95	101	97	101
Program Management	-	-	-	15	15	15	8	-	-	-
Construction Contracts	65	71	71	77	81	62	-	-	-	-
<i>ADMINISTRATION:</i>										
Office of Director	15	30	30	33	31	36	32	29	28	21
Office of Deputy Director of Regulatory Compliance and Capital Improvements	5	6	8	13	16	15	-	-	-	-
Office of Deputy Director of Operations	43	13	12	11	10	8	12	11	10	9
Office of Assistant Director of Engineering	1	1	1	1	1	2	2	3	2	2
Office of Assistant Director of Finance	53	36	37	38	35	33	26	27	14	15
Office of Assistant Director of Maintenance and Support Services	112	143	136	155	156	157	158	158	155	149
Office of Assistant Director of Water	106	109	109	111	113	117	151	147	147	156
Office of Assistant Director of Wastewater	46	48	47	38	36	31	3	2	1	-
Office of Assistant Director of Regulatory Compliance and Planning	5	5	5	5	3	3	43	52	51	47
Attorney's Office	4	4	4	4	4	4	3	3	4	4
Controller	110	114	114	134	135	125	125	127	128	132
Information Technology	65	68	69	70	70	71	69	62	62	62
Retail Customer Service	227	224	216	253	268	266	258	261	271	275
Regulatory Compliance and Monitoring	14	15	16	18	17	16	-	-	-	-
General Maintenance	110	116	113	120	127	122	140	133	138	124
Planning	17	17	17	22	24	23	-	-	-	-
<b>Total</b>	<b>2,349</b>	<b>2,371</b>	<b>2,362</b>	<b>2,476</b>	<b>2,518</b>	<b>2,504</b>	<b>2,427</b>	<b>2,419</b>	<b>2,416</b>	<b>2,436</b>

<sup>(1)</sup> The Plant Maintenance Division was eliminated as of October 1, 2007 and the employees were assigned to the Water Production and Maintenance Division and the Wastewater Treatment and Maintenance Division.

# Capital Indicators

LAST 10 FISCAL YEARS

	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<i>WATER:</i>										
Water mains <sup>(1)</sup> (miles)	5,988	5,969	5,922 <sup>(2)</sup>	5,907	5,747	5,641	5,624	5,575	5,519	5,426
Water treatment plants	9	8	8	8	8	8	8	8	8	8
Permitted water treatment capacity (million gallons per day)	454	454	452 <sup>(3)</sup>	452	452	452	452	452	452	452
Water supply wells	100	100	100	100	100	100	100	97	92	92
<i>WASTEWATER:</i>										
Sanitary sewers <sup>(1)</sup> (miles)	4,048	4,027	3,995 <sup>(2)</sup>	3,975	3,981	3,948	3,919	3,858	3,803	3,724
Wastewater treatment plants	3	3	3	3	3	3	3	3	3	3
Permitted wastewater treatment capacity (million gallons per day)	376	376	368	368	368	368	368	341	353	353
Wastewater pump stations	1,042	1,039	1,039	1,039	1,035	1,035	992	986	976	967

<sup>(1)</sup> Does not include laterals.

<sup>(2)</sup> In fiscal year 2010 & 2011, the measurements for water mains and sanitary sewers do not include miscellaneous and private pipes.

<sup>(3)</sup> Total water supply allocation as per Water Use Permit is 357 mgd.

# Insurance in Force

Type of Coverage and Insurance Company	Policy Period	Details of Coverage	Limits of Liability
Crime Policy: Fidelity & Deposit Co. of Maryland	08/19/13 - 08/19/14	Employee Dishonesty	\$1,000,000
Money and Securities: Fidelity & Deposit Co. of Maryland	11/25/12 - 11/25/13	Theft of money and securities	Values scheduled per location
Accidental Death: Hartford Life Insurance Co.	08/29/12 - 12/31/13	Accidental death and dismemberment	\$25,000
Property Insurance: Ace American Ins. Co., Lexington Ins. Co., Liberty International Underwriters	03/02/13 – 03/02/14	"All risk" coverage on real and personal property and outfalls	\$165,000,000
Automobile Liability:	Continuous	Self-Insured	\$200,000 per person/ \$300,000 per occurrence pursuant to F.S. 768.28 (certain claims may not fall with the parameters of FS 768.28)
General Liability:	Continuous	Self-Insured	\$200,000 per person/ \$300,000 per occurrence pursuant to F.S. 768.28 (certain claims may not fall with the parameters of FS 768.28)
Workers' Compensation:	Continuous	Self-Insured	Statutory coverage pursuant to F.S. 440

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## **Miami-Dade Water and Sewer Department**

A Department of Miami-Dade County, Florida

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**MIAMI-DADE  
COUNTY**

*Delivering Excellence Every Day*

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 the requirements of the Americans with Disabilities Act.